File NR G4-29394
WR Doc ID 2085419

DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE
08/18/1987

WATER RIGHT NUMBER
G4-29394

MAILING ADDRESS
Yakima Concrete & Asphalt Co.
P.O. Box 1610
Yakima, WA 98907

SITE ADDRESS (IF DIFFERENT)
Unspecified

FINDINGS OF FACT AND ORDER Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I find the appropriation of water as recommended is a beneficial use, is not legally available for appropriation, will be detrimental to existing rights and to the public interest.

Therefore, I ORDER Application No. G4-29394 be DENIED.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel RD SW Ste 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Yakima, Washington, this 25 day of MARCH 2013.

Mark Kemner, LHG, Section Manager
Water Resources Program/CRO

For additional information visit the Environmental Hearings Office Website: http://www.eho.wa.gov
To find laws and agency rules visit the Washington State Legislature Website: http://www.leg.wa.gov/CodeReviser

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number G4-29394.

On August 18, 1987, Brent Chigbrow, on behalf of Yakima Concrete and Asphalt Company, filed an application with the Washington State Department of Ecology (Ecology) to appropriate groundwater within Water Resource Inventory Area (WRIA) 37, within the Yakima River Basin. That application was accepted and assigned control number G4-29394. The attributes of the application are listed in Table 1 below:

Table 1: Summary of Requested Water Right

Applicant Name	Yakima Concrete & Asphalt Company
Date of Application	August 18, 1987
Place of Use	That portion of the SW¼SW¼ of Section 28, T. 13 N., R. 19 E.W.M. lying east of the Yakima River and that portion of the NW¼NW¼ and the NE¼NW¼ and the N½SE¼ NW¼ of Section 33, T. 13 N., R. 19 E.W.M. lying east of the Yakima River EXCEPT that part deeded to the state of Washington and 8 acres reserved for mobile homes, barns, corrals, and yard areas.

County	Waterbody	Tributary To	WRIA
Yakima	Groundwater		37-Lower Yakima

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Industrial	500	GPM	Not Specified	01/01	12/31
Domestic Multiple	500	GPM	Not Specified	01/01	12/31

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
1 Well	19133321002		13 N.	19 E.	33	NENW		

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum: NAD83/WGS84.

On May 17th, 2012, Ecology sent the applicants a letter notifying them of the difficulties granting new water rights in the Yakima Basin. That letter gave the applicant five options for processing their application. Those options are:

1. Provide a mitigation plan to offset the impacts of the proposed new use's on the Yakima River and/or nearby tributary creeks.
2. Place the pending application "on-hold" while the applicant pursues mitigation.
3. Process the application "as is". The letter indicated that if the proposed water use is consumptive, approval of the application would be unlikely.
4. If you no longer own the property where use is proposed you request the assignment of your application to the appropriate person (i.e. current land owner).
5. The applicant withdraws the application if there is no longer any interest in the project or pursuing mitigation for the project.

Ecology included a "Statement of Intent for Pending Application for a Water Right Permit" form which the applicants could fill out contact information and check a box indicating which of the above options they intended to pursue.

Applicants were requested to reply within ninety (90) days of the original letter and to select one of the above options. The letter also stated that if they did not respond or return the form within ninety (90) days, Ecology would process the application in its current state. To date, Yakima Concrete and Asphalt Company has not responded. Ground Water Application No. G4-29394 requests to use water consumptively for continuous industrical and multiple domestic uses.

Legal Requirements for Approval of Appropriation of Water

Public Notice

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted and used. Notice of this application was published in the Yakima Herald Republic on August 20 and 27, 1987. There were no comments or protest received.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

(a) It is a surface water right application for more than 1 cubic-foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic-feet per second, so long as that irrigation project will not receive public subsidies.

(b) It is a groundwater right application for more than 2,250 gallons per minute.

(c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above.

(d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).

(e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

Water Resources Statutes and Case Law

RCW 90.44 authorizes the appropriation of public groundwaters for beneficial use.
RCW 90.03 describes the processes for acquiring a water right permit.

In accordance with RCW 90.44.060 and RCW 90.03.290, the following considerations shall be addressed before a permit can be issued:

- The water use must be beneficial.
- Water must be available.
- There must be no impairment of existing rights.
- The water use must not be detrimental to the public interest.

INVESTIGATION

Application Review

The application review included information and supporting documentation was obtained through the following:

- Documentation submitted with the application.
- Washington State Water Code and administrative rules and policies.
- Digitized topographic maps and aerial photographs.
- A physical site visit was conducted by Candis Graff and Kelsey Collins, Ecology employees, on March 5, 2013. Photographs were taken and area geology was noted.

History of Water Regulation in the Yakima Basin

In order to protect survival of Endangered Species Act (ESA) listed salmon species, improve flows in the Yakima River main stem to sustain salmon migration and protect senior irrigation rights the United States Bureau of Reclamation (Reclamation) claimed water in the Yakima Basin under the "Yakima Reclamation Project." Under the Reclamation Act, an intricate extensive storage and delivery system was established, ultimately supported by the state of Washington on May 10, 1905, through an exchange of federal funds. Through these actions, the United States claimed all remaining unappropriated surface water in the Yakima Basin.

Throughout the years many events have shaped the way Reclamation operates the Yakima Reclamation Project. The following events affected the way Reclamation operates facilities in the Yakima Basin:

- Consent Decree (1945) – A stipulated settlement pertaining to water distribution in the basin. The Decree defined quantities on the main stem and divided the users into proratable and non-proratable classes.
- Acquavella Adjudication (1977) – General Adjudication proceeding filed, limited to surface water, identifying and quantifying the water rights in the Yakima Basin. Currently the Conditional Final Orders (CFO) for all of the subbasins in the Yakima Basin are complete, with Subbasin 23 awaiting the Washington State Supreme Court to rule on appeals. Once resolutions of final appeals and a comprehensive final order issues, the Acquavella Adjudication will be finalized.
- Yakima River Basin Water Enhancement Project (YRBWEP) (1979) – Feasibility level study authorized by Congress to focus on the need to assure adequate water supplies in the Yakima

Basin. The implementation of conservation measures proposed by the Act will reduce out-of-stream irrigation diversions. The savings will result in more water remaining in the stream and storage.

- Quackenbush Decision (1980) – Required Reclamation to work on means to meet the project needs through more efficient or modified means having less of an impact on the fisheries resource. This resulted in the operational procedure known as the "flip-flop", whereby late season water is released to meet operational needs below the confluence of the Yakima River with the Naches River with water stored in the Naches River system. This results in less water when fish spawn, forcing them to build redds lower in the system, requiring less water to maintain during the winter.
- Order and Determination Granting Application (1981) – an order initiated by the United States Secretary of Interior on February 17, 1981, filed notice for the diversion of surface waters in the Yakima Basin to support YRBWEP. That order has subsequently been extended to 2018.
- Development of the System Operations Advisory Committee (SOAC) (1981) – An advisory board to Reclamation consisting of fishery biologists representing the U.S. Fish and Wildlife Service, the Yakama Nation, the Washington Department of Fish and Wildlife, and irrigation entities represented by the Yakima Basin Joint Board.
- Superior Court Order regarding the rights of the Yakama Nation (1990) – The treaty rights of the Yakama Nation were declared as follows:
    - The Yakama Nation has a non-proratable irrigation right with a 1855 priority date and proratable irrigation rights with a 1905 priority date.
    - The Yakama Nation has a right to flows necessary to maintain anadromous fish life in the river with a priority date referred to as "time immemorial."

Today, Reclamation manages surface water supply in the Yakima Basin by calculating Total Water Supply Available (TWSA). Surface water supply is matched with all of the known demands, and if adequate supplies are not available, Reclamation begins to ration proratable water users in the basin.

Types of Water Users Today

Surface water right holders in the Yakima Basin fall into one of three categories, senior pre-Yakima Project water users, proratable Yakima Project water users with May 10, 1905 priority dates, and junior water users with post-May 10, 1905 priority dates. Senior water users, or their predecessors, developed permanent water uses as early as the 1850's through the early 1900's. Proratable water users are made up of individuals, municipalities, irrigation companies, and irrigation districts who agreed to participate in the federal government's Yakima Reclamation Project initiated on May 10, 1905. During drought years, the water supplies of the proratable water users can be rationed (or 'prorationed') based on Reclamation's estimate of the TWSA in the Yakima Basin. The last group of water right holders is the junior water users. Junior water users hold water rights with a priority date of later than May 10, 1905.

Curtailment of the junior water users and the prorationing of the May 10, 1905, water users has occurred at least three times since the year 2000. Based on a standing 2005 Yakima County Superior Court Order (as well as many subsequent temporary Court Orders), the junior water users must cease use of their water when the proratable water users are prorationed. The 2005 Order further provides exceptions to curtailment during prorationing periods for post-1905 junior water rights where sufficient

mitigation water rights eliminate fully any impairment of a senior water right and where the diversions of water by junior water right holders will not limit or diminish the water available for diversion by a more senior water right.

Water Availability

For water to be available for appropriation, it must be both physically and legally available.

Physical Availability

For water to be physically available for appropriation there must be ground or surface water present in quantities and quality and on a sufficiently frequent basis to provide a reasonably reliable source for the requested beneficial use or uses. In making this assessment, the following information and factors are considered:

- Volume of water represented by senior water rights, including federal or tribal reserved rights or claims;
- Water right claims registered under Chapter 90.14 RCW;
- Ground water rights established in accordance with Chapter 90.44 RCW, including those that are exempt from the requirement to obtain a permit; and
- Potential riparian water rights, including non-diversionary stock water.
- Technical information or data.
- Lack of data indicating water usage can also be a consideration in determining water availability, if the department cannot ascertain the extent to which existing rights are consistently utilized and cannot affirmatively find that water is available for further appropriation.

Legal Availability

To determine whether water is legally available for appropriation, the following factors are considered:

- Regional water management plans or regulations – which may specifically close certain water bodies to further appropriation.
- Existing rights – which may already appropriate physically available water.
- Fisheries and other instream uses (e.g., recreation and navigation) including those uses that are recognized as senior water rights. Instream needs, including instream and base flows set by regulation. Water is not available for out of stream uses where further reducing the flow level of surface water would be detrimental to existing fishery resources.
- The Department may deny an application for a new appropriation in a drainage where the total quantity of water rights confirmed through an adjudication exceeds the average low flow supply, even if the rights confirmed in the adjudication are not presently being exercised. Water would not become available for appropriation until existing rights are relinquished for non-use by state proceedings.

Hydrogeology

The Ahtanum and Moxee Valleys comprise a structurally formed groundwater subbasin within the Yakima River Basin. The major anticlines, such as Rattlesnake Hills, Yakima Ridge, Ahtanum Ridge, and Cowiche Mountain, bound the Ahtanum-Moxee subbasin on the north and south, and exert significant

structural control on the movement of groundwater in the basalt and sedimentary aquifer systems. These geologic structures function as flow barriers, and direct groundwater toward the discharge area along the Yakima River. When wells are pumped in Ahtanum Valley or Moxee Valley they withdraw groundwater that is moving through the flow system toward the Yakima River and/or local streams, and the amount of discharge to surface water is reduced, depleting the streamflow. The United States Geological Survey (USGS) has modeled the stream depletion impacts due to current and potential future groundwater pumping from all aquifers on the Yakima River at multiple stream gage locations. The model results indicate that from 1960 to 2001 the groundwater pumping in the Ahtanum-Moxee subbasin and Selah has resulted in a reduction of flow to the Yakima River of about 87 cubic-feet per second (CFS). About 11 cfs is due to pumping in basalt aquifers and about 76 cfs is from pumping in the sedimentary aquifers. The USGS also modeled the potential stream depletion impacts of pending groundwater applications; which includes the subject application. The USGS model results indicate that potential pumping due to these applications would result in about 16 cfs of additional flow reduction on the Yakima River. Therefore, if Ecology authorizes the subject groundwater application, the USGS model predicts the associated groundwater pumping will result in the reduced flow of the Yakima River.

[A full description of the hydrogeologic analysis can be found in the associated Technical Reference Report – *Overview of the Hydraulic Relationship between Surface Water and Groundwater in the Ahtanum – Moxee Groundwater Basin* (March 5, 2013) by John Kirk.]

Impairment Considerations

Where the groundwater source for a proposed new groundwater withdrawal is in hydraulic continuity with a surface water body with unmet flows (or other senior unmet water rights) and the proposed withdrawal would have the effect of reducing stream flows or intercepting groundwater that would otherwise flow to surface water, then the proposed groundwater withdrawal would impair these more senior rights, and the application must be denied. Postema v. PCHB, 142 Wn.2d 68, 93-94, 11 P.3d 726 (2000).

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection. A water right application may not be approved if it would:

- Interrupt or interfere with the availability of water to an adequately constructed groundwater withdrawal facility of an existing right. An adequately constructed groundwater withdrawal facility is one that (a) is constructed in compliance with well construction requirements and (b) fully penetrates the saturated zone of an aquifer or withdraws water from a reasonable and feasible pumping lift.
- Interrupt or interfere with the availability of water at the authorized point of diversion of a surface water right. A surface water right conditioned with instream flows may be impaired if a proposed use or change would cause the flow of the stream to fall to or below the instream flow more frequently or for a longer duration than was previously the case.
- Interrupt or interfere with the flow of water allocated by rule, water rights, or court decree to instream flows.
- Degrade the water quality of the source to the point that the water is unsuitable for beneficial use by existing users (e.g., via sea water intrusion).

Beneficial Use

Industrial and multiple domestic uses are defined in statute as beneficial uses (RCW 90.54.020(1)).

Public Interest

Ecology may not approve an application for a new water right if the new water right would be detrimental to the public interest.

Given the following conditions in the Yakima Basin, Ecology concludes that approval of this new water right would be detrimental to the public interest:

- Surface water in the Yakima Basin is managed to satisfy TWSA. TWSA is measured below the Sunnyside Valley Irrigation Dam at the Parker gaging station. Any new water right issued that is not subject to curtailment under the court's post-1905 water rights curtailment order and is not fully mitigated in order to avoid causing a reduction of TWSA as measured at Parker would not be in the public interest because it would result in a reduction of TWSA. The proposed new water right will not be fully mitigated in the Yakima Basin. Thus, approval of this proposed new water right would result in a reduction of TWSA.
- Yakima Basin groundwater is in hydraulic continuity with area surface waters (the Yakima River and its tributaries). Senior surface water rights are not consistently met (the most junior rights are curtailed or cut off during water limited years). The withdrawal of additional groundwater in the Yakima Basin will intercept water that would otherwise contribute to the flows of surface water in the Yakima River Basin.
- Existing use of Yakima Basin Groundwater has been determined to be at a 200 cfs deficit. Any new uses of groundwater would add to this deficit.

Proposed Use and Basis of Water Demand

The proposed use of water is for continuous supply year-round for industrical and multiple domestic uses. An instantaneous quantity of 500 gallons per minute was requested by the applicant, but no annual quantity was specified.

Other Rights Appurtenant to the Place of Use

Table 2: Water Rights Appurtenant to Proposed Place-of-Use

Control #	Document Type	Source	Purpose	Quantity (Qa)	POU
S4-84638-J	CFO	Yakima R.	SR	166,846	Entire Yakima Basin
S4-84639-J	CFO	Kachess R.	SR	250,261	Entire Yakima Basin
S4-84640-J	CFO	Yakima R.	SR	446,610	Entire Yakima Basin
S4-84641-J	CFO	Bumping R.	SR	38,768	Entire Yakima Basin
S4-84642-J	CFO	Tieton R.	SR	216,850	Entire Yakima Basin
S4-84643-J	CFO	Tieton R.	SR	5,300	Entire Yakima Basin
S4-84644-J	CFO	Yakima R.	SR	472	Entire Yakima Basin

Table 2 continued on page 10

Table 2 - Continued

Control #	Document Type	Source	Purpose	Quantity (Qa)	POU
S4-84645-J	CFO	Tieton R.	SR	2	Entire Yakima Basin
S4-84646-J	CFO	Yakima R.	SR	56	Entire Yakima Basin
S4-84647-J	CFO	Yakima R.	SR	60	Entire Yakima Basin
S4-84648-J	CFO	Yakima R.	SR	408	Entire Yakima Basin
S4-84649-J	CFO	Tieton R.	SR	1.265	Entire Yakima Basin
S4-84650-J	CFO	Yakima R.	SR	5,120	Entire Yakima Basin
R4-34552	Application	Naches R.	MU	200,000	N/A
G4-31494P	Permit	2 Wells	MU	2,722	Terrace Heights service district

SR=Filling & Release of Stored Water, MU=Municipal.

All surface water certificates referenced above in Table 2 are owned by the United States Bureau of Reclamation and are authorized the above quantities for storage purposes for flood control.

Permit No. G4-31494P authorizes water from up to 2 wells for the purpose of municipal supply within the approved future service area of the Terrace Heights municipal water system as depicted within the system's Department of Health-approved comprehensive water system plan.

CONCLUSIONS

The conclusions based on the above investigation are as follow:

Beneficial Use

In accordance with RCW 90.54.020(1), the proposed purpose of industrial and multiple domesic uses are beneficial uses.

Availability

Based on the collective information summarized above in this report, water is not legally available at the site of the proposed well.

Impairment of Other Water Rights

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection. The information summarized above in this report illustrates that:

- Surface water rights in the Yakima Basin are often prorationed or curtailed during water short years.
- The USGS model indicates that groundwater pumping in the Ahtanum-Moxee subbasins will result in a reduced flow of the Yakima River.

Approval of the proposed withdrawal of water **will impair** existing water users in the Yakima Basin.

Public Welfare

Given that the withdrawal of goundwater **will impair** existing water users and reduce TWSA, it will be detrimental to the public welfare to grant new groundwater rights when the use of such groundwater will intercept waters otherwise available to satisfy stream flow rights and senior surface water rights.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be **DENIED**.

Candis K Groff 3-25-13

Report Writer *Date*

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Selected References

Interim Comprehensive Basin Operating Plan for the Yakima Project Washington, U.S. Department of the Interior, U.S. Bureau of Reclamation, http://www.usbr.gov/pn/programs/yrbwep/reports/operatingplan/finaliop.pdf