POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

SCOTT CORNELIUS, PALOUSE WATER CONSERVATION NETWORK, and SIERRA CLUB PALOUSE GROUP,
Appellants,
v.
WASHINGTON DEPARTMENT OF ECOLOGY and WASHINGTON STATE UNIVERSITY,
Respondents.

PCHB No. 06-099

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

CONCURRENCE and DISSENT

I agree with my colleagues on the outcome of this decision, including the conclusion that Ecology is not required to establish a reasonable or feasible pump lift. I write separately because I do not agree with the majority's conclusion that Ecology had sufficient information to consider the impairment issue as reasonably could be expected under the circumstances at the time it issued the Reports of Examination. I also write separately in order to further discuss when Ecology is required to establish a reasonable or feasible pump lift as set forth in RCW 90.44.070.

RCW 90.44.070 provides, in part:

> No permit shall be granted for the development or withdrawal of public ground waters beyond the capacity of the underground bed or formation in the given basin, district, or locality *to yield such water within a reasonable or feasible pumping lift* in case of pumping developments, or within a reasonable or feasible reduction of pressure in the case of artesian developments.

The Board has interpreted this provision to require Ecology to "determine a range within which pumping lifts would be reasonable for domestic pumping developments" *before* issuing a groundwater permit which could affect a prior water right. *Heer Brothers v. Ecology & Schell,*

PCHB Nos. 894 & 894-A, p.8 (1976) (*Heer Brothers I*) (emphasis added). The Board clearly set forth Ecology's responsibility to set a reasonable pump lift level in *Pair v. Ecology & Lehn Ranches, Inc.*, PCHB No. 77-189 (1978). In *Pair*, the Board stated that "the first issue for determination of impairment, however, is whether (a) a proposed well will, beyond speculation, have a detrimental effect upon a lawful existing well, *or* (b) well levels in an area show a substantial cumulative increase in pumping lift. (citations omitted). If one or both conditions do exist, then the Department must come forward with its determination of the reasonable pumping lifts which it will protect in existing lawful wells, and this will be the starting point for determining whether or not a proposed new permit impairs an existing water right." *Id.* at 7 (emphasis added).

When Ecology Senior Hydrogeologist Guy Gregory was questioned about when he would use a reasonable or feasible pumping lift, he indicated that he would look at changes in existing wells. He stated that the market (economics) would then tell us the level for the reasonable or feasible the pump lift. I believe Ecology misinterprets the Board's previous holding in *Pair* because it appears to over-emphasize whether any wells are failing in the area when making a determination on the necessity to establish a reasonable or feasible pump lift.

Mr. Gregory did testify earlier that the Department made a qualitative assessment of WSU's proposed consolidation of water rights by looking at the change in the point of withdrawal, the distance from other wells, and the fact that no additional water was being authorized for withdrawal. I don't believe, however, that in this case the Department knew enough about how the aquifer would respond to the changes when it issued the Reports of Examination for consolidating WSU's water rights. Ecology appeared to base its impairment decision regarding Mr. Cornelius' well primarily on the documents in its files and the fact that no

increase in water quantity was authorized for withdrawal. In the case at hand, the consolidation results in a large volume of water being transferred to two main points of withdrawal. Furthermore, one of these points of withdrawal (Well #7) fully penetrates the stratigraphy of the aquifer, which can affect how the aquifer responds to drawdowns.

The difficult question is how to evaluate when a proposed well will have a detrimental effect upon a lawful existing well, beyond speculation. The Board has previously recognized that Ecology's task "involves a degree of prediction using data that is not totally complete", and that "[i]t is a delicate task to determine when there is enough information to allow decisions which minimize perceived risks." *Black Star Ranch & Eckerich v. Ecology*, PCHB No. 87-19, p. 12 (1988). There are also fiscal constraints on the Department's ability to undertake or contract for detailed groundwater studies. *Heer and Pierret v. Ecology and Schell*, PCHB No. 1135, p. 14 (1977) (*Heer Brothers II*). The Board has ultimately concluded that it is a matter of discretion. *Black Star Ranch* at p. 12. Nevertheless, this is not the end of the Board's analysis because the Board must still evaluate the Department's decision while giving the appropriate amount of deference to the agency's decision. *Port of Seattle v. Pollution Control Hearings Board*, 151 Wn.2d 568, 90 P.3d 659 (2004).

After reviewing the Board decisions pertaining to reasonable or feasible pump lifts, it appears that the Board requires a level of certainty before it will allow a water right to issue that has a reasonable possibility of causing impairment. The Board has upheld Ecology's decision to deny a permit because of a lack of adequate information regarding impacts on other water right holders; required Ecology to determine a reasonable or feasible pump lift even when the transfer would not cause impairment in order to clarify the rights of appropriators in the area; upheld Ecology's decision to approve a permit when there is clear evidence that there is no potential

impact on other water right holders; and reversed Ecology's decision to issue a permit without adequate information, even when the chance of impairment was slight. Ecology's decision in this case, based on information it had prior to hearing, appears to fall into the latter category as described in *Heer Brothers I* below.

In *Heer Brothers I, id.*, the District Engineer for Ecology acknowledged that there was very limited information regarding the aquifer's characteristics, but opined that " "given the quantity of water" being sought, respondent's proposed well would "very, very unlikely … be a detrimental effect on these (appellants') springs,". . . ." *Heer Brothers I* at p. 5. Ecology's investigation involved viewing pump apparatus in existence in the vicinity of the proposed well and an examination of written records of water rights in the area. Because the District Engineer was unable to say what the extent of the interference would be to existing wells, the Board vacated the permit because Ecology failed to establish a reasonable or feasible pump lift.

In *Graves v. Ecology and City of Okanogan*, PCHB Nos. 88-140, 141 & 144 (1989), the City of Okanogan sought development of a new well because of water shortages at the south end of the city. The new well was in hydraulic continuity with the surface waters of the Okanogan River and was made subject to summertime curtailment when the river reached the minimum flow established for the river. The City sought to transfer its water right from its old well (City No. 1), which also withdrew water from the same riverside aquifer, to the new well (City No. 5) so that the new well would not be subject to summertime curtailment. Ecology approved the transfer of the water right from City No. 1 to City No. 5. Shortly after the transfer was approved, some neighboring wells either went dry or the water level fell below the foot-valve in the pump system. All of these wells were dug to a level of 30 feet or less. The drawdown attributable to City No. 5 was in the range of two to four feet. The appropriators who took modest measures to

deepen their wells were able to recover water. This case is significant because the Board required the City to submit information to Ecology so that Ecology could determine a reasonable or feasible pump lift for existing domestic and irrigation rights even though "the instant municipal development will not place appellants close to the limit of such a range." *Graves* at 9. The Board also stated that it "cannot conclude that the City's right impairs existing water rights." *Id.* The Board still determined that it was important to have this additional information to clarify the rights of the appropriators in the locality.

In *Andrews v. Ecology*, PCHB No. 97-20 (1997), Mr. Andrews sought a change of water right to allow the establishment of an additional well (Well No. 9) to restore the lost production of his existing well (Well No. 6). Well No. 9 was to be located about one mile northeast of Well No. 6. The change in the point of withdrawal was also sought because the location of Well No. 9 was downhill and would require much less electricity use to lift the water. Ecology performed no technical review of the request. There were groundwater declines in the area, possibly due to over-appropriation of water. Ecology denied even a temporary permit for the change request to add Well No. 9, but did grant a temporary change for a substitute well near Well No. 6. There was some geologic evidence that Well No. 9 was unlikely to affect a neighboring well approximately four miles south of Well No. 6. The Board also found that a well held by the State Department of Natural Resources would be less likely affected than the substitute well at the Well No. 6 location. The Board concluded that Ecology's denial of the temporary change for Well No. 9 was proper because it lacked sufficient information to show that the operation of the two wells would have the same effect upon the rights of others as operation of the right with only the one well.

In *Black Star Ranch, id.*, a water right applicant sought a permit for his existing well. Ecology was studying the Moxee/Black Rock Valley area in Yakima County at the time because of groundwater declines. Pump tests of the well were inconclusive as to whether the well was outside the study area. Ecology had made no determination of whether the proposed withdrawal would result in a reasonable or feasible pump lift from being exceeded. Ecology's denial of the permit was upheld by the Board because the information was incomplete. In discussing the reason for denial, the Board discussed the reason behind the permit system in the water codes is to prevent potential problems between appropriators. Otherwise, the permit system would not be needed because water use could just be regulated on the basis of priority.

In *Savaria v. Ecology and Lasater*, PCHB No. 77-20, (1977), the Board found that there was no evidence of any decline of the static water levels in the area, and the pumping did not exceed the annual recharge rate of the aquifer system. The Appellant did not know the depth of the pump setting of his own well, the static water level, or the pumping level. The only evidence provided was an estimate that the pumping lift would be increased by two feet. The Board concluded that Ecology was not required to make a determination of the range of reasonable or feasible pump lift for the area because the permit would not detrimentally affect the prior water right.

Another case where the Board found it was unnecessary to establish a reasonable and feasible pump lift when presented with strong evidence of no potential for impairment is *Heer Brothers II, id.* In *Heer Brothers II*, the proposed well was to be dug over 600 feet deeper than the Appellants' operating wells. Ecology had determined that the Sagebrush Flats area and the lower Moses Coulee were separate hydrologic and geologic systems, and if the Respondent's well was properly cased, waters from the shallow and middle aquifers would be protected from

cascading into the deeper aquifers. With no domestic wells within the radius of influence and no impact on the lower Moses Coulee, the Board upheld Ecology's decision to issue the permit without determining a reasonable or feasible pump lift.

In a case similar in important facts to *Heer Brothers II*, the Board found in *Pair, id*., that there was no threshold showing of impairment because there was no hydraulic continuity between the upper and lower aquifers, and the shallow wells had remained stable over time.

Finally, in *Shinn v. Ecology & Fode*, PCHB No. 613 (1975) and *Shinn v. Ecology*, PCHB No. 648 (1975), the Department of Ecology had established management areas for the Odessa sub-area that included a limited controlled rate of decline of water level. The Board found that the controlled rate of decline provided generally for a reasonable or feasible pump lift, and the Appellants were unable to establish why it was not reasonable or feasible as to them.

In the present case, Dr. Osiensky provided calculations using the Cooper-Jacobs approximation method to demonstrate that relative changes that can be expected from differing pumping scenarios of the WSU wells would be quite small. This information was persuasive in the Board's determination that there is no impairment of the Cornelius well and that a reasonable or feasible pump lift was unnecessary. This information, however, was not available to the Department at the time it prepared its Reports of Examination. WSU did conduct a pump test of some wells in August 2007, after having installed a data logger into the Cornelius well, but there is little indication of how that raw data was used in preparing the Reports of Examination. The fact that there was a large volume of water being consolidated, the fact that one of the major points of withdrawal now included a well that fully penetrated the aquifer, and the fact that it is possible for a well in the Grande Ronde Aquifer that is farther from the point of withdrawal to show an impact before a well located closer to the point of withdrawal, all pointed to the need for

additional information before Ecology could determine that there would be no impact to the Cornelius well. It was not clear that there would be no impact from the consolidation under these circumstances. The Board's previous decisions indicate that the "beyond speculation" language contained in the test enunciated in *Pair* is met by a showing of a reasonable possibility of impairment by the Appellants. The ease and cost for Ecology in obtaining additional information remains a factor, but in a case such as this, it is not enough to rely so heavily on documented water rights without additional investigation. Ecology should have obtained additional information or established a reasonable or feasible pump lift for the area around the Cornelius well.

For this reason, I concur with the bulk of this decision, but respectfully dissent on that portion of the opinion that states that Ecology had enough information at the time it prepared the Reports of Examination to consider the impairment issue.

DATED this 17th day of April 2008.

POLLUTION CONTROL HEARINGS BOARD

WILLIAM H. LYNCH, Member