LIONS DEN
PCD No. SF2525

Water Resources Report

This Water Resources Report was completed for Lions Den, LLC ("Applicant") by David J Whitehead, P.E. of Whitehead Engineering, LLC, a Registered Professional Engineer, in accordance with the requirements of the El Paso County Land Development Code described in Section 8.4.7 (B)(1)(c). Mr Whitehead has over 40 years' experience in hydrogeologic analysis. Locally, he has evaluated groundwater-based water supply for subdivisions in El Paso County for over 30 years. This report presents the data, documentation and analysis in sufficient detail to determine sufficiency of the Lions Den proposed subdivision water supply in terms of water sufficiency citing dependability, quantity and quality criteria.

1.0 Site Location

The subdivision site consists of approximately 35.97 acres located in the W1/2, E1/2, NW1/4 of Section 13, Township 12 south, Range 66 West of the 6th P.M., El Paso County, Colorado. The address is 12120 Casey Lane, Colorado Springs, CO 80908 (Figure 1) Tax ID No. 62130 00 006. The Applicant intends to subdivide the property into seven lots containing 5.00+ acres each. There is an existing home with a well and septic system on Lot 5.

2.0 Sufficient Water Quantity

2.1 Water Demand

The seven residential lots will each use a total of 0.474 acre feet per year of groundwater from the underlying Denver Basin Aquifers to provide a minimum of 0.26 acre feet of water per year per residence for in-home use. The remaining 0.214 acre feet per year will be available for irrigation of lawn and garden, and the watering of up to two horses or equivalent livestock, per lot.

2.2. Groundwater Availability

The Water Rights to the four underlying groundwater aquifers were adjudicated September 15, 2022, under Water Court Decree 2021CW3068 (Exhibit A). Table 1 quantifies the groundwater underlying the 35.97-acre property in each of the four aquifers.

Table 1 Groundwater Quantification

AQUIFER	NET SAND (feet)	Total (Acre Feet)	Annual Average Withdrawal 100 Years (Acre Feet)
Dawson (NNT)	170	1223	12.23
Denver (NNT)	460	2812	28.12
Arapahoe (NNT)	250	1529	15.29
Laramie-Fox Hills (NT)	190	1025	10.25

The Water Court awarded the Applicants a vested right of 1223 acre feet of groundwater underlying Applicants' Property from the not-nontributary Dawson aquifer. Of this, up to 0.474 acre-feet annually may be pumped pursuant to the plan for augmentation. From the not-nontributary Denver aquifer the Applicants were awarded a vested right to 2812 acre-feet of groundwater. Of this, up to 0.474 acre-feet annually may be pumped by each lot pursuant to the plan for augmentation. A total of 995.4 acre-feet of groundwater from each aquifer will provide sufficient quantity of water to each lot meeting the requirement of a 300-year water supply.

3.0 Sufficient Dependability

3.1 Groundwater Wells

All the wells for this subdivision are covered by the Water Court Decree 2021CW3068, one (1) existing well and six (6) proposed wells. The proposed wells for Lots 1-4, 6 & 7 will be completed in the not nontributary Denver Aquifer. Pumping rates are expected range from 10 to 15 gallons per minute. The Denver aquifer was calculated to have 2812 acre feet of groundwater underlying the property. Of this, 142.2 acre feet (19.77 percent) of the total available amount is allocated for use by the existing well on lot 5 to provide a 300-year supply. Numerous nearby Denver aquifer wells supply water for similar sized homes and therefore a well completed in this aquifer should be capable of meeting the proposed demand.

The well used by the existing home on Lot 5, discussed above, has been steadily supplying water since its construction in 1982. This well is completed in the not non-tributary Dawson Aquifer and was permitted and constructed as an exempt well pursuant to C.R.S. 537-92-602 having permit number 116298 (Exhibit B). This well is being re-permitted pursuant to the new Court Decree. The Dawson aquifer was calculated to contain 2331 acre feet of groundwater underlying the property. Of this, 142.2 acre feet (6.10 percent) is allocated to provide a 300-year supply. Based on historical use, production from the existing well is sufficient to meet the water supply demands for the proposed uses.

3.2. Augmentation Requirements

The augmentation obligation for the proposed wells on Lot 1-4, 6 & 7 constructed to the Denver aquifer requires the replacement of 4% of annual pumping. "Depletions during pumping will be effectively replaced by residential return flows from non-evaporative septic systems. The annual consumptive use for non-evaporative septic systems is 10% per year per residence. At the household indoor use rate of 0.26 acre-feet per residence per year, total of 1.82 acre feet (assuming seven residences), 1.638 acre feet is replaced to the stream system per year, utilizing non-evaporative septic system. Thus, during pumping, total maximum stream depletions of 0.92 acre feet will be augmented provided septic system return flows are generated by indoor use of water in at least 4 residences ((4 x 0.26) x 0.9 = 0.93). (21CW3068, Exhibit A).

The augmentation obligation for the well on Lot 5 drawing groundwater from the Dawson aquifer requires the replacement of actual stream depletions. Augmentation of depletions during pumping will be by the septic system return flows. The nontributary water rights of the Laramie-Fox Hills aquifer is reserved to meet for augmentation of depletions after pumping ceases.

4.0. Sufficient Quality

4.1 Denver Aquifer Water Quality

Lot 1-4, 6 & 7 will be served by a well completed in the confined Denver aquifer. As a Well does not exist in the Denver aquifer on the Property, a nearby Denver well will be selected to acquire a representative water quality sample.

Water quality samples will be collected using standard collection and preservation methods. Analytes selected are in compliance with the Amendment to the Land Development Code dated August 22 2024, Section 8.4.7(B)(3)(d). The analysis results are presented in the Water Quality Report and provides evidence that the groundwater in the Denver aquifer meets the Colorado Primary Drinking Water Standards for the required analytes at the sample location (Exhibit D).

4.2. Dawson Aquifer Water Quality

The Dawson Aquifer has been the primary source of water since 1997 for the existing home within the Lions Den Subdivision The same well will continue to supply groundwater for use on Lot 5. Because the supply has not changed and the existing well will be used, water quality samples were not collected from the Dawson aquifer.

5.0 Summary and Conclusion

The proposed subdivision of 36.12 acres located in Lions Den Subdivision will create 6 new lots each requiring a new well. The purpose of the Water Resources Report is to provide the data, documentation and analysis in sufficient detail to determine sufficiency of the proposed subdivision's water supply in terms of dependability, quantity and quality. The amount of groundwater underlying Applicants property has been adjudicated in water court under Water Court Decree 21CW3068. Based on the proposed uses and quantification of available groundwater, there is sufficient quantity to meet the County required 300-year water supply criteria. Wells completed in the not non-tributary Dawson and Denver aquifer have successfully been supplying groundwater for similar sized homes and uses in the area at sufficient rates and duration. In addition, only a small fraction of the quantified groundwater will be used on the overlying land in accordance with an augmentation plan, the water source can reasonably be considered a dependable supply. The quality of the Denver aquifer groundwater underlying the new proposed lots was evaluated in accordance with the Land Development Code and was determined to meet Primary Drinking Water Standards for the required analytes.

DISTRICT COURT, WATER DIVISION 2, COLORADO Court Address: 501 North Elizabeth Street, Suite 116 Pueblo, CO 81003 Phone Number: (719) 404-8832	DATE FILED: September 15, 2022 2:36 PM CASE NUMBER: 2021CW3068
CONCERNING THE APPLICATION FOR WATER RIGHTS OF: **LIONS DEN TRUST** **IN EL PASO COUNTY**	▲ COURT USE ONLY ▲ Case No.: 21CW3068 (consolidated with Division 1 Case No. 21CW3195 pursuant to Order of Panel on Multi-District Litigation 22MD2)

FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF REFEREE AND DECREE: ADJUDICATING DENVER BASIN GROUNDWATER AND APPROVING PLAN FOR AUGMENTATION

THIS MATTER comes before the Water Court on the Application filed by Lions Den Trust on October 29, 2021. Having reviewed said application and other pleadings on file, and being fully advised on this matter, the Water Court makes the following findings and orders:

FINDINGS OF FACT

1. The applicant in this case is Lions Den Trust c/o Victor Marx and Eileen Marx, whose address is 13395 Voyager Pkwy 130, Colorado Springs, CO 80921 ("Applicant"). Applicant is the owner of the land totaling approximately 35.97 acres on which the structures sought to be adjudicated and augmented herein are and will be located, and under which lies the Denver Basin groundwater described in this decree, and is the owner of the place of use where the water will be put to beneficial use, except for any potential off-property uses as described in Paragraph 19.

2. The Applicant filed this Application with the Water Courts for both Water Divisions 1 and 2 on October 29, 2021. The Applications were referred to the Water Referees in both Divisions 1 and 2 on or about November 2, 2021.

3. The time for filing statements of opposition to the Application expired on the last day of December 2021. A statement of opposition was timely filed by Kettle Creek, LLC on December 30, 2021.

4. A Motion for Consolidation of the Division 1 and Division 2 cases into Water Division 2 was filed with the Colorado Supreme Court on January 10, 2022. The Panel on Consolidated Multidistrict Litigation certified the Motion for Consolidation to the Chief Justice on January 13, 2022. Chief Justice, Brian D. Boatright, granted the Motion for Consolidation by Order dated February 14, 2022.

5. In accordance with the notice requirements of C.R.S. § 37-92-302, lienholders of the Applicant's property were sent a Letter of Notice dated November 30, 2021. A Certificate of Notice was filed with the Court on February 14, 2022.

6. On November 3, 2021, the Division 1 Water Court, on Motion from Applicant, ordered that consolidated publication be made by only Division 2. On November 12, 2021, the Water Court, Division 2 ordered that publication occur in *The Gazette* within El Paso County.

7. The Clerk of this Court has caused publication of the Application filed in this matter as provided by statute and the publication costs have been paid. On November 30, 2021, proof of publication in *The Gazette* was filed with Water Court, Division 2. All notices of the Application have been given in the manner required by law.

8. On July 25, 2022, a stipulation between the Applicant and Kettle Creek, LLC was filed with the Division 2 Water Court. By Order dated July 28, 2022, the Division 2 Water Court approved such stipulation.

9. Pursuant to C.R.S. §37-92-302(2), the Office of the State Engineer has filed Determination of Facts for each Denver Basin aquifer with this Court on January 11, 2022, which have been considered by the Water Court in the entry of this decree.

10. Pursuant to C.R.S. §37-92-302(4), the Office of the Division Engineer for Water Division No. 2 filed its Summary of Consultation Report dated February 16, 2022, and no response by the Applicant was required to the Summary of Consultation Report pursuant to the Order of the Court dated February 21, 2022. The Summary of Consultation Report has been considered by the Water Court in the entry of this decree.

11. The Water Court has jurisdiction over the subject matter of these proceedings and over all who have standing to appear as parties whether they have appeared or not. The land and water rights involved in this case are not within a designated groundwater basin.

GROUNDWATER RIGHTS

12. The Application requested quantification and adjudication of a vested underground water right from the Dawson aquifer underlying the Applicant's property, as described herein, for use in Lions Den Wells Nos. 1 through 7, as currently existing and

as may be constructed to the Dawson aquifer, and any additional or replacement wells associated therewith, for withdrawal of a portion of Applicant's full entitlement of supply from the Dawson aquifer under the plan for augmentation decreed herein. Applicant also requested quantification and adjudication of vested underground water rights and uses from the Denver, Arapahoe, and Laramie-Fox Hills aquifers underlying the Applicant's property. The following findings are made with respect to such underground water rights:

13. The land overlying the groundwater subject to the adjudication in this case is owned by the Applicant and consists of approximately 35.97 acres located in the W½ E½ NW¼ of Section 13, Township 12 South, Range 66 West of the 6th P.M., El Paso County, Colorado, also known as 12120 Casey Ln., Colorado Springs, CO 80908 ("Applicant's Property"). Applicant intends to subdivide the property into up to seven (7) lots of +/- 5 acres each. All groundwater adjudicated herein shall be withdrawn from the overlying land.

14. Lions Den Wells Nos. 1 through 7: Lions Den Wells Nos. 1 through 7 will be located on the Applicant's Property. Lions Den Well No. 1 is currently permitted and constructed as an exempt well pursuant to C.R.S. §37-92-602 under Well Permit No. 197034. Applicant is awarded the vested right to use Lions Den Wells Nos. 1 through 7, along with any necessary additional or replacement wells associated with such structures, for the extraction and use of groundwater from the not-nontributary Dawson aquifer pursuant to the plan for augmentation decreed herein. Upon entry of this decree and submittal by the Applicant of a complete well permit application and filing fee, the State Engineer shall issue a revised permit for the existing Lions Den Well No. 1, and new permits for Lions Den Wells Nos. 2 through 7 pursuant to C.R.S. §37-90-137(4), consistent with and referencing the plan for augmentation decreed herein.

15. Of the statutorily described Denver Basin aquifers, the Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers all exist beneath the Applicant's Property. The Dawson, Denver, and Arapahoe aquifers underlying the Applicant's Property contain not-nontributary water, while the water of the Laramie-Fox Hills aquifer underlying the Applicant's Property is nontributary. The quantity of water in the Denver Basin aquifers exclusive of artificial recharge underlying the Applicant's Property is as follows:

AQUIFER	NET SAND (ft)	Annual Average Withdrawal 100 Years (Acre Feet)	Annual Average Withdrawal 300 Years (Acre Feet)	Total Withdrawal (Acre Feet)
Dawson (NNT)	170	12.23	4.07	1,223[1]
Denver (NNT- 4%)	460	28.12	9.37	2,812
Arapahoe (NNT- 4%)	250	15.29	5.09	1,529
Laramie-Fox Hills (NT)	190	10.25	3.41	1,025

[1] Should the existing well permit no. 197034 not be cancelled and re-permitted, then this amount will be reduced by 300 acre-feet to 923 acre-feet.

16. Pursuant to C.R.S. §37-90-137(9)(c.5)(I), the augmentation requirements for wells in the Dawson aquifer require the replacement to the affected stream systems of actual stream depletions on an annual basis. The Applicant's Property is located more than one mile from any point of contact with a surface stream. Pursuant to C.R.S. §37-90-137(9)(c.5)(I), depletions from wells on the property pumping from the Denver and Arapahoe aquifers would require replacement of 4% of the amount of water pumped on an annual basis, and such additional amounts as may be required pursuant to C.R.S. §37-90-137(9)(c.5). Applicant shall not be entitled to construct a well or use water from the not-nontributary Dawson, Denver, or Arapahoe aquifers except pursuant to an approved augmentation plan in accordance with C.R.S. §37-90-137(9)(c.5), including as decreed herein as concerns the Dawson aquifer.

17. Subject to the augmentation requirements described in Paragraphs 16 and 22 and the other requirements and limitations in this decree, Applicant shall be entitled to withdraw all legally available groundwater in the Denver Basin aquifers underlying Applicant's Property. Said amounts can be withdrawn over the 100-year life for the aquifers as set forth in C.R.S. §37-90-137(4), or withdrawn over a longer period of time based upon local governmental regulations or Applicant's water needs provided withdrawals during such longer period are in compliance with the augmentation requirements of this decree. This decree describes a pumping period of 300-years as to the Dawson aquifer, as required by El Paso County, Colorado Land Development Code §8.4.7(C)(1). The average annual amounts of ground water available for withdrawal from the underlying Denver Basin aquifers, based upon the 100-year aquifer life, are determined and set forth in Paragraph 15, above, based upon the January 11, 2022, Office of the State Engineer Determination of Facts described in Paragraph 9.

18. Applicant shall be entitled to withdraw an amount of groundwater in excess of the average annual amount decreed herein from the Denver Basin aquifers underlying Applicant's Property, so long as the sum of the total withdrawals from wells in each of the aquifers does not exceed the product of the number of years since the date of issuance of the original well permit or the date of entry of the decree herein, whichever comes first, and the average annual volume of water which Applicant is entitled to withdraw from each of the aquifers underlying Applicant's Property, subject to the requirement that such banking and excess withdrawals do not violate the terms and conditions of the plan for augmentation decreed herein and any other plan for augmentation decreed by the Court that authorizes withdrawal of the Denver Basin groundwater decreed herein.

19. Subject to the terms and conditions in the plan for augmentation decreed herein and final approval by the State Engineer's Office pursuant to the issuance of well permits in accordance with C.R.S. §§37-90-137(4) or 37-90-137(10), the Applicant shall have the right to use the ground water for beneficial uses upon the Applicant's Property consisting of domestic, irrigation, stock water, guest house, recreation, wildlife, fire protection, and also for storage and augmentation purposes associated with such uses. The amount of groundwater decreed for such uses upon the Applicant's Property is reasonable as such uses are to be made for the long-term use and enjoyment of the Applicant's Property and is to establish and provide for adequate water reserves. The

nontributary groundwater may be used, reused, and successively used to extinction, both on and off the Applicant's Property subject, however, to the limitations imposed on the use of the Laramie-Fox Hills aquifer groundwater by this decree and the requirement under C.R.S. §37-90-137(9)(b) that no more than 98% of the amount withdrawn annually shall be consumed. Applicant may use such water by immediate application or by storage and subsequent application to the beneficial uses and purposes stated herein. Provided however, as set forth above, Applicant shall only be entitled to construct a well or use water from the not-nontributary Dawson, Denver, and Arapahoe aquifers pursuant to a decreed augmentation plan entered by the Court, including that plan for augmentation decreed herein.

20. Withdrawals of groundwater available from the nontributary Laramie-Fox Hills aquifer beneath the Applicant's Property in the amount determined in accordance with the provisions of this decree will not result in injury to any other vested water rights or to any other owners or users of water.

PLAN FOR AUGMENTATION

21. The structures to be augmented are the Lions Den Wells Nos. 1 through 7 as constructed and to be constructed to the not-nontributary Dawson aquifer underlying the Applicant's Property, along with any additional or replacement wells associated therewith. This plan for augmentation does not cover depletions associated with diversions in the Denver or Arapahoe aquifers. If Applicant would like to divert its entitlements in the Denver and Arapahoe aquifers, it must do so under a separate future decreed augmentation plan.

22. Pursuant to C.R.S. §37-90-137(9)(c.5), the augmentation obligation for Lions Den Wells Nos. 1 through 7, and any additional or replacement wells constructed to the Dawson aquifer, requires the replacement of actual stream depletions. The water to be used for augmentation during pumping is the septic system return flows of the not-nontributary Lions Den Wells Nos. 1 through 7, to be pumped as set forth in this plan for augmentation. The water to be used for augmentation after pumping ceases is the reserved portion of Applicant's nontributary water right in the Laramie-Fox Hills aquifer. Applicant shall provide for the augmentation of stream depletions caused by pumping the Lions Den Wells Nos. 1 through 7 and any additional or replacement wells as approved herein. Water use criteria are as follows:

A. Use: The Lions Den Wells Nos. 1 through 7 may each pump up to 0.474 acre-feet of water per year, assuming seven lots, for a maximum total of 3.32 acre-feet being withdrawn from the Dawson aquifer annually. Should fewer than seven lots be developed on Applicant's Property, but a minimum of four lots are developed, each well thereon shall be entitled to withdraw its proportional share of the total 3.32 acre-feet available. Indoor use will utilize up to 0.26 acre-feet of water per year per residence, with the remaining 0.214 acre-feet per year pumping entitlements available for other uses on the Applicant's Property, including, irrigation of lawn and garden and the watering of up

to two horses or equivalent livestock, per residence. The foregoing figures assume the use of seven individual septic systems, with resulting return flows from each as described below in Paragraph 22.C. Should Applicant subdivide Applicant's Property into fewer than seven lots such that total annual pumping is reduced below 3.32 acre-feet, depletions and return flows for the replacement of depletions will potentially be reduced. Under this circumstance, pumping for uses other than indoor use may be increased provided at all times septic return flows shall replace the maximum depletions resulting from pumping as described in this Paragraph 22. A minimum of four lots with indoor use and septic system returns must be developed in order for the associated wells to pump the maximum amount of 3.32 acre feet per year.

B. Depletions: Maximum annual stream depletions over the 300-year pumping period will amount to approximately 27.72% of pumping. Maximum annual depletions for total residential pumping from all wells of 3.32 acre-feet are therefore 0.92 acre-feet in year 300. Should Applicant's pumping be less than the total 3.32 annual acre-feet described herein, resulting depletions and required replacements will be correspondingly reduced.

C. Augmentation of Depletions During Pumping Life of Wells: Pursuant to C.R.S. §37-90-137(9)(c.5), Applicant is required to replace actual stream depletions attributable to pumping of the maximum seven residential Dawson aquifer wells. Applicant has shown that, provided water is delivered for indoor use and treated as required by this decree, depletions during the pumping period will be effectively replaced by residential return flows from non-evaporative septic systems. The annual consumptive use for non-evaporative septic systems is estimated at 10% per year per residence. At the household indoor use rate of 0.26 acre-feet per residence per year, total of 1.82 acre-feet (assuming seven residences), 1.638 acre-feet (0.234 acre-feet per residence) is replaced to the stream system per year, utilizing non-evaporative septic systems. Thus, during pumping, total maximum annual stream depletions of 0.92 acre-feet will be augmented provided septic system return flows are generated by indoor use of water in at least four residences ((4 x 0.26) x 0.9 = 0.93).

D. Augmentation of Post Pumping Depletions: This plan for augmentation shall have a pumping period of a minimum of 300 years. For the replacement of post-pumping depletions which may be associated with the use of the Lions Den Wells Nos. 1 through 7 and any additional or replacement wells, Applicant will reserve water from the nontributary Laramie Fox Hills aquifer underlying the Applicant's Property, as described below. This reservation will be sufficient to replace all post-pumping depletions associated with maximum pumping of Lions Den Wells Nos. 1 through 7, accounting for replacements made during the plan pumping period. The amount of nontributary Laramie-Fox Hills groundwater reserved may be reduced as may be determined through this Court's retained jurisdiction as described in this decree. If the Court, by order, reduces the Applicant's obligation to account for and replace such post-pumping depletions for any reason, it may also reduce the amount of Laramie-Fox Hills aquifer groundwater reserved for such purposes, as described herein. Applicant also reserves the right to substitute other legally available augmentation sources for such post

pumping depletions upon further approval of the Court under its retained jurisdiction. Even though this reservation is made, under the Court's retained jurisdiction, Applicant reserves the right in the future to prove that post-pumping depletions will be noninjurious. Pursuant to C.R.S. §37-90-137(9)(b), no more than 98% of water withdrawn annually from a nontributary aquifer shall be consumed. The reservation of 859 acre-feet from the Laramie-Fox Hills aquifer results in approximately 841.82 acre-feet of available post-pumping augmentation water, which will be sufficient to replace post-pumping depletions based on total pumping of 3.32 acre-feet annually, in accordance with the February 16, 2022, Division Engineer's Summary of Consultation.

E. Upon entry of a decree in this case, the Applicant will be entitled to apply for and receive a new well permit for the existing Lions Den Well No. 1 and new permits for the Lions Den Wells Nos. 2 through 7 for the uses in accordance with this decree and otherwise in compliance with C.R.S. §37-90-137.

23. Because depletions occur to both the South Platte and Arkansas River systems under the State's groundwater flow model, the Application in this case was filed in both Water Divisions 1 and 2. The return flows set forth above as the augmentation source during the pumping period will accrue to only the Arkansas River system where most of the depletions will occur and where the Applicant's Property is located. Under this augmentation plan, the total amount of depletions will be replaced to the Arkansas River system as set forth herein, and the Court finds that those replacements are sufficient under this augmentation plan subject to Paragraphs 42-46 herein.

24. This decree, upon recording, shall constitute a covenant running with Applicant's Property, benefitting and burdening said land, and requiring construction of well(s) to the nontributary Laramie-Fox Hills aquifer and pumping of water to replace post-pumping depletions under this decree. Subject to the requirements of this decree, in order to determine the amount and timing of post-pumping replacement obligations under this augmentation plan, Applicant or its successors shall use information commonly used by the Colorado Division of Water Resources for augmentation plans of this type at the time. Pursuant to this covenant, the water from the nontributary Laramie-Fox Hills aquifer reserved herein may not be severed in ownership from the Applicant's Property. This covenant shall be for the benefit of, and enforceable by, third parties owning vested water rights who would be injured by the failure to provide for the replacement of post-pumping depletions under the decree, and shall be specifically enforceable by such third parties against the owner of the Applicant's Property.

25. Applicant or its successors shall be required to initiate pumping from the Laramie-Fox Hills aquifer for the replacement of post-pumping depletions when either: (i) the absolute total amount of water available from the Dawson aquifer allowed to be withdrawn under the plan for augmentation decreed herein (996 acre-feet) has been pumped; (ii) the Applicant or its successors in interest have acknowledged in writing that all withdrawals for beneficial use through the Lions Den Wells Nos. 1 through 7 or any additional and replacement wells have permanently ceased; (iii) a period of 10 consecutive years where no withdrawals of groundwater has occurred; or (iv) accounting

shows that return flows from the use of the water being withdrawn is insufficient to replace depletions caused by the withdrawals that already occurred.

26. Unless modified by the Court under its retained jurisdiction, Applicant and its successors shall be responsible for accounting and replacement of post-pumping depletions as set forth herein. Should Applicant's obligation hereunder to account for and replace such post-pumping stream depletions be reduced or abrogated for any reason, Applicant may petition the Court to also modify or terminate the reservation of the Laramie-Fox Hills aquifer groundwater.

27. The term of this augmentation plan is for a minimum of 300 years, however, the length of the plan for a particular well or wells may be extended beyond such time provided the total plan pumping allocated to such well or wells is not exceeded. Should the actual operation of this augmentation plan depart from the planned diversions described in Paragraph 22 such that annual diversions are increased through banking measures, or the duration of the plan is extended, the Applicant must prepare and submit a revised model of stream depletions caused by the actual pumping or intended schedule. This analysis must utilize depletion modeling acceptable to the State Engineer, and to this Court, and must represent the water use under the plan for the entire term of the plan to date. The analysis must show that return flows have equaled or exceeded actual stream depletions throughout the pumping period and that reserved nontributary water remains sufficient to replace post-pumping depletions. The Applicant shall provide notice of the revised model submissions to the State Engineer, this Court, and opposer in this case, and the State Engineer and opposer will have thirty (30) days for review and comment about the revised modeling, upon which, the Applicant will be allowed thirty (30) days to respond to the comments of the State Engineer and the opposer. After this notice and comment period, if the revised depletion modeling is acceptable to the State Engineer, this Court may give approval for the extension of this augmentation plan past the 300-year minimum.

28. Consideration has been given to the depletions from Applicant's use and proposed uses of water, in quantity, time and location, together with the amount and timing of augmentation water which will be provided by the Applicant, and the existence, if any, of injury to any owner of or person entitled to use water under a vested water right.

29. It is determined that the timing, quantity and location of replacement water under the protective terms in this decree are sufficient to protect the vested rights of other water users and eliminate injury thereto. The replacement water shall be of a quantity and quality so as to meet the requirements for which the water of senior appropriators has normally been used, and provided of such quality, such replacement water shall be accepted by the senior appropriators for substitution for water derived by the exercise of the Lions Den Wells Nos. 1 through 7. As a result of the operation of this plan for augmentation, the depletions from the Lions Den Wells Nos. 1 through 7 and any additional or replacement wells associated therewith will not result in injury to the vested water rights of others.

CONCLUSIONS OF LAW

30. The application for adjudication of Denver Basin groundwater and approval of plan for augmentation was filed with the Water Clerks for Water Divisions 1 and 2, pursuant to C.R.S. §§37-92-302(1)(a) and 37-90-137(9)(c.5). These cases were properly consolidated before Water Division 2.

31. The Applicant's request for adjudication of these water rights is contemplated and authorized by law, and this Court and the Water Referee have exclusive jurisdiction over these proceedings. C.R.S. §§37-92-302(1)(a), 37-92-203, and 37-92-305.

32. Subject to the terms of this decree, the Applicant is entitled to the sole right to withdraw all the legally available water in the Denver Basin aquifers underlying the Applicant's Property, and the right to use that water to the exclusion of all others.

33. The Applicant has complied with C.R.S. §37-90-137(4), and the groundwater is legally available for withdrawal by the requested nontributary well(s), and legally available for withdrawal by the requested not-nontributary well(s) upon the entry of this decree approving an augmentation plan pursuant to C.R.S. §37-90-137(9)(c.5), and the issuance of well permits by the State Engineer's Office. Applicant is entitled to a decree from this Court confirming its rights to withdraw groundwater pursuant to C.R.S. §37-90-137(4).

34. The Denver Basin water rights applied for in this case are not conditional water rights, but are vested water rights determined pursuant to C.R.S. §37-90-137(4). No applications for diligence are required. The claims for nontributary and not-nontributary groundwater meet the requirements of Colorado Law.

35. The determination and quantification of the nontributary and not-nontributary groundwater rights in the Denver Basin aquifers as set forth herein is contemplated and authorized by law. C.R.S. §§37-90-137, and 37-92-302 through 37-92-305.

36. The Applicant's request for approval of a plan for augmentation is contemplated and authorized by law. If administered in accordance with this decree, this plan for augmentation will permit the uninterrupted diversions from the Lions Den Wells Nos. 1 through 7 and any additional or replacement wells as described herein without adversely affecting any other vested water rights in the Arkansas River and South Platte River or their tributaries and when curtailment would otherwise be required to meet a valid senior call for water. C.R.S. §§37-92-305(3), (5), and (8).

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED AS FOLLOWS:

37. All of the foregoing Findings of Fact and Conclusions of Law are incorporated herein by reference, and are considered to be a part of this decretal portion as though set forth in full.

38. The Application for Adjudication of Denver Basin Groundwater and for Approval of Plan for Augmentation filed by the Applicant is approved, subject to the terms of this decree.

A. Subject to the requirement to re-permit the existing exempt well located on Applicant's Property, Applicant is awarded a vested right to 1,223 acre-feet of groundwater from the not-nontributary Dawson aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. Of the total 1,223 acre-feet within the not-nontributary Dawson aquifer, 996 acre-feet total may be pumped pursuant to the plan for augmentation decreed herein. The remaining 227 acre-feet of Dawson aquifer groundwater decreed herein which is not included in this plan for augmentation, shall not be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of that amount.

B. Applicant is awarded a vested right to 2,812 acre-feet of groundwater from the not-nontributary Denver aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. However, none of the not-nontributary Denver aquifer water vested and decreed herein shall be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of such amount.

C. Applicant is awarded a vested right to 1,529 acre-feet of groundwater from the not-nontributary Arapahoe aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. However, none of the not-nontributary Arapahoe aquifer water vested and decreed herein shall be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of such amount.

D. Applicant is awarded a vested right to 1,025 acre-feet of groundwater from the nontributary Laramie-Fox Hills aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. Subject to the provisions of Rule 8 of the Denver Basin Rules, 2 CCR 402-6, limiting consumption to ninety-eight percent of the amount withdrawn, and the other terms and conditions of this decree, Applicant's Laramie-Fox Hills aquifer groundwater may be utilized for all purposes described in Paragraph 19, subject to the reservation of 859 acre-feet of the total 1,025 acre-feet awarded to be utilized only for replacement of post-pumping depletions under the plan for augmentation decreed herein, consistent with Paragraph 22.D., above.

39. The Applicant has furnished acceptable proof as to all claims and, therefore, the Application for Adjudication of Denver Basin Groundwater and For Approval of Plan for Augmentation filed by the Applicant is granted and approved in accordance with the

terms and conditions of this decree. Approval of this Application will not result in any injury to senior vested water rights.

40. The Applicant shall comply with C.R.S. §37-90-137(9)(b), requiring the relinquishment of the right to consume two percent (2%) of the amount of the nontributary groundwater withdrawn annually. Ninety-eight percent (98%) of the nontributary groundwater withdrawn annually may therefore be consumed. No plan for augmentation shall be required to provide for such relinquishment. Applicant shall be required to demonstrate to the State Engineer prior to the issuance of a well permit that no more than ninety-eight percent of the groundwater withdrawn annually will be consumed.

41. The Lions Den Wells Nos. 1 through 7, and any replacement or additional wells, shall be operated such that combined pumping from all wells does not exceed the annual (3.32 acre-feet) and total (996 acre-feet) pumping limits for the Dawson aquifer as decreed herein, and is in accordance with the requirements of the plan for augmentation described herein. Consistent with Rule 11.A of the Statewide Nontributary Ground Water Rules, the Denver Basin groundwater decreed herein must be withdrawn from the "overlying land" as defined in Rule 4.A.8 of the Statewide Nontributary Ground Water Rules, and Lions Den Wells Nos. 1 through 7 shall be constructed on the overlying land. The State Engineer, the Division Engineer, and/or the Water Commissioner shall not curtail the diversion and use of water by the Lions Den Wells Nos. 1 through 7 or any additional and replacement wells so long as the return flows from the annual diversions associated with the Lions Den Wells Nos. 1 through 7 and such other wells accrue to the stream system pursuant to the conditions contained herein. To the extent that Applicant or one of its successors or assigns is ever unable to provide the replacement water required, then the Lions Den Wells Nos. 1 through 7 and any additional or replacement wells shall not be entitled to operate under the protection of this plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulations of the State of Colorado. Pursuant to C.R.S. §37-92-305(8), the State Engineer shall curtail all out-of-priority diversions which are not so replaced as to prevent injury to vested water rights. In order for this plan for augmentation to operate, return flows from the septic systems discussed herein shall at all times during pumping be in an amount sufficient to replace the amount of stream depletions, and cannot be sold, leased or otherwise used for any purpose other than the augmentation plan decreed herein. Applicant shall be required to have any wells pumping on the Applicant's Property providing water for in-house uses and generating septic system returns prior to pumping the wells for any of the other uses identified in Paragraphs 19 or 22.A.

42. The Court retains jurisdiction over this matter to make adjustments in the allowed average annual amount of withdrawal from the Denver Basin aquifers, either upwards or downwards, to conform to actual local aquifer characteristics, and the Applicant need not file a new application to request such adjustments.

A. At such time as adequate data may be available, Applicant or the State Engineer may invoke the Court's retained jurisdiction as provided in this Paragraph 42 for purposes of making a final determination of water rights as to the quantities of water

available and allowed average annual withdrawals from any of the Denver Basin aquifers quantified and adjudicated herein. Any person seeking to invoke the Court's retained jurisdiction for such purpose shall file a verified petition with the Court setting forth with particularity the factual basis for such final determination of Denver Basin water rights under this decree, together with the proposed decretal language to effect the petition. Within four months of the filing of such verified petition, the State Engineer's Office shall utilize such information as available to make a final determination of water rights finding, and shall provide such information to the Court, Applicant, opposer, and the petitioning party.

B. If no protest is filed with the Court to such findings by the State Engineer's Office within sixty (60) days, this Court shall incorporate by entry of an Amended Decree such "final determination of water rights", and the provisions of this Paragraph 42 concerning adjustments to the Denver Basin ground water rights based upon local aquifer conditions shall no longer be applicable. In the event of a protest being timely filed, or should the State Engineer's Office make no timely determination as provided in Paragraph 42.A., above, the "final determination of water rights" sought in the petition may be made by the Water Court after notice to all parties and following a full and fair hearing, including entry of an Amended Decree, if applicable in the Court's reasonable discretion.

43. Pursuant to C.R.S. §37-92-304(6), the Court shall retain continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question of whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others, as pertains to the use of Denver Basin groundwater supplies adjudicated herein for augmentation purposes. The court also retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation plan, including the requirement to construct a well in the Laramie-Fox Hills aquifer as described in Paragraph 24. The Court further retains jurisdiction should the Applicant later seek to amend this decree by seeking to prove that post-pumping depletions are noninjurious, that the extent of replacement for post-pumping depletions is less than the amount of water reserved herein, and other post-pumping matters addressed in Paragraph 22.D. The Court's retained jurisdiction may be invoked using the process set forth in Paragraph 46.

44. As pertains to the Denver Basin groundwater supplies, the Court shall retain continuing jurisdiction for so long as Applicant is required to replace depletions to the Arkansas River system, to determine whether the replacement of depletions to the Arkansas River system instead of the South Platte River system is causing injury to water rights tributary to the South Platte River system.

45. Any person may invoke the Court's retained jurisdiction at any time that Applicant is causing depletions, including ongoing post-pumping depletions, to the South Platte River system and is replacing such depletions to only the Arkansas River system. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for the alleged injury and to

request that the Court reconsider injury to petitioners' vested water rights associated with the above replacement of depletions under this decree, together with the proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof going forward to establish a prima facie case based on the facts alleged in the petition and that Applicant's failure to replace depletions to the South Platte River system is causing injury to water rights owned by that party invoking the Court's retained jurisdiction, except that the State and Division Engineer may invoke the Court's retained jurisdiction by establishing a prima facie case that injury is occurring to any vested or conditionally decreed water rights in the South Platte River system due to the location of Applicant's replacement water. If the Court finds that those facts are established, the Applicant shall thereupon have the burden of proof to show (i) that petitioner is not injured, or (ii) that any modification sought by the petitioner is not required to avoid injury to the petitioner, or (iii) that any term or condition proposed by Applicant in response to the petition does avoid injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert injury to the vested water rights of others.

46. Except as otherwise specifically provided in Paragraphs 42-45, above, pursuant to the provisions of C.R.S. §37-92-304(6), this plan for augmentation decreed herein shall be subject to the reconsideration of this Court on the question of injury to vested water rights of others for five years following the date of entry of this decree. Any person, within such period, may petition the Court to invoke its retained jurisdiction. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for requesting that the Court reconsider injury to petitioner's vested water rights associated with the operation of this decree, together with proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof of going forward to establish a prima facie case based on the facts alleged in the petition. If the Court finds those facts are established, Applicant shall thereupon have the burden of proof to show: (i) that the petitioner is not injured, or (ii) that any modification sought by the petitioner is not required to avoid injury to the petitioner, or (iii) that any term or condition proposed by Applicant in response to the petition does avoid injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert injury to the vested water rights of others. If no such petition is filed within such period and the retained jurisdiction period is not extended by the Court in accordance with the provisions of the statute, this matter shall become final on the question of injury to vested water rights of others under its own terms, although the Court retains continuing jurisdiction as specifically provided in Paragraphs 42-45.

47. Pursuant to C.R.S. §37-92-502(5)(a), the Applicant shall install and maintain such water measurement devices and recording devices as are deemed necessary by the State Engineer or Division Engineers, and the same shall be installed and operated in accordance with instructions from said entities. Applicant is to install and maintain a totalizing flow meter on each of Lions Den Wells Nos. 1 through 7, or any additional or replacement wells associated therewith and is required to include geophysical logging on each well. Applicant shall read and record the well meter readings on April 1st and November 1st of each year and shall submit the meter readings to the

Water Commissioner by April 15th and November 15th of each year or more frequently as requested by the Water Commissioner.

48. The vested water rights, water right structures, and plan for augmentation decreed herein shall be subject to all applicable administrative rules and regulations, as currently in place or as may in the future be promulgated, of the offices of Colorado State and Division Engineers for administration of such water rights, to the extent such rules and regulations are uniformly applicable to other similarly situated water rights and water users. Lions Den Well No. 1 shall be permitted as a non-exempt structure under the plan for augmentation decreed herein. The State Engineer shall identify in any permits issued pursuant to this decree the specific uses which can be made of the groundwater to be withdrawn, and, to the extent the well permit application requests a use that has not been specifically identified in this decree, shall not issue a permit for any proposed use, which use the State Engineer determines to be speculative at the time of the well permit application or which would be inconsistent with the requirements of this decree, any separately decreed plan for augmentation, or any modified decree and augmentation plan.

49. The Ruling of Referee, when entered as a decree of the Water Court, shall be recorded in the real property records of El Paso County, Colorado. Copies of this ruling shall be mailed as provided by statute.

Date: August 22, 2022.

Kate Brewer
Water Referee
Water Division Two

DECREE

The court finds that no protest was filed in this matter. The foregoing ruling is confirmed and approved and is made the judgment and decree of this Court.

Date: September 15, 2022

BY THE COURT:

LARRY C. SCHWARTZ, WATER JUDGE
WATER DIVISION 2