

**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 KIOWA-BIJOU DESIGNATED GROUND WATER BASIN

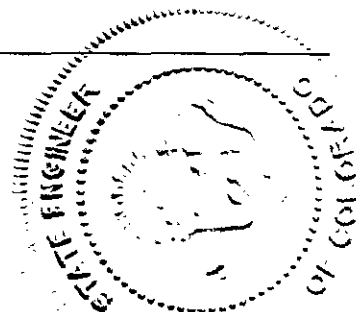
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APPLICANT: ELENA THEOS

AQUIFER: **ARAPAHOE**

DETERMINATION NO.: **1105-BD**

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

**FINDINGS**

1. The application was received complete by the Colorado Ground Water Commission on October 25, 2006.
2. The applicant requests a determination of rights to designated ground water in the Arapahoe Aquifer (hereinafter "aquifer") underlying 75.36 acres, generally described as the W $\frac{1}{2}$  of the NE $\frac{1}{4}$  of Section 34, Township 3 South, Range 62 West of the 6th Principal Meridian, in Adams County. According to a signed statement dated October 21, 2006, the applicant owns the 75.36 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 The proposed annual amount of ground water to be allocated and withdrawn from the aquifer for intended beneficial uses is the maximum allowable amount.
4. The above described land area overlying the ground water claimed by the applicant is located within the boundaries of the Kiowa-Bijou Designated Ground Water Basin and within the North Kiowa-Bijou Ground Water Management District. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction.
5. The applicant intends to apply the allocated ground water to the following beneficial uses: domestic, stock watering, irrigation, and commercial. The applicant's proposed place of use of the allocated ground water is the above described 75.36 acre land area.
6. The quantity of water in the aquifer underlying the 75.36 acres of land claimed by the applicant is 2,242 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.

- 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 175 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 75.36 acres of overlying land claimed by the applicant is 22.4 acre-feet.
  9. 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, within one hundred years, deplete the flow of a natural stream 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 farther than one mile from the aquifer contact with the alluvium. The Designated Basin Rules require that at least four percent (4%) of the amount of water withdrawn annually must be returned to the uppermost aquifer in the vicinity of the permitted point or points of withdrawal.
  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 November 13, 2006, in accordance with Rule 9.1 of the Designated Basin Rules, a letter was sent to the North Kiowa-Bijou 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.
16. In accordance with Sections 37-90-107(7) and 37-90-112, C.R.S., the application was published in the Eastern Colorado News newspaper on November 17 and 24, 2006.
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 Kiowa-Bijou 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 75.36 acres of land, generally described as the W $\frac{1}{2}$  of the NE $\frac{1}{4}$  of Section 34, Township 3 South, Range 62 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 22.4 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. At least four percent (4%) of the amount of water withdrawn annually must be returned to the uppermost aquifer in the vicinity of the permitted point or points of withdrawal.
23. The use of ground water from this allocation shall be limited to the following beneficial uses: domestic, stock watering, irrigation, and commercial. The place of use shall be limited to the above described 75.36 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 75.36 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 75.36 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 prior 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 North Kiowa-Bijou 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 75.36 acre overlying land area, or any part thereof, shall reveal the existence of this determination.

Applicant: Elena Theos  
Aquifer: Arapahoe  
Determination No.: 1105-BD

Dated this 31st day of January, 2006.

*Hal D. Simpson*

Hal D. Simpson  
Executive Director  
Colorado Ground Water Commission



By: *Keith Vander Horst*

Keith Vander Horst, P.E.  
Supervisor, Designated Basins

Prepared by: SKR

EXHIBIT A

1105-BD

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GWS 1  
06/09/00

OCT 25 2006

STATE OF COLORADO  
OFFICE OF THE STATE ENGINEER  
DIVISION OF WATER RESOURCES  
1313 Sherman St. Room 821  
Denver, CO 80203  
(303) 866-3581 Fax (303) 866-3589

WATER RESOURCES  
STATE ENGINEER  
COLO.

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

I (We) Elena Theos  
(Name(s))

claim and say that I (we) am (are) the owner(s) of the following described property consisting of  
15.36 acres in the County of Adams  
State of Colorado:

(Insert the property legal description)

*legal description to be attached. See Exhibit A*

and, that the ground water sought to be withdrawn from the Arroyo  
aquifer underlying the above-described land has not been conveyed to reserved to another, nor has  
consent been given to its withdrawal by another.

Further, I (we) claim and say that I (we) have read the statements made herein; know the contents  
hereof; and that the same are true to my (our) knowledge.

Elena Theos 10-21-06  
Signature Date

\_\_\_\_\_  
Signature Date

INSTRUCTIONS:

Please type or print neatly in black ink. This form may be reproduced by photocopy or word  
processing means. See additional information on the reverse side.

EXHIBIT A

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**Exhibit "A"**

Legal Description

WATER RESOURCES  
STATE ENGINEER  
COLO.

THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 62  
WEST OF THE 6TH P.M., EXCEPTING A 30 FOOT STRIP ALONG ALL BOUNDARY LINES AS  
CONTAINED IN RESOLUTION RECORDED MARCH 16, 1911, IN BOOK 60 AT PAGE 496,  
COUNTY OF ADAMS, STATE OF COLORADO.

EXHIBIT A

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STATE ENGINEER  
COLO.

