COLORADO GROUND WATER COMMISSION FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO ALLOW THE WITHDRAWAL OF GROUND WATER IN THE UPPER BLACK SQUIRREL CREEK DESIGNATED GROUND WATER BASIN

APPLICANT: TKB PROPERTIES, LLC

DENVER

ROBERT C. "808" BALINK

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El Paso County, CO

DETERMINATION NO.: 1485-BD

AQUIFER:

Rec \$31.00 1 of 6

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, TKB Properties, LLC (hereinafter "applicant") submitted an application for determination of water right to allow the withdrawal of designated ground water from the Denver

- The application was received complete by the Colorado Ground Water Commission on December 21, 2007.
- 2. The applicant requests a determination of rights to designated ground water in the Denver Aquifer (hereinafter "aquifer") underlying 40 acres, generally described as the N½ of the N½ of the SW¼ of Section 13, Township 12 South, Range 63 West of the 6th Principal Meridian, in El Paso County. According to a signed statement dated December 17, 2007, the applicant owns the 40 acres of land, as further described in said affidavit which is attached hereto as Exhibit A, and claims control of the ground water in the aquifer underlying this land area.
- The proposed annual amount of ground water to be allocated and withdrawn from the aquifer for intended beneficial uses is the maximum allowable amount.
- 4. The above described land area overlying the ground water claimed by the applicant is located within the boundaries of the Upper Black Squirrel Creek Designated Ground Water Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction.
- The applicant intends to apply the allocated ground water to the following beneficial uses: domestic, commercial, industrial, irrigation, stock watering and replacement supply. The applicant's proposed place of use of the allocated ground water is the above described 40 acre land area.
- 6. The quantity of water in the aquifer underlying the 40 acres of land claimed by the applicant is 1,734 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:
 - a. The average specific yield of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 17 percent.

Applicant: TKB Properties, LLC

Aquifer: Denver

Determination No.: 1485-BD

b. The average thickness of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 255 feet.

- 7. At this time, there is no substantial artificial recharge that would affect the aquifer within a one hundred year period.
- 8. Pursuant to Section 37-90-107(7), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate ground water in the aquifer based on ownership of the overlying land and an aquifer life of one hundred years. Therefore, the maximum allowed average annual amount of ground water in the aquifer that may be allocated for withdrawal pursuant to the data in the paragraphs above for the 40 acres of overlying land claimed by the applicant is 17.3 acre-feet.
- 9. In accordance with Rule 5.3.2.4 of the Designated Basin Rules, the maximum average annual amount of ground water available for allocation from the aquifer underlying the 40 acres of land claimed by the applicant is reduced to 16.3 acre-feet to allow for the annual withdrawal of a small capacity well which is completed in the aquifer, Permit no. 225983. Except for this well, review of the records in the Office of the State Engineer has disclosed that none of the water in the aquifer underlying the land claimed by the applicant has been previously allocated or permitted for withdrawal.
- 10. Pursuant to Section 37-90-107(7)(c)(ill), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.
- 11. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable aquifer may be less than the one hundred years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.
- 12. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the aquifer underlying the land claimed by the applicant will, within one hundred years, deplete the flow of a natural steam or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the ground water is considered to be not-nontributary ground water. Also, the location of the land claimed by the applicant is closer than one mile from the aquifer contact with the alluvium. Withdrawal of water from the aquifer underlying the claimed land area would impact the alluvial aquifer of Black Squirrel Creek or its tributaries, which has been determined to be over-appropriated. Commission approval of a replacement plan pursuant to Section 37-90-107.5, C.R.S., and Rule 5.6 of the Designated Basin Rules providing for the actual depletion of the alluvial aquifer and adequate to prevent any material injury to existing water rights, would be required prior to approval of well permits for wells to be located on this land area to withdraw the allocated ground water from the aquifer.

Applicant: TKB Properties, LLC

Aquifer: Denver

Determination No.: 1485-BD

13. In accordance with Section 37-90-107(7), C.R.S., upon Commission approval of a determination of water right, well permits for wells to withdraw the authorized amount of water from the aquifer shall be available upon application, subject to the conditions of this determination and the Designated Basin Rules and subject to approval by the Commission.

- 14. On January 24, 2008, in accordance with Rule 9.1 of the Designated Basin Rules, a letter was sent to the Upper Black Squirrel Creek Ground Water Management District requesting written recommendations concerning this application. No written recommendations from the district were received.
- 15. The Commission Staff has evaluated the application relying on the claims to control of the ground water in the aquifer made by the applicant.
- In accordance with Sections 37-90-107(7) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on January 31 and February 7, 2008.
- No objections to the determination of water right and proposed allocation of ground water were received within the time limit set by statute.
- 18. In order to prevent unreasonable impairment to the existing water rights of others within the Upper Black Squirrel Creek Designated Ground Water Basin it is necessary to impose conditions on the determination of water right and proposed allocation of ground water. Under conditions as stated in the following Order, no unreasonable impairment of existing water rights will occur from approval of this determination of water right or from the issuance of well permits for wells to withdraw the authorized amount of allocated ground water from the aquifer.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of rights to designated ground water in the Denver Aquifer underlying 40 acres of land, generally described as the N½ of the N½ of the SW¼ of Section 13, Township 12 South, Range 63 West of the 6th Principal Meridian, is approved subject to the following conditions:

- 19. The allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 16.3 acre-feet. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.
- 20. To conform to actual aquifer characteristics, the Commission may adjust the allowed average annual amount of ground water to be withdrawn from the aquifer based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the volume of water in the aquifer was incorrect.

Applicant: TKB Properties, LLC

Aquifer: Denver

Determination No.: 1485-BD

21. The applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.

- 22. Commission approval of a replacement plan, providing for actual depletion of affected alluvial aquifers and adequate to prevent any material injury to existing water rights in such alluvial aquifers is required prior to approval of well permits for wells to be located on the overlying land area to withdraw ground water from the aquifer.
- 23. The use of ground water from this allocation shall be limited to the following beneficial uses: domestic, commercial, industrial, irrigation, stock watering and replacement supply. The place of use shall be limited to the above described 40 acre land area.
- 24. The applicant, or subsequent persons controlling this water right, shall record in the public records of the county in which the claimed overlying land is located notice of transfer of any portion of this water right to another within sixty days after the transfer, so that a title examination of the above described 40 acre land area, or any part thereof, shall reveal the changes affecting this water right. Such notice shall consist of a signed and dated deed which indicates the determination number, the aquifer, a description of the above described land area, the annual amount of ground water (acre-feet) transferred, name of the recipient, and the date of transfer.
- 25. Subject to the above conditions, well permits for wells to withdraw the allocated annual amount of water from the aquifer shall be available upon application subject to approval by the Commission and the following conditions:
 - a. The wells shall be located on the above described 40 acre overlying land area.
 - b. The wells must be constructed to withdraw water from only the Denver Aquifer. Upon application for a well permit to construct such a well, the estimated top and base of the aquifer at the proposed well location will be determined by the Commission and indicated on the approved well permit. Plain non-perforated casing must be installed, grouted and sealed to prevent diversion of ground water from other aquifers and the movement of ground water between aquifers.
 - c. The entire depth of each well must be geophysically logged <u>prior</u> to installing the casing as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.
 - d. Each well shall be constructed within 200 feet of the location specified on the approved well permit, but must be more than 600 feet from any existing large-capacity well completed in the same aquifer.
 - e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and maintained by the well owner and submitted to the Commission or the Upper Black Squirrel Creek Ground Water Management District upon their request.

Applicant: TKB Properties, LLC

Aquifer: Denver

Determination No.: 1485-BD

- f. The well owner shall mark the well in a conspicuous place with the permit number and the name of the aquifer. The well owner shall take necessary means and precautions to preserve these markings.
- 26. A copy of this Findings and Order shall be recorded by the applicant in the public records of the county in which the claimed overlying land is located so that a title examination of the above described 40 acre overlying land area, or any part thereof, shall reveal the existence of this determination.

Dated this	1216	day of	March	. 2008.
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Dick Wolfe, P.E Executive Director

Colorado Ground Water Commission

Keith Vander Horst, P.E. Water Resource Engineer

Prepared by: SKR

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1485-BD

GWS-1 (Rev, Sept 1996)

Page 1 of 1

STATE OF COLORADO OFFICE OF THE STATE ENGINEER

DIVISION OF WATER RESOURCES

RECEIVED

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

I (we) TKB Properties, LLC		
	(Name) b) the owner(s) of the following described properties the County of El Paso	perty State
North One-half of the North One-half of the	e Southwest Quarter, Section 13, Township 12 South	,
Range 63 West		
and, that the ground water sought to aquifer underlying the above-des another, nor has consent been giver	scribed land has not been conveyed or reserve	ed to
	(we) have read the statements made herein; knov are true to my (our) own knowledge.	v the
	TKB Properties, LLC (Date	
	(Date	e)
INSTRUCTIONS:		
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COLORADO GROUND WATER COMMISSION FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO ALLOW THE WITHDRAWAL OF GROUND WATER IN THE UPPER BLACK SQUIRREL CREEK DESIGNATED GROUND WATER BASIN

APPLICANT: TKB PROPERTIES, LLC

ARAPAHOE

ROBERT C. "BOB" BALINK

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Rec \$31.00 1 of 6 20

El Paso County, CO

2020/2020

DETERMINATION NO.:

AQUIFER:

1484-BD

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, TKB Properties, LLC (hereinafter "applicant") submitted an application for determination of water right to allow the withdrawal of designated ground water from the Arapahoe Aquifer.

- The application was received complete by the Colorado Ground Water Commission on December 21, 2007.
- 2. The applicant requests a determination of rights to designated ground water in the Arapahoe Aquifer (hereinafter "aquifer") underlying 40 acres, generally described as the N½ of the N½ of the SW¼ of Section 13, Township 12 South, Range 63 West of the 6th Principal Meridian, in El Paso County. According to a signed statement dated December 17, 2007, the applicant owns the 40 acres of land, as further described in said affidavit which is attached hereto as Exhibit A, and claims control of the ground water in the aquifer underlying this land area.
- The proposed annual amount of ground water to be allocated and withdrawn from the aquifer for intended beneficial uses is the maximum allowable amount.
- 4. The above described land area overlying the ground water claimed by the applicant is located within the boundaries of the Upper Black Squirrel Creek Designated Ground Water Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction.
- The applicant intends to apply the allocated ground water to the following beneficial uses: domestic, commercial, industrial, irrigation, stock watering and replacement supply. The applicant's proposed place of use of the allocated ground water is the above described 40 acre land area.
- 6. The quantity of water in the aquifer underlying the 40 acres of land claimed by the applicant is 1,326 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:
 - a. The average specific yield of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 17 percent.

Applicant: TKB Properties, LLC Page 2

Aquifer: Arapahoe

Determination No.: 1484-BD

b. The average thickness of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 195 feet.

- 7. At this time, there is no substantial artificial recharge that would affect the aquifer within a one hundred year period.
- 8. Pursuant to Section 37-90-107(7), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate ground water in the aquifer based on ownership of the overlying land and an aquifer life of one hundred years. Therefore, the maximum allowed average annual amount of ground water in the aquifer that may be allocated for withdrawal pursuant to the data in the paragraphs above for the 40 acres of overlying land claimed by the applicant is 13.3 acre-feet.
- A review of the records in the Office of the State Engineer has disclosed that none of the water in the aquifer underlying the land claimed by the applicant has been previously allocated or permitted for withdrawal.
- 10. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.
- 11. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable aquifer may be less than the one hundred years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.
- 12. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the aquifer underlying the land claimed by the applicant will not, within one hundred years, deplete the flow of a natural steam or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the ground water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. No more than 98% of the amount of ground water withdrawn annually shall be consumed, as required by the Designated Basin Rules.
- 13. In accordance with Section 37-90-107(7), C.R.S., upon Commission approval of a determination of water right, well permits for wells to withdraw the authorized amount of water from the aquifer shall be available upon application, subject to the conditions of this determination and the Designated Basin Rules and subject to approval by the Commission.
- 14. On January 24, 2008, in accordance with Rule 9.1 of the Designated Basin Rules, a letter was sent to the Upper Black Squirrel Creek Ground Water Management District requesting written recommendations concerning this application. No written recommendations from the district were received.
- 15. The Commission Staff has evaluated the application relying on the claims to control of the ground water in the aquifer made by the applicant.

Applicant: TKB Properties, LLC

Aquifer: Arapahoe

Determination No.: 1484-BD

16. In accordance with Sections 37-90-107(7) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on January 31 and February 7, 2008.

- 17. No objections to the determination of water right and proposed allocation of ground water were received within the time limit set by statute.
- 18. In order to prevent unreasonable impairment to the existing water rights of others within the Upper Black Squirrel Creek Designated Ground Water Basin it is necessary to impose conditions on the determination of water right and proposed allocation of ground water. Under conditions as stated in the following Order, no unreasonable impairment of existing water rights will occur from approval of this determination of water right or from the issuance of well permits for wells to withdraw the authorized amount of allocated ground water from the aquifer.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of rights to designated ground water in the Arapahoe Aquifer underlying 40 acres of land, generally described as the N½ of the N½ of the SW¼ of Section 13, Township 12 South, Range 63 West of the 6th Principal Meridian, is approved subject to the following conditions:

- 19. The allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 13.3 acre-feet. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.
- 20. To conform to actual aquifer characteristics, the Commission may adjust the allowed average annual amount of ground water to be withdrawn from the aquifer based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the volume of water in the aquifer was incorrect.
- 21. The applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.
- 22. No more than 98% of the ground water withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the water withdrawn is being consumed.
- 23. The use of ground water from this allocation shall be limited to the following beneficial uses: domestic, commercial, industrial, irrigation, stock watering and replacement supply. The place of use shall be limited to the above described 40 acre land area.

Applicant: TKB Properties, LLC

Aguifer: Arapahoe

Determination No.: 1484-BD

24. The applicant, or subsequent persons controlling this water right, shall record in the public records of the county - in which the claimed overlying land is located - notice of transfer of any portion of this water right to another within sixty days after the transfer, so that a title examination of the above described 40 acre land area, or any part thereof, shall reveal the changes affecting this water right. Such notice shall consist of a signed and dated deed which indicates the determination number, the aquifer, a description of the above described land area, the annual amount of ground water (acre-feet) transferred, name of the recipient, and the date of transfer.

- 25. Subject to the above conditions, well permits for wells to withdraw the allocated annual amount of water from the aquifer shall be available upon application subject to approval by the Commission and the following conditions:
 - a. The wells shall be located on the above described 40 acre overlying land area.
 - b. The wells must be constructed to withdraw water from only the Arapahoe Aquifer. Upon application for a well permit to construct such a well, the estimated top and base of the aquifer at the proposed well location will be determined by the Commission and indicated on the approved well permit. Plain non-perforated casing must be installed, grouted and sealed to prevent diversion of ground water from other aquifers and the movement of ground water between aquifers.
 - c. The entire depth of each well must be geophysically logged <u>prior</u> to installing the casing as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.
 - d. Each well shall be constructed within 200 feet of the location specified on the approved well permit, but must be more than 600 feet from any existing large-capacity well completed in the same aquifer.
 - e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and maintained by the well owner and submitted to the Commission or the Upper Black Squirrel Creek Ground Water Management District upon their request.
 - f. The well owner shall mark the well in a conspicuous place with the permit number and the name of the aquifer. The well owner shall take necessary means and precautions to preserve these markings.
- 26. A copy of this Findings and Order shall be recorded by the applicant in the public records of the county in which the claimed overlying land is located so that a title examination of the above described 40 acre overlying land area, or any part thereof, shall reveal the existence of this determination.

Applicant: TKB Properties, LLC Aquifer: Arapahoe

Determination No.: 1484-BD

Dated this 12th day of Month _____, 2008,

> Dick Wolfe, P.E. **Executive Director**

Colorado Ground Water Commission

Keith Vander Horst, P.E. Water Resource Engineer

Prepared by: SKR

GWS-1 (Rev, Sept 1996)

Page 1 of 1

STATE OF COLORADO OFFICE OF THE STATE ENGINEER **DIVISION OF WATER RESOURCES**



NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

	(Mana)
claim and say that I (wa)	(Name) am (are) the owner(s) of the following described property
consisting of 40	I A A . AMID.
of Colorado:	icres in the County of El Paso, State
VI COLORAGO.	
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Range 63 West	
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and that the ground water s	rught to be withdrawn from the Aranghoe
and, that the ground water so aquifer underlying the abo	ought to be withdrawn from the Arapahoe
aquifer underlying the abo	ove-described land has not been conveyed or reserved to
aquifer underlying the abo	bught to be withdrawn from the Arapahoe ove-described land has not been conveyed or reserved to on given to it's withdrawal by another,
aquifer underlying the abo another, nor has consent bec	ove-described land has not been conveyed or reserved to on given to it's withdrawal by another.
aquifer underlying the abo another, nor has consent bec Further, I (we) claim and say	ove-described land has not been conveyed or reserved to en given to it's withdrawal by another. The statements made herein: know the
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aquifer underlying the abo another, nor has consent bec Further, I (we) claim and say	ove-described land has not been conveyed or reserved to on given to it's withdrawal by another, by that I (we) have read the statements made herein; know the same are true to my (our) own knowledge.

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COLORADO GROUND WATER COMMISSION FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO ALLOW THE WITHDRAWAL OF GROUND WATER IN THE UPPER BLACK SQUIRREL CREEK DESIGNATED GROUND WATER BASIN

APPLICANT: TKB PROPERTIES, LLC

AQUIFER:

LARAMIE-FOX HILLS

DETERMINATION NO.:

1483-BD

ROBERT C. "BOB" BALINK 04/14/2008 61:58:59 PM

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Page Rec \$31.89 10/6 El Paso County, CO

in compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, TKB Properties, LLC (hereinafter "applicant") submitted an application for determination of water right to allow the withdrawal of designated ground water from the Laramie-Fox Hills Aquifer.

- 1. The application was received complete by the Colorado Ground Water Commission on December 21, 2007.
- The applicant requests a determination of rights to designated ground water in the Laramie-Fox Hills Aquifer (hereinafter "aquifer") underlying 40 acres, generally described as the N1/2 of the N½ of the SW¼ of Section 13, Township 12 South, Range 63 West of the 6th Principal Meridian, in El Paso County. According to a signed statement dated December 17, 2007, the applicant owns the 40 acres of land, as further described in said affidavit which is attached hereto as Exhibit A, and claims control of the ground water in the aquifer underlying this land area.
- 3. The proposed annual amount of ground water to be allocated and withdrawn from the aquifer for intended beneficial uses is the maximum allowable amount.
- The above described land area overlying the ground water claimed by the applicant is located within the boundaries of the Upper Black Squirrel Creek Designated Ground Water Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction.
- The applicant intends to apply the allocated ground water to the following beneficial uses: domestic, commercial, industrial, irrigation, stock watering and replacement supply. The applicant's proposed place of use of the allocated ground water is the above described 40 acre land area.
- The quantity of water in the aquifer underlying the 40 acres of land claimed by the applicant is 1,560 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:
 - a. The average specific yield of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 15 percent.

Applicant: TKB Properties, LLC Aquifer: Laramie-Fox Hills Determination No.: 1483-BD

b. The average thickness of the saturated permeable material of the aquifer underlying the land under consideration that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 260 feet.

- 7. At this time, there is no substantial artificial recharge that would affect the aquifer within a one hundred year period.
- 8. Pursuant to Section 37-90-107(7), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate ground water in the aquifer based on ownership of the overlying land and an aquifer life of one hundred years. Therefore, the maximum allowed average annual amount of ground water in the aquifer that may be allocated for withdrawal pursuant to the data in the paragraphs above for the 40 acres of overlying land claimed by the applicant is 15.6 acre-feet.
- A review of the records in the Office of the State Engineer has disclosed that none of the water in the aquifer underlying the land claimed by the applicant has been previously allocated or permitted for withdrawal.
- 10. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.
- 11. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable aquifer may be less than the one hundred years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.
- 12. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the aquifer underlying the land claimed by the applicant will not, within one hundred years, deplete the flow of a natural steam or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the ground water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. No more than 98% of the amount of ground water withdrawn annually shall be consumed, as required by the Designated Basin Rules.
- 13. In accordance with Section 37-90-107(7), C.R.S., upon Commission approval of a determination of water right, well permits for wells to withdraw the authorized amount of water from the aquifer shall be available upon application, subject to the conditions of this determination and the Designated Basin Rules and subject to approval by the Commission.
- 14. On January 24, 2008, in accordance with Rule 9.1 of the Designated Basin Rules, a letter was sent to the Upper Black Squirrel Creek Ground Water Management District requesting written recommendations concerning this application. No written recommendations from the district were received.
- 15. The Commission Staff has evaluated the application relying on the claims to control of the ground water in the aquifer made by the applicant.

Applicant: TKB Properties, LLC Aquifer: Laramie-Fox Hills Determination No.: 1483-BD

- In accordance with Sections 37-90-107(7) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on January 31 and February 7, 2008.
- 17. No objections to the determination of water right and proposed allocation of ground water were received within the time limit set by statute.
- 18. In order to prevent unreasonable impairment to the existing water rights of others within the Upper Black Squirrel Creek Designated Ground Water Basin it is necessary to impose conditions on the determination of water right and proposed allocation of ground water. Under conditions as stated in the following Order, no unreasonable impairment of existing water rights will occur from approval of this determination of water right or from the issuance of well permits for wells to withdraw the authorized amount of allocated ground water from the aquifer.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of rights to designated ground water in the Laramie-Fox Hills Aquifer underlying 40 acres of land, generally described as the N½ of the N½ of the SW¼ of Section 13, Township 12 South, Range 63 West of the 6th Principal Meridian, is approved subject to the following conditions:

- 19. The allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 15.6 acre-feet. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.
- 20. To conform to actual aquifer characteristics, the Commission may adjust the allowed average annual amount of ground water to be withdrawn from the aquifer based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the volume of water in the aquifer was incorrect.
- 21. The applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.
- 22. No more than 98% of the ground water withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the water withdrawn is being consumed.
- 23. The use of ground water from this allocation shall be limited to the following beneficial uses: domestic, commercial, industrial, irrigation, stock watering and replacement supply. The place of use shall be limited to the above described 40 acre land area.

- 24. The applicant, or subsequent persons controlling this water right, shall record in the public records of the county in which the claimed overlying land is located notice of transfer of any portion of this water right to another within sixty days after the transfer, so that a title examination of the above described 40 acre land area, or any part thereof, shall reveal the changes affecting this water right. Such notice shall consist of a signed and dated deed which indicates the determination number, the aquifer, a description of the above described land area, the annual amount of ground water (acre-feet) transferred, name of the recipient, and the date of transfer.
- 25. Subject to the above conditions, well permits for wells to withdraw the allocated annual amount of water from the aquifer shall be available upon application subject to approval by the Commission and the following conditions:
 - a. The wells shall be located on the above described 40 acre overlying land area.
 - b. The wells must be constructed to withdraw water from only the Laramle-Fox Hills Aquifer. Upon application for a well permit to construct such a well, the estimated top and base of the aquifer at the proposed well location will be determined by the Commission and indicated on the approved well permit. Plain non-perforated casing must be installed, grouted and sealed to prevent diversion of ground water from other aquifers and the movement of ground water between aquifers.
 - c. The entire depth of each well must be geophysically logged <u>prior</u> to installing the casing as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.
 - d. Each well shall be constructed within 200 feet of the location specified on the approved well permit, but must be more than 600 feet from any existing large-capacity well completed in the same aquifer.
 - e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and maintained by the well owner and submitted to the Commission or the Upper Black Squirrel Creek Ground Water Management District upon their request.
 - f. The well owner shall mark the well in a conspicuous place with the permit number and the name of the aquifer. The well owner shall take necessary means and precautions to preserve these markings.
- 26. A copy of this Findings and Order shall be recorded by the applicant in the public records of the county in which the claimed overlying land is located so that a title examination of the above described 40 acre overlying land area, or any part thereof, shall reveal the existence of this determination.

contents hereof; and that the same are true to my (our) own knowledge.

In mal	12-17-07
TKB Properties, LLC	(Date)
	······································
	(Date)

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COLORADO GROUND WATER COMMISSION FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR REPLACEMENT PLAN TO ALLOW THE WITHDRAWAL OF GROUND WATER FROM THE DENVER AQUIFER IN THE UPPER BLACK SQUIRREL CREEK DESIGNATED GROUND WATER BASIN.

APPLICANT: TKB PROPERTIES, LLC

REPLACEMENT PLAN - DETERMINATION OF WATER RIGHT NO. 1485-BD

In compliance with Section 37-90-107.5, CRS, and the Designated Basin Rules, 2 CCR 410-1, TKB Properties, LLC (referred to hereinafter as "applicant") submitted an application for a replacement plan to allow the withdrawal of ground water from the Denver Aquifer in accordance with Determination of Water Right No. 1485-BD.

- 1. Pursuant to Section 37-90-107(7), CRS, in the Findings and Order dated March 12, 2008, the Ground Water Commission (hereinafter "Commission") approved a Determination of Water Right, No. 1485-BD, for the Denver aquifer. This determination of water right allows the allocation of ground water from the Denver Aquifer (hereinafter "aquifer"), underlying 40 acres, generally described as the N½ of the N½ of the SW¼ of Section 13, Township 12 South, Range 63 West of the 6th Principal Meridian, in El Paso County.
- 2. The allowed average annual amount of ground water to be withdrawn from the aquifer, in accordance with the conditions of the above determination of water right, shall not exceed 16.3 acre-feet.
- 3. a. In accordance with Rule 5.3.6 of the Designated Basin Rules, the replacement water requirement status for the ground water in the aquifer underlying the above described 40 acre land area was determined to be not-nontributary. Withdrawal of ground water from the aquifer underlying the above land area would impact the Upper Black Squirrel Creek Designated Ground Water Basin Alluvial Aquifer, described in Designated Basins Rules 5.2.6.1 (hereinafter referred to as the "Upper Black Squirrel Alluvial Aquifer"), which has been determined by the Commission to be over-appropriated.
 - b. Commission approval of a replacement plan, providing for replacement of actual depletions to the Upper Black Squirrel Alluvial Aquifer and adequate to prevent any material injury to existing water rights, is required prior to approval of well permits for wells to be located on the above described land area to withdraw the allowed allocation of ground water from the aquifer, in accordance with the conditions of the subject determination of water right.
- 4. In accordance with Rule 5.3.6.2(C) of the Designated Basin Rules, the amount of replacement water shall provide for the replacement of depletions of alluvial water for the first 100 years due to all previous pumping and if pumping continues beyond 100 years, shall replace actual impact until pumping ceases.
- The above-described 40-acre land area is located within the boundaries of the Upper Black Squirrel Creek Designated Ground Water Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Commission has jurisdiction.

Applicant: TKB Properties, LLC

Aguifer: Denver

Replacement Plan - Determination No. 1485-BD

6. The subject application for replacement plan was received complete by the Commission on January 11, 2008.

- 7. a. In accordance with Rule 5.6.1 of the Designated Basin Rules, the replacement plan must be adequate to prevent any material injury to water rights of other appropriators.
 - b. As proposed by the applicant, the replacement plan would allow for use of an annual amount of up to 1.0 acre-feet of water for two individual wells serving two lots of a four-lot subdivision for a period of 300 years. The use of each well would be limited to an annual withdrawal of 0.5 acre-feet of ground water, which breaks down to 0.3 acre-feet for inhouse use, and 0.2 acre-feet for the irrigation of up to 3,000 square feet of lawns and gardens and the watering of up to two horses.
 - c. The applicant calculated actual depletions to the Upper Black Squirrel Creek Alluvial Aquifer system for the proposed withdrawals with a ground water flow model (AUG 3) using the Colorado State Engineer's (SEO) Denver aquifer DE10 data file, the output of which is attached hereto as Exhibit A. The calculated depletions to the Upper Black Squirrel Creek Alluvial Aquifer caused by the pumping of 1.0 acre-feet per year for 300 years would steadily increase to 0.92 acre-feet, or 91.79% of pumping, in the 300th year. Staff has determined the applicant's values to be acceptable.
 - d. Replacements for depletions are to be made to the Upper Black Squirrel Alluvial Aquifer. The applicant proposes to aggregate all replacements to the drainage in which the wells will operate, in accordance with Guideline 2007-1.
 - e. The source of replacement water would be return flows from in-house use of ground water, to be withdrawn from a total of four wells, two of which will be Denver aquifer wells permitted in accordance with the conditions of the subject determination and proposed replacement plan, and two of which will be Arapahoe aquifer wells withdrawing nontributary ground water in accordance with the conditions of Determination No. 1484-BD.
 - i. The applicant estimates that return flows from each of the four lots will consist of 90% of the water used for in-house purposes. If each lot uses the total anticipated annual amount for in-house use (0.30 acre-feet), the per lot contribution amounts to 0.27 acre-feet. According to the applicant's calculations, at full build out, return flows will total 1.08 acre-feet per year.
 - ii. A totalizing flow meter will be installed on each well and will be kept in good working order.
 - The subject property is located within the drainage of Black Squirrel Creek. The entirety of the property overlies the legal alluvium of Black Squirrel Creek.
 - iv. The applicant or their successor(s) will be responsible for administration of the replacement plan.
 - v. The approved replacement plan will be recorded in the real property records of El Paso County.

Applicant: TKB Properties, LLC

Aquifer: Denver

Replacement Plan - Determination No. 1485-BD

- 16. Well permits for up to two individual on-lot wells shall be available upon application subject to approval by the Commission and the conditions for well permit issuance in the Commission's Findings and Order of March 12, 2008, for Determination of Water Right No. 1485-BD, and subject to the following terms and conditions of this replacement plan.
- 17. A totalizing flow meter or a Commission approved water flow measuring device shall be installed on each well. The well owners shall maintain the meters in good working order. Permanent records of annual withdrawal of ground water shall be maintained by each well owner and provided to the Commission upon request.
- 18. The allowed annual amount of ground water to be withdrawn from the aquifer by each permitted well shall not exceed 0.5 acre-feet. The total combined withdrawals by both wells may not exceed 1.0 acre-feet annually.
- 19. The allowed use of ground water for each well under this plan is indoor needs for one single-family dwelling, irrigation of lawns and gardens not to exceed 3,000 square feet, the watering of up to two large domestic animals, and replacement supply. Place of use for each well shall be limited to the lot on which the well is located.
- 20. To assure adequate return flows, the number of wells serving occupied single-family dwellings that are generating return flows via a non-evaporative septic system must be equal to or greater than the number of wells shown in Table 1 below before any irrigation or animal watering is allowed to be served by either of the two wells to be operated pursuant to this plan.

Table 1				
Year	No. of Wells	Return Flow (af/yr)		
1-10	1	0.27		
11-20	2	0.54		
21-80	3	0.81		
81-300	4	1.08		

- 21. Return flows from in-house use of ground water within the future four-lot subdivision shall occur through individual on lot non-evaporative septic systems located within the above described 40 acre land area. To prevent unreasonable impairment of water quality, the septic systems shall be constructed to state and county health department standards.
- 22. Pumping under this plan is limited to a period of 300 years. The year of first use of this replacement plan shall be the calendar year of construction of a well permitted pursuant to this plan or permitting of an existing well pursuant to the plan.
- 23. A table showing net depletions to the affected alluvial aquifer in acre-feet per year is shown in Table 1 of the attached Exhibit A, based on an assumption of a continuous annual withdrawal from the aquifer of 1.0 acre-feet by both wells to be permitted pursuant to this plan. Replacement of depletions must be provided in the acre-feet amounts shown in Exhibit A. Replacement requirements may be computed using Exhibit A depletion values on a prorated basis between each given value, or for simplicity may be equal to the amount shown in the next succeeding 10-year increment.

Aquifer: Denver

Replacement Plan - Determination No. 1485-BD

- 29. To insure appropriate control of the subject water rights and sources of replacement water, and that each lot is able to obtain a well permit, the applicant shall transfer a sufficient portion of the underlying water either to each lot owner (if well permits will be applied for by the lot owners), or to the property owners association (if well permits will be applied for by the property owners association). Such transfers shall be by recorded deed, in accordance with the conditions of Paragraph 24 of the Commission's Orders for Determination No. 1485-BD.
- 30. Any covenants adopted for the future subdivision should contain a description of the replacement plan and how the plan is to be administered, including the required limitations on water use for each lot.
- 31. A copy of this Findings and Order shall be recorded by the applicant in the real property records of El Paso County, so that a title examination of the above described 40-acre property, or any part thereof, shall reveal to all future purchasers the existence of this replacement plan. The terms and conditions of this replacement plan shall be considered to be a covenant on and running with the subject property.
- 32. In the event the permitted wells are not operated in accordance with the conditions of this replacement plan, they shall be subject to administration, including orders to cease diverting ground water.
- 33. The Commission retains jurisdiction to modify or revoke approval of this replacement plan, if monitoring or operating experience reveals that the plan results in any material injury to water rights of other appropriators or in unreasonable impairment to water quality.

Dated this 20th day of March , 2008.

Dick Wolfe, P.E Executive Director

Colorado Ground Water Commission

Keith Vander Horst, P.E. Water Resource Engineer

Prepared by: SKR