

**BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO**

IN THE MATTER OF PETITION SEEKING)
DESIGNATION OF A CRITICAL GROUND)
WATER AREA, DESIGNATION OF A GROUND)
WATER MANAGEMENT AREA, MORATORIUMS)
ON APPROVAL OF NEW WATER RIGHT)
APPROPRIATIONS, AND OTHER ACTIONS)
_____)

ORDER

This matter is before the Director of the Idaho Department of Water Resources (“Director” or “Department”) as the result of a petition filed with the Director seeking the Director’s designation of a critical ground water area and a ground water management area. In addition, the petition sought to have the Director impose a moratorium on future appropriations of ground water, impose a moratorium on further development under existing permits to appropriate ground water, rescind portions of the April 1992 “Interagency Agreement” between the Department and the Washington Department of Ecology, and to require implementation of several other actions. After holding a public meeting and receiving public comment, the Director enters the following Findings of Fact, Conclusions of Law, and Order:

FINDINGS OF FACT

1. The following organizations (hereinafter “Petitioners”) submitted a petition (“Petition”) on November 21, 2003, which was subsequently amended on November 22, 2003:

Palouse Water Conservation Network
Friends of the Clearwater
Moscow Civic Association
Palouse Group of the Sierra Club
Idaho Conservation League, North Idaho Office

2. The Petitioners requested that the Director implement eight administrative actions relating to water rights authorizing the diversion of ground water and use of ground water from the portion of the Palouse Basin aquifer system underlying the City of Moscow, Idaho. The Petitioners sought to have the following eight actions implemented by the Director:

- a. Designate the portion of the Palouse Basin aquifer system in the Grande Ronde Formation in Idaho a critical ground water area pursuant to Idaho Code § 42-233a;
- b. Designate the portion of the Palouse Basin aquifer system in the Wanapum Formation in Idaho a ground water management area pursuant to Idaho Code § 42-233b;

- c. Impose a moratorium on processing and approval of all pending and new applications for permits to appropriate water from all aquifers of the Palouse Basin aquifer system, pending adoption and implementation of a plan to stabilize ground water levels;
- d. Impose a moratorium on further development of inchoate (not fully developed) portions of existing permits authorizing appropriation of ground water from the Grande Ronde portion of the aquifer system;
- e. Order reduction of ground-water withdrawals from the Grande Ronde portion of the aquifer system on a time priority basis;
- f. Require metering and reporting of ground-water withdrawals from both the Grande Ronde and Wanapum portions of the aquifer system;
- g. Rescind portions of the "Interagency Agreement" dated April 1992, between the Department and the Washington Department of Ecology pertaining to the approval of the Pullman-Moscow Groundwater Management Plan and portions of the agreement alleged by the Petitioners to be contrary to Idaho law; and
- h. Establish a ground water management advisory committee with representation of the diverse interests in water issues in the City of Moscow area.

3. On January 6, 2004, the Director received a package of supporting documentation from the Petitioners. The documentation consists of historic documents and summaries of past activities by the City of Moscow and the Palouse Basin Aquifer Committee, summaries of research conducted by the University of Idaho and Washington State University, surveys of public attitudes about water use and conservation, newspaper articles about events, and other documents about historic and current conditions and activities.

4. On February 2, 2004, staff from the Department held a public meeting in Moscow, Idaho, to provide information about ground water conditions in the Palouse Basin and available administrative actions. Approximately 200 people attended the meeting. The audience was provided with addresses for submitting comments through mail, facsimile, and email. Since the Petition was submitted, the Department has received 36 comments submitted by regular mail or electronically.

5. Information provided by the Petitioners and from Department records indicate the following characteristics about aquifers and historic ground water use in the Palouse Basin:

- a. The area for which the Petition was filed is underlain by two major aquifers. Both aquifers are in basalts and sedimentary interbeds in formations within the Columbia River Basalt Group. The upper aquifer is found at a depth of about 250 to 500 feet in layered sand zones in the Wanapum Formation. Static water levels are about 60 feet below land surface. The lower aquifer occurs at a depth of about 650 to 1,300 feet in the Grande Ronde Formation. Static water levels are about 300 feet below land surface.

- b. Distinct characteristics define each aquifer. The upper aquifer in the Wanapum Formation responds to both precipitation and pumping, indicating recharge from surface precipitation. Age dating indicates water in the upper aquifer is relatively recent, which is consistent with recharge from precipitation and other surface water sources. The lower aquifer in the Grande Ronde Formation does not reflect fluctuations in climate or precipitation and appears to receive limited recharge. Age dating of water in the lower aquifer has shown ages of 10,000 years old or older. What recharge that does occur is believed to be from leakage from the upper aquifer in the Wanapum Formation, although there appears to be poor connectivity between the upper and lower aquifers.
- c. Ground water from the upper aquifer in the Wanapum Formation has been used since the late 1890s and provides water to rural residents of Latah County. The upper aquifer also supplied all the water used by the City of Moscow and the University of Idaho until the mid 1960s. Flowing wells once existed in the area, probably arising from sand beds in surface sediments of the Latah Formation and shallow fractured basalt comprising the upper aquifer. Water levels declined rapidly and by the 1920s, water levels were 44 feet below land surface. By the 1960s, water levels had declined to more than 140 feet below land surface. By about 1965, both the City of Moscow and the University of Idaho ceased using ground water diverted from the upper aquifer and began using only ground water from the lower aquifer in the Grande Ronde Formation. Ground water levels in the upper aquifer subsequently recovered to about 50 feet below land surface by the 1980s. With water levels in the upper aquifer having recovered from previous declines (see Attachment 1), the City of Moscow resumed diverting ground water from the upper aquifer for approximately 30 percent of its municipal needs.
- d. Withdrawal of ground water from the lower aquifer in the Grande Ronde Formation began in the 1960s in Idaho when the City of Moscow and the University of Idaho shifted their uses to the lower aquifer. The lower aquifer also supplies water for municipal uses in the State of Washington, Washington State University, and other uses in Pullman and Whitman County, Washington. Currently, approximately 70 percent of the water used by the City of Moscow is withdrawn from the lower aquifer. Ground water levels have been declining at rates of 1 to 2 feet per year for more than 50 years. Recent data over the last six years suggests that the slope of the decline is decreasing and water levels in the Grande Ronde Formation are beginning to stabilize (see Attachment 2).
- e. The exact boundaries of the aquifer in the Grande Ronde Formation are unknown, but no more than about 13 percent of the aquifer is thought to underlie Idaho. Approximately 30 percent of the ground water withdrawn from the Grande Ronde Formation is used in Idaho.

- f. A ground water model developed in 1990 predicted stabilization of water levels in the Grand Ronde Formation within 10 to 15 years if withdrawals stabilized. Based on records from the City of Moscow, withdrawals of ground water from the aquifer in the Grande Ronde Formation have stabilized. Additional research since the ground water model was developed indicates that the aquifer characteristics determined to be appropriate at the time the ground water model was developed resulted in an over prediction of recharge to the Grande Ronde Formation. Based on the most recent knowledge of the aquifer characteristics, the model prediction may well have been accurate, but with a longer period of time of stabilized withdrawals required to achieve stabilization of ground water levels.
- g. Water levels in wells in Moscow, Idaho and Pullman, Washington respond differently to stress, or pumping, indicating some degree of hydraulic or geologic separation in the Palouse Basin aquifer system. However, long-term annual trends in ground water levels are similar in both Idaho and Washington. Recent research has identified a possible zone of reduced hydraulic conductivity between Moscow and Pullman that may inhibit ground water flow in the aquifer system.

6. An estimated water budget was developed and presented at a Palouse Water Supply Workshop held on September 11, 2000 (see Section 5 of the Supporting Documentation for the Petition). Based on general estimates of recharge and discharge, Dr. Kent Keller of Washington State University estimated the water budget in 2000 to be:

- a. Infiltration, estimated at 10-40 cfs
- b. Pumping, 10 cfs
- c. Baseflow (discharge), 10-20 cfs.

Additional work is currently underway to refine this estimated water budget.

7. The Department and the Washington Department of Ecology signed an Interagency Agreement in April 1992. Pursuant to that agreement, the two agencies agreed to administer the ground water in the Palouse Basin aquifer system in accordance with the ground water management plan subsequently adopted by the Pullman Moscow Water Resources Committee (now named the Palouse Basin Aquifer Committee, or PBAC) in September of 1992 ("1992 Plan").

8. PBAC is made up of representatives from the following entities:

- City of Colfax
- City of Moscow
- City of Pullman
- Latah County
- Whitman County
- University of Idaho
- Washington State University

9. The 1992 Plan contained seven goals, and it did not differentiate between the upper and lower aquifers for management purposes. The primary objective of the 1992 Plan was to insure stable ground water levels in the aquifer system by limiting annual increases in ground water withdrawals. For each entity (i.e., Moscow, Idaho; the University of Idaho; Pullman, Washington; and Washington State University), ground water withdrawals were never to exceed 125 percent of the average withdrawals for the period 1981 through 1985.

10. In 2000, PBAC adopted new goals with the primary objective being to stabilize ground water levels in the lower aquifer in the Grande Ronde Formation by 2020.

11. PBAC received a grant of \$100,000 from the U. S. Environmental Protection Agency for research, which in turn has provided funding for continued research at the University of Idaho and Washington State University.

CONCLUSIONS OF LAW

1. Idaho Code § 42-233a provides in pertinent part as follows:

“Critical ground water area” is defined as any ground water basin, or designated part thereof, not having sufficient ground water to provide a reasonably safe supply for irrigation of cultivated lands, or other uses in the basin at the then current rates of withdrawal, or rates of withdrawal projected by consideration of valid and outstanding applications and permits, as may be determined and designated, from time to time, by the director of the department of water resources.

2. Idaho Code § 42-233b provides in pertinent part as follows:

“Ground water management area” is defined as any ground water basin or designated part thereof which the director of the department of water resources has determined may be approaching the conditions of a critical ground water area.

When a ground water management area is designated by the director of the department of water resources, or at any time thereafter during the existence of the designation, the director may approve a ground water management plan for the area. The ground water management plan shall provide for managing the effects of ground water withdrawals on the aquifer from which the withdrawals are made and on any other hydraulically connected sources of water

Applications for permits made within a ground water management area shall be approved by the director only after he has determined on an individual basis that sufficient water is available and that other prior water rights will not be injured.

3. The Director is responsible for the allocation of water for new uses in Idaho. Idaho Code § 42-203A(5) reads in pertinent part as follows:

In all applications whether protested or not protested, where the proposed use is such (a) that it will reduce the quantity of water under existing water rights, or (b) that the water supply itself is insufficient for the purpose for which it is sought to be appropriated, or (c) where it appears to the satisfaction of the director that such application is not made in

good faith, is made for delay or speculative purposes, or (d) that the applicant has not sufficient financial resources with which to complete the work involved therein, or (e) that it will conflict with the local public interest as defined in section 42-202B, Idaho Code, or (f) that it is contrary to conservation of water resources within the state of Idaho; or (g) that it will adversely affect the local economy of the watershed or local area within which the source of water for the proposed use originates, in the case where the place of use is outside of the watershed or local area where the source of water originates; the director of the department of water resources may reject such application and refuse issuance of a permit therefor, or may partially approve and grant a permit for a smaller quantity of water than applied for, or may grant a permit upon conditions.

4. The Director is authorized under the provisions of Idaho Code §42-1805(7) as follows:

After notice, to suspend the issuance or further action on permits or applications as necessary to protect existing vested water rights or to ensure compliance with the provisions of chapter 2, title 42, Idaho Code, or to prevent violation of the minimum flow provisions of the state water plan.

5. Idaho Code § 42-237a, paragraph g, states in part:

To supervise and control the exercise and administration of all rights to the use of ground waters and in the exercise of this discretionary power he may initiate administrative proceedings to prohibit or limit the withdrawal of water from any well during any period that he determines that water to fill any water right in said well is not there available. To assist the director of the department of water resources in the administration and enforcement of this act, and in making determinations upon which said orders shall be based, he may establish a ground water pumping level or levels in an area or areas having a common ground water supply as determined by him as hereinafter provided. Water in a well shall not be deemed available to fill a water right therein if withdrawal therefrom of the amount called for by such right would affect, contrary to the declared policy of this act, the present or future use of any prior surface or ground water right or result in the withdrawing of the ground water supply at a rate beyond the reasonably anticipated average rate of future natural recharge. However, the director may allow withdrawal at a rate exceeding the reasonably anticipated rate of future natural recharge if the director finds it is in the public interest and if it satisfies the following criteria:

1. A program exists or likely will exist which will increase recharge or decrease withdrawals within a time period acceptable to the director to bring withdrawals into balance with recharge.
2. Holders of senior rights to use ground water will not be caused thereby to pump water from below the established reasonable pumping level or levels.

6. The Department and the Washington Department of Ecology signed an Interagency Agreement in 1992. The agencies agreed to administer the ground water resources of the Palouse Basin aquifer system in accordance with the ground water management plan adopted by what is now named PBAC in September 1992. The primary objective of the ground water management plan, as modified in 2000, is to stabilize ground water levels in the lower aquifer in the Grande Ronde Formation by 2020.

7. Recent ground water level data for the lower aquifer in the Grand Ronde Formation indicates that the rate of any decline is decreasing. Available information is inadequate to determine that there is not sufficient ground water to provide a reasonably safe supply for irrigation of cultivated lands, or other uses, at the current rates of withdrawal or projected rates of withdrawal. Therefore, designation of the lower aquifer in the Grand Ronde Formation as a critical ground water area is not warranted at this time.

8. Available information is also inadequate to determine that water use exceeds the reasonably anticipated average rate of future natural recharge in the lower aquifer in the Grand Ronde Formation or that water is unavailable in the lower aquifer to meet existing water uses and to supply any undeveloped portions of existing permits authorizing the appropriation of ground water. Therefore, requiring holders of ground water rights to reduce withdrawals from the lower aquifer in the Grand Ronde Formation on a time priority basis or establishing a moratorium on the approval of new permits authorizing the appropriation of ground water from the lower aquifer is not warranted at this time.

9. With only approximately 13 percent of the lower aquifer in the Grand Ronde Formation underlying lands within the State of Idaho, coordinated management of the aquifer on a regional basis is appropriate until such time as it is shown that independent management of that portion of the lower aquifer in the State of Idaho will provide enhanced protection and administration of the ground water resource in Idaho.

10. Ground water level data for the upper aquifer in the Wanapum Formation indicates water levels have recovered from previous declines. Available information indicates there is sufficient ground water available in the upper aquifer to provide a reasonably safe supply for irrigation of cultivated lands, or other uses, at the current rates of withdrawal or projected rates of withdrawal, and conditions in the upper aquifer are not approaching those of a critical ground water area. Therefore, designation of the upper aquifer in the Wanapum Formation as a ground water management area or establishing a moratorium on the approval of new permits authorizing the appropriation of ground water from the upper aquifer is not warranted at this time.

11. Requiring additional measurement and reporting of ground water diversions from either the lower or upper aquifers is not necessary at this time.

12. PBAC consists of representatives from cities, counties, and universities withdrawing ground water from the Palouse Basin aquifer system. Additional representation from citizens and other interested parties will provide opportunities for dialogue among a broader range of interested parties and should enhance the overall management of the Palouse Basin aquifer system.

ORDER

In response to the Petition as amended on November 22, 2003, and for the reasons stated in the foregoing Findings of Fact and Conclusions of Law, IT IS THEREFORE, HEREBY ORDERED as follows:

1. The petition for designation of that portion of the Palouse Basin aquifer system in the Grand Ronde Formation as a critical ground water area is DENIED.
2. The petition for designation of that portion of the Palouse Basin aquifer system in the Wanapum Formation as a ground water management area is DENIED.
3. The petition seeking a moratorium on the approval of permits seeking to appropriate ground water from the Palouse Basin aquifer system or any aquifers tributary to the Palouse Basin aquifer system is DENIED.
4. The petition seeking a moratorium on further development of inchoate portions of existing permits authorizing the appropriation of ground water from the Grande Ronde portion of the aquifer system is DENIED.
5. The petition seeking to have ground water withdrawals from the Grande Ronde portion of the aquifer system reduced on a time priority basis is DENIED.
6. The petition seeking to have measurement and reporting required for all ground water withdrawals is DENIED.
7. The petition seeking to rescind portions of the Interagency Agreement between the Department and the Washington Department of Ecology is DENIED.

IT IS FURTHER ORDERED that the Director will annually review ground water levels and conditions in the Palouse Basin aquifer system. The Director will also annually review implementation and effectiveness of the current or any subsequent ground water management plan adopted by PBAC. Based on these reviews, the Director will consider designation as a critical ground water area or a ground water management area for any portion(s) of the Palouse Basin aquifer system, where the Director determines such designation is warranted, without further petition.

IT IS FURTHER ORDERED that to assist the Director with his annual review of the implementation and effectiveness of the current or any subsequent ground water management plan adopted by PBAC, a representative designated by the Director should be appointed as a non-voting, ex officio member of PBAC.

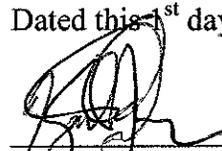
IT IS FURTHER ORDERED that to enhance the overall management of the Palouse Basin aquifer system through dialogue among a broader range of interested parties, PBAC should create a "PBAC Citizens Advisory Group" having the following membership and responsibilities and whose involvement with PBAC will be facilitated by the Director's designated ex officio member of PBAC:

a. Citizens Advisory Group membership: three (3) members representing the petitioning organizations; two (2) members representing municipal providers or community water systems located within the Palouse Basin, other than those entities with representatives on PBAC; and two (2) members representing county/rural interests.

b. Responsibilities of the Citizens Advisory Group:

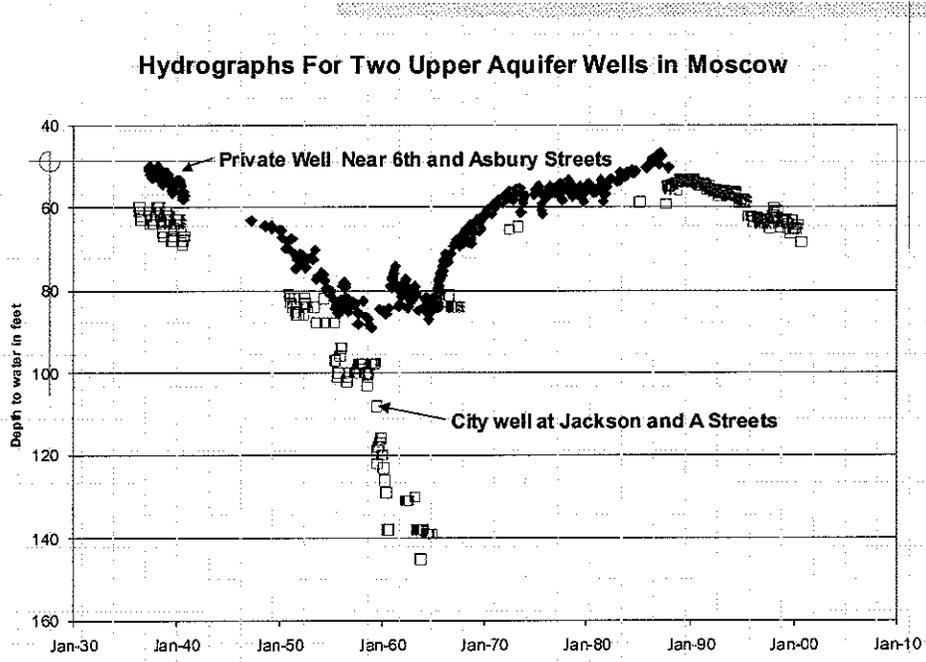
- (1) Develop recommendations for consideration by PBAC for revisions to the ground water management plan adopted by PBAC and recommendations for implementation strategy to effectively accomplish management plan goals;
- (2) Develop recommendations for consideration by PBAC for water conservation and recommendations for implementation strategy;
- (3) Develop recommendations for consideration by PBAC for peer review of research and objectives for future research;
- (5) Develop recommendations for public participation in implementation of the ground water management plan adopted by PBAC.

Dated this 1st day of December



Karl J. Dreher
Director

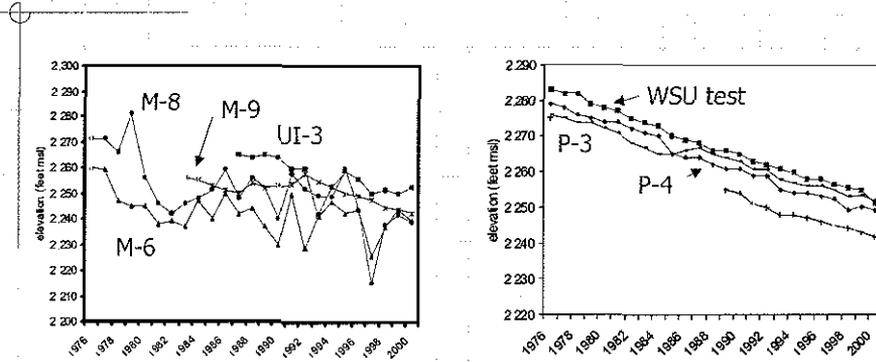
ATTACHMENT 1



Source: Dr. Dale Ralston, presentation at public meeting on February 2, 2004.

ATTACHMENT 2

Water Levels from Grande Ronde wells in Moscow and Pullman



Moscow Wells

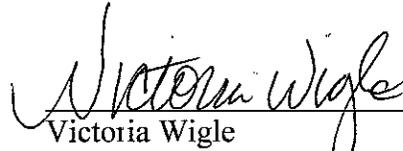
Pullman Wells

Source: Dr. Dale Ralston, presentation at public meeting on February 2, 2004.

CERTIFICATE OF MAILING

I HEREBY CERTIFY that service of the within and foregoing document was made this 1st day of December, 2004, by mailing a copy thereof, postage prepaid, to the party listed below:

DIANE FRENCH
COALITION OF CONCERNED CITIZENS
202 E 7TH STREET
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Victoria Wigle
Director's Administrative Assistant
Idaho Department of Water Resources