

IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

IN THE MATTER OF PROTESTED APPLICATIONS)
58131, 58528, 58529 AND 58530 FILED TO)
CHANGE THE WATERS ALREADY APPROPRIATED)
FROM AN UNDERGROUND SOURCE, LOCATED IN)
THE CARSON VALLEY GROUNDWATER BASIN,)
DOUGLAS COUNTY, NEVADA.)

RULING

4128

GENERAL

I.

Application 58131 was filed on September 25, 1992, by the Indian Hills General Improvement District (IHGID), to change the point of diversion of 0.96 cfs, a portion of underground water heretofore appropriated under Permit 48105, for quasi-municipal use within the IHGID service area, in Douglas County, Nevada. The proposed point of diversion is the so called "Brown's Well" located within the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 30, T.14N., R.20E., M.D.B.&M.¹

Application 58528 was filed on February 5, 1993, by the IHGID, to change the point of diversion of 0.83 cfs, a portion of underground water heretofore appropriated under Permit 43685, for quasi-municipal use within the IHGID service area. The proposed point of diversion is the Brown's Well described above.²

Application 58529 was filed on February 5, 1993, by the IHGID, to change the point of diversion of 0.83 cfs, a portion of underground water heretofore appropriated under Permit 44626, for quasi-municipal use within the IHGID service area. The proposed point of diversion is the Brown's Well described above.³

Application 58530 was filed on February 5, 1993, by the IHGID, to change the point of diversion of 0.55 cfs, a portion of underground water heretofore appropriated under Permit 52093, for

¹ File No. 58131, official records in the Office of the State Engineer.

² File No. 58528, official records in the Office of the State Engineer.

³ File No. 58529, official records in the Office of the State Engineer.

quasi-municipal use within the IHGID service area. The proposed point of diversion is the Brown's Well described above.⁴

II.

Protests were timely filed by over 140 homeowners in the Jack's Valley area, Alpine View Estates, and nearby areas in Douglas County, Nevada, to the granting of Applications 58131, 58528, 58529 and 58530. The protestants request that the State Engineer deny these applications on the following grounds:

1. The subject application is deficient and should be denied. The existing permitted well, permit #52093, has never been perfected and the alleged water right has not been exercised, utilized or perfected in accordance with state law.

2. The existing permitted well, #52093, has never been capable of delivering more than its current utilized duty of less than 80 gpm (0.17 CFS) or less than 25% of the originally permitted duty. Consequently, more than 75% or 0.55 CFS was not and could not have been put to beneficial use. Therefore, the alleged 0.54 CFS for which transfer has been applied did not exist in fact and cannot be claimed.

3. Upon information and belief, the alleged rights have been forfeited because of failure to put such alleged rights to beneficial use for in excess of five years.

4. Upon information and belief, the use to which this alleged right would be put would result in a huge increase in sewage effluent and further degradation of the quality of surface and groundwaters.

5. Upon information and belief, the duties of the "water ski well", permit numbers 48965, 48966 and 54101 totalling 0.615 CFS automatically have been transferred to the Brown's well, permit #55539, based upon proximity. This makes the total permitted duty of the Brown's well 1.615 CFS. Even without the transfer of the additional alleged rights, this existing combined duty will unreasonably lower the static water level, extend the cone of depression and the zone of contribution, adversely affecting existing wells and potentially will aggravate existing hazards to the quality of the water supply contrary to the public interest. Accordingly, the granting of permit #55539 with a duty of 1.0 CFS was, in itself, contrary to the public interest.

⁴ File No. 58530, official records in the Office of the State Engineer.

6. Upon information and belief, adding more withdrawal of groundwater under permit #55539, the "Brown's Well", to which the alleged rights are requested to be transferred, will unreasonably lower even further the static water level and adversely affect existing wells and is therefore contrary to the public interest

7. The Brown's Well to which these additional alleged rights are requested to be diverted is hydraulically down-gradient and in hydraulic proximity to existing domestic wells in the immediately surrounding vicinity and to domestic wells in the Alpine View and Jack's Valley subdivisions. Further groundwater withdrawal and the resulting cone of depression and zone of influence will prove detrimental to the public interest and to our domestic water supply by unreasonably lowering the water table.

8. The proposed point of diversion of the alleged water rights to the "Brown's Well", permit # 55539, is down-gradient and within 2500 feet of proposed land surface application of secondarily-treated sewage effluent on Indian lands, within 400 feet of a meander of the Carson River and within 2100 feet of the main stream of the Carson River. This is in direct conflict with the recommendations of the Federal Wellhead Protection Program of the Clean Water Act for groundwater from either a partially-confined or unconfined aquifer that is to be used for human consumption. In accordance with the characteristics of the Carson Valley Basin-fill Reservoir which is hydraulically continuous throughout, the Zone of Contribution (ZOC) from these contaminating sources is far greater than their proximity to the Brown's Well. Even without pumpage in addition to the permitted duty of the Brown's Well, its close proximity to sources of pollution render it potentially hazardous and unsafe as a source of a quasi-municipal water supply.

9. Upon information and belief, the Brown's Well is within less than 10,000 feet (within less than 2000 feet according to one source of information) of the advancing plume of the toxic "Bently Spill". The toxic constituents of this spill contaminate both the "unconfined" and "partially-confined" portions of the aquifer and already have advanced two to three miles toward the site of the Brown's Well from the site of the original spill. Even the currently permitted duty of the Brown's Well will increase the cone of depression and the zone of contribution such that it is reasonable to expect that the progression of the plume of the Bently spill will be accelerated and render the water unfit for human consumption at some imminent future date. Further addition to this duty by transfer of the alleged rights, in the face of such reasonably anticipated circumstances,

would further exacerbate the rate of progression of the toxic plume and constitute unconscionable disregard of public health concerns and increase the imminent likelihood(sic) of contamination of other domestic wells in the area contrary to the public interest.

10. Upon information and belief, recharge of the Carson Valley basin-fill reservoir is currently less than existing use. Therefore granting or approving the subject application would further exceed the already exceeded safe yield of the basin and result in even greater permanent depletion or mining of groundwater resources in violation of Nevada law.

11. Upon information and belief, the water of the Carson Valley basin-fill reservoir is vastly over-appropriated.

12. There are many vacant lots in both the Alpine View and Jack's Valley subdivision areas which must receive due consideration with respect to future utilization of domestic wells thereby exacerbating the consumptive use from the subdivisions over the period of buildout.

13. The Alpine View and Jack's Valley subdivisions are approved subdivisions with approval based upon individual domestic wells on each lot. The right to the use of water for domestic purposes is an existing right protected by statute.

14. This application should be denied because the IHGID cannot show that the alleged water right will ever be put to beneficial use (the major portion of the alleged permitted rights have languished for over a decade).

15. The IHGID does not have the economic capability to put the water under the subject application to beneficial use.

16. The protestant reserves the right to amend the subject protest to include such issues and additional evidence relevant to the points of protest and any additional matters that may affect the groundwater rights and resources of the subject area as such evidence or information becomes available.

17. The undersigned additionally incorporates by reference as though fully set forth herein and adopts as its own, each and every other protest to the subject application.⁵

⁵ Exhibit No. 6, Public Administrative Hearing before the State Engineer, October 11, 1993.

In addition to the above protest, Richard S. Leigh added the following to his protest:

"In 1989, we had to drill our well deeper. We can not do it again.⁶"

Likewise, Roger and R.J. Joly added the following to their protest:

"We developed well problems this summer sucking air."⁷

III.

On October 11, 1993, a Public Administrative Hearing was held before the State Engineer to consider protested Applications 58131, 58528, 58529 and 58530.⁸

FINDINGS OF FACT

I.

At the hearing, the Protestants requested that the hearing be continued.⁹ The Hearing Officer, after consulting with the State Engineer, denied the request for a continuance and required the applicant to present his case first.¹⁰

II.

The protestants claim that Applications 58131, 58528, 58529 and 58530 are deficient and should be denied.⁵ After review of subject change applications and their base permits,¹¹ the State

⁶ Protest filed by Richard S. Leigh, File No. 58131, official records in the Office of the State Engineer.

⁷ Protest filed by Roger and R.J. Joly, File No. 58131, official records in the Office of the State Engineer.

⁸ Exhibit No. 1, Public Administrative Hearing before the State Engineer, October 11, 1993.

⁹ Transcript pp. 16-18, Public Administrative Hearing before the State Engineer, October 11, 1993.

¹⁰ Transcript p. 23, Public Administrative Hearing before the State Engineer, October 11, 1993.

¹¹ File No's. 48105, 43685, 44626 and 52093, official records in the Office of the State Engineer.

Engineer finds that the applications are complete and the base rights to these applications are in good standing.¹²

The protestants feel that the fact that the base rights to these applications have not been perfected, requires the State Engineer to deny these applications.⁵ The State Engineer finds that Nevada Water Law allows the State Engineer to approve a change of an unperfected water right.¹³

III.

The protestants feel that the base rights to Applications to Change 58131, 58528, 58529 and 58530 have been forfeited for non-use.⁵ The State Engineer earlier found that the base rights, Permits 48105, 43685, 44626 and 52093 are in good standing. Extensions of time for filing proof of beneficial use have been granted to December 10, 1994. The principle of forfeiture of a water right applies only when the right has been perfected. The State Engineer finds that forfeiture does not apply to these water rights.¹⁴

IV.

In their protest, the protestants allege that the approval of Applications 58131, 58528, 58529 and 58530 would result in an increase in sewage effluent and an increase in the degradation of the quality of surface water and groundwater.⁵ However, no evidence or testimony was presented to support this allegation. Furthermore, wastewater collection and treatment services are provided by the IHGID.¹⁵ Nevada law provides for the collection,

¹² NRS 533.335 and 533.345 describe what constitutes a completed application and these applications meet those requirements.

¹³ NRS 533.324 and 533.345.

¹⁴ NRS 534.090 describes what constitutes a forfeiture as well as Town of Eureka v. Office of State Engineer of Nevada, 108 Nev, 826 P.2d 948 (1992). It is only logical that beneficial use of the water must have been completed before a period of non-use can begin. These permits were approved for Quasi-Municipal use to serve 1500 homes, many of which have not been built.

¹⁵ Transcript pp. 33, 35, Public Administrative Hearing before the State Engineer, October 11, 1993.

treatment, and disposal of wastewater in a manner that protects the surface waters and groundwaters from degradation.¹⁶ This part of Nevada law is administered by the Nevada Division of Environmental Protection. The State Engineer finds that there is no evidence of degradation of the surface or underground waters as a result of the approval of Applications 58131, 58528, 58529 and 58530. The State Engineer further finds that environmental pollution prevention, including the Wellhead Protection Program, are covered by State regulations and statutes outside of the jurisdiction of the State Engineer, with which IHGID must comply.

V.

The protestants claim that pumping the Brown's Well at the combined diversion rates of Applications 58131, 58528, 58529 and 58530 and the existing Brown's Well permit will cause an unreasonable lowering of the static groundwater level, extend the cone of depression and adversely affect domestic wells in Jack's Valley and in Alpine View Estates.⁵ The protestants feel that approval of these applications would be detrimental to the public interest.

The Brown's Well taps into an artesian aquifer.¹⁷ Drawdown is a term that normally applies to the drop in groundwater elevation caused by pumping. However, with an artesian aquifer, it is more appropriate to consider the change in artesian pressure caused by pumping.

At the hearing, the Applicant presented estimates of the decrease in artesian pressure caused by the proposed pumping of the Brown's Well. The estimates were based on a computer model which simulated the pumping rate and schedule anticipated for the Brown's Well over a ten year period.¹⁷ The estimated decrease in artesian pressure is as follows: 15 to 20 feet at $\frac{1}{4}$ mile from the well; 10-15 feet at $\frac{1}{2}$ mile; 0 to 5 feet at one mile. Even with these estimated drawdowns, the geohydrology of the area is such that the

¹⁶ NRS 445.

¹⁷ Exhibit No. 14, Public Administrative Hearing before the State Engineer, October 11, 1993.

artesian pressure would remain positive.¹⁷ The State Engineer finds that the estimated drawdowns are realistic and represent a reasonable lowering of the artesian pressure. The State Engineer further finds that any existing water rights located near the Brown's Well will not suffer any adverse impacts beyond experiencing a reasonable lowering of the artesian pressure.

The nearest wells in Jack's Valley or Alpine View Estates are located approximately 2.5 miles from the Brown's Well. These wells tap into an unconfined groundwater aquifer that is not hydraulically connected to artesian aquifer which is the source for the Brown's Well.¹⁷ The State Engineer finds that the proposed pumping of the Brown's Well will have no adverse impacts to the domestic wells in Jack's Valley or Alpine View Estates.

The State Engineer has many records of pumping by IHGID. The pumping and per connection usage remain very low because of lack of pumping capacity. Although IHGID has the rights to more water, their wells have been relatively small in production. The State Engineer finds that it is in the public interest to allow them to move a portion of their water rights in an effort to improve their pumping capacity to not only allow more flexibility in pumping, but to allow some security against fire and well failure.

The above findings are based largely on the results of simulating the pumping of the Brown's Well in a computer model of the groundwater aquifers. The State Engineer finds that a monitoring plan is required to further validate the model and provide assurance in the future that there are no adverse effects as predicted by the model. The monitoring plan should be designed to detect impacts to the confined and unconfined aquifers as a result of pumping the Brown's Well.

VI.

The protestants allege that the close proximity of the Brown's Well to sources of pollution render it hazardous and unsafe as a source of a quasi-municipal water supply.⁵ No evidence or testimony was provided to support this allegation.

IHGID is required to comply with drinking water standards promulgated under the Safe Drinking Water Act and the Nevada

Division of Health. The State Engineer finds that the approval of Applications 58131, 58528, 58529 and 58530 in no way releases IHGID from its responsibility to comply with all applicable State and Federal water quality and health laws.

VII.

The protestants referred to the potential threat to drinking water quality in the Brown's Well that may be caused by the "Bently Spill."⁵ As stated earlier, the Nevada Division of Environmental Protection enforces laws dealing with groundwater pollution and the Nevada Division of Health administers the Safe Drinking Water Program. The State Engineer finds that adequate safeguards exist in these laws to protect the public, and that IHGID must comply with these laws.

VIII.

The protestants feel that approval of Applications 58131, 58528, 58529 and 58530 would further exceed the safe yield of the Carson Valley Groundwater Basin.⁵ The State Engineer finds that these applications are seeking to change water already appropriated under existing water rights. The State Engineer further finds that approval of Applications 58131, 58528, 58529 and 58530 does not increase the quantity of water already appropriated in the Carson Valley Groundwater Basin.

IX.

There are many vacant lots in the Alpine View and Jack's Valley subdivisions which will someday be served by domestic wells.⁵ The high density of domestic wells tapping into the unconfined groundwater aquifer which is not areally extensive may cause a reduced supply of water to the existing wells.¹⁸ The State Engineer finds that high density of domestic wells in the Jack's Valley and Alpine View areas and the limited groundwater resource that supplies those wells present a greater risk to the protestants' existing wells than the proposed pumping of the Brown's Well, which taps a separate artesian aquifer.

¹⁸ Transcript p. 154, Public Administrative Hearing before the State Engineer, October 11, 1993.

X.

The protestants feel that Applications 58131, 58528, 58529 and 58530 should not be approved because IHGID cannot show that the water will ever be put to beneficial use.⁵ The protestants presented no evidence to support the grounds for this assertion. IHGID is a District that was approved under NRS 318 to supply water and sewer services to residents within the District.¹⁹ The District must serve new development as projects are approved by the Douglas County Commission.²⁰ The applications considered here are changes of water rights presently held by the District. The State Engineer finds that IHGID has the water rights, the need for the water, and the ability to place the water to beneficial use.

XI.

The protestants assert that IHGID does not have the economic capability to put the water to beneficial use.⁵ There is no evidence on the record to support this assertion. Furthermore, under NRS 318, the District has several options for obtaining financing for the construction of facilities necessary to put the water to beneficial use. The State Engineer finds that IHGID has the economic capability to put the water to beneficial use.

XII.

Brown's Well is located about 3/8 mile from the Carson River.²¹ Due to a confining clay layer between the Carson River and the artesian aquifer which supplies the Brown's Well, the Carson River is not in direct communication with the artesian aquifer.²² The State Engineer finds that the proposed pumping of the Brown's Well will not remove any water from the Carson River.

¹⁹ Transcript p. 33, Public Administrative Hearing before the State Engineer, October 11, 1993.

²⁰ Transcript pp. 26-30, Public Administrative Hearing before the State Engineer, October 11, 1993.

²¹ Transcript p. 87, Public Administrative Hearing before the State Engineer, October 11, 1993.

²² Transcript p. 109, Public Administrative Hearing before the State Engineer, October 11, 1993.

XIII.

In his post-hearing brief, Protestant Philip M. Lehrman requested an extension of time for filing protestants' briefs. Mr. Lehrman feels that additional studies are necessary to evaluate any potential impacts to the Carson River, the groundwater aquifers, and water quality. Mr. Lehrman states that the protestants do not have the means to conduct such investigations and suggests that the State Engineer conduct its own studies.

As stated previously in this ruling portions of Nevada Law Administered by State agencies other than the Division of Water Resources, protects the quality of drinking water and the quality of surface and groundwaters. IHGID must comply with all applicable laws. The State Engineer finds that additional studies, beyond the required monitoring, are not necessary to protect the public and the groundwater resource. The State Engineer further finds that adequate information is available on the record and in the files and records of the State Engineer to make a decision regarding Applications 58131, 58528, 58529 and 59530.

CONCLUSIONS

I.

The State Engineer has jurisdiction over this matter.²³

II.

The State Engineer is prohibited by law from granting a permit under an application to change an existing right where:

- A. The proposed use conflicts with existing rights, or
- B. The proposed use threatens to prove detrimental to the public interest.²⁴

III.

Applications 58131, 58528, 58529 and 58530 are complete and ready for action by the State Engineer. The base rights to these applications, identified as Permits 48105, 43685, 44626 and 52093, respectively, are valid water rights in good standing.

²³ NRS 533 and 534.

²⁴ NRS 533.370.

IV.

Groundwater pollution and drinking water quality issues are addressed by Nevada Law administered by agencies other than the Division of Water Resources. IHGID must comply with all applicable laws enforced by other State agencies. Therefore, adequate safeguards exist to protect the public health and the environment. Approval of Applications 58131, 58528, 58529 and 58530 do not threaten to prove detrimental to the public interest.

V.

The aquifer which supplies the domestic wells in Jack's Valley and Alpine View Estates is not hydraulically connected to the aquifer which supplies the Brown's Well. Therefore, the proposed pumping of the Brown's Well will have no adverse impacts on the domestic wells in Jack's Valley and Alpine View Estates or on any existing water rights in the vicinity of the Brown's Well.

VI.

The proposed pumping of the Brown's Well will cause a reasonable lowering of the artesian pressure, if the well obtains its water from the artesian aquifer. Any well located within one mile of the Brown's Well, will experience a reasonable drop in the artesian pressure. Any well that obtains its water from the upper aquifer, which is separated from the artesian aquifer by a confining layer, will experience no negative impact caused by the pumping of the Brown's Well.

VII.

A monitoring program is necessary to validate the computer model used in estimating the drawdown and insure that no adverse impacts are observed in the confined and unconfined aquifers.

VIII.

Since Applications 58131, 58528, 58529 and 58530 seek to change existing water rights, their approval will not increase the quantity of water already appropriated.

IX.

IHGID is considered a District under NRS 318 and is capable of placing this water to beneficial use.

X.

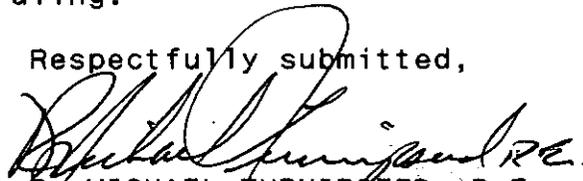
The proposed pumping of the Brown's Well will in no way reduce the flow of water in the Carson River.

RULING

The protests to Application 58131, 58528, 58529 and 58530 are hereby overruled and Applications 58131, 58528, 58529 and 58530 are hereby approved subject to:

1. Payment of statutory fees;
2. Existing rights;
3. Approval by the State Engineer of a monitoring plan designed to detect any impacts to the confined and unconfined aquifers. The monitoring plan must be submitted to the State Engineer within 120 days of the date of this ruling.

Respectfully submitted,


R. MICHAEL TURNIPSEED, P.E.
State Engineer

RMT/JCP/pm

Dated this 26th day of
July, 1994.