

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

IN THE MATTER OF APPLICATIONS 55612,)
57690, 57691, 57692, AND 58913 FILED)
TO APPROPRIATE WATER FROM AN UNDERGROUND)
SOURCE WITHIN THE SPANISH SPRINGS VALLEY)
GROUNDWATER BASIN (85), WASHOE COUNTY,)
NEVADA)

RULING
#4601

GENERAL

I.

Application 55612 was filed by HAWCO Corporation on January 8, 1991, to appropriate 1.547 cubic feet per second (cfs), not to exceed 1,120 acre-feet annually (afa), from an underground source for quasi-municipal purposes for 1,000 single family dwelling units in Spanish Springs Valley. The proposed point of diversion is described as being located within the NW¼ NW¼ of Section 26, T.21N., R.20E., M.D.B. & M., and the place of use is described as being parts of Sections 3 and 4, T.20N., R.20E., and all or parts of Sections 11, 13, 14, 15, 22, 23, 26, 27, 34 and 35, T.21N., R.20E., M.D.B. & M.¹

Application 55612 was denied by the State Engineer prior to publication². The applicant appealed said ruling to the Second Judicial District Court of the State of Nevada and a Stipulation and Order for Dismissal, filed April 13, 1992, caused State Engineer's Ruling No. 3873 to be reversed and the matter was remanded to the State Engineer for further proceedings after such time as the United States Geological Survey (U.S.G.S.) completed its study of the Spanish Springs Valley Ground Water Basin.¹ On December 7, 1992, notice of the application was sent to be published in an area newspaper in compliance with NRS § 533.360.¹

¹ File No. 55612, official records in the office of the State Engineer.

² State Engineer's Ruling No. 3873, dated March 4, 1992, official records in the office of the State Engineer.

Application 55612 was timely protested by Washoe County on the grounds that:

The applicant does not have an approved project to support the application. So as to insure the applicant is not merely applying for this appropriation for speculation, the State Engineer is requested to review the application/applicant with respect to N.R.S. 533.375, Which [sic] states:

State Engineer may require additional information before approval or rejection of application. Before either approving or rejecting the application, the state engineer may require such additional information as will enable him to guard the public interest properly, and may in case of an application proposing to divert more than 10 cubic feet per second of water, require a statement of the following facts:

1. In the case of an incorporated company he may require the submission of the articles of incorporation, and the names and places of residence of directors and officers, and the amount of its authorized and of its paid-up capital.

Washoe County owns and operates the Desert Springs, Spring Creek and Countryside water delivery systems. The County is responsible for water service to approximately 1060 individual dwelling units within the Spanish Springs Hydrographic basin. There are presently in excess of 1000 additional units being developed under approved tentative maps not including proposed schools and commercial areas.

Washoe County currently holds approximately 3000 acre feet of water rights for the existing and proposed developments.

The 1992 "Hydrographic Basin Summaries" prepared by the Division of Water Resources and Water Planning state that Spanish Springs Valley has a perennial yield of 1,000 acre feet annually. The summary further states current commitments under permit and certificate exceed 10,000 acre feet annually.

II.

Application 57690 was filed by Spring Creek Development, Inc. on May 21, 1992, to appropriate 7.0 cfs, not to exceed 2,388 afa of water from an underground source for quasi-municipal/municipal purposes described as subdivisions, commercial, municipal or private golf course and recreation complex. The application

further noted that water was to be put to use in a timely manner based on map and development approvals and the economic conditions for subdivision development. The proposed point of diversion is described as being located within the SE¼ SE¼ of Section 7, T.20N., R.21E., M.D.B. & M. The place of use is described as Sections 6, 7 and 18, T.20N., R.21E., M.D.B. & M.³ Application 57690 was filed to be supplemental to Applications 57691 and 57692.

Application 57691 was filed by Spring Creek Development, Inc. on May 21, 1992, to appropriate 7.0 cfs of water from an underground source for quasi-municipal/municipal purposes. The proposed point of diversion is described as being located within the NW¼ NE¼ of Section 7, T.20N., R.21E., M.D.B. & M. The proposed manner of use and place of use are the same as under Application 57690.⁴

Application 57692 was filed by Spring Creek Development, Inc. on May 21, 1992, to appropriate 7.0 cfs of water from an underground source for quasi-municipal/municipal purposes. The proposed point of diversion is described as being located within Lot 4, SW¼ SW¼ of Section 7, T.20N. R.21E., M.D.B. & M. The proposed manner of use and place of use are the same as under Applications 57690 and 57691.⁵

Applications 57690, 57691 and 57692 were proposed as supplemental to each other for a total combined duty of 2,388 afa. All three applications were timely protested by Richard T. Donovan and Washoe County.^{3,4,5}

³ File No. 57690, official records in the office of the State Engineer.

⁴ File No. 57691, official records in the office of the State Engineer.

⁵ File No. 57692, official records in the office of the State Engineer.

Richard Donovan protested the applications on the grounds that:

Appropriation is sought in a hydrographic area that is, according to the Area Summary of the Division of Water Planning, already over-appropriated by a factor in excess of nine. Washoe County has adopted, as part of its Area Plan for Spanish Springs Valley, Policy Number SS.7.6 urging no new permits be issued in the basin. Approval of this application would constitute a violation of NRS 533.370(3) in that there is no unappropriated water left in the basin, the proposed use conflicts with existing uses, including that of the protestant, and is detrimental to the public interest.

Washoe County protested the applications on the grounds that: The applicant fails to include the information required under N.R.S. 533.340,3.; which states:

In addition to the requirements of N.R.S. 533.335, the application shall contain:

3. If for Municipal supply or for domestic use, the approximate number of persons to be served, and the approximate future requirement.

Furthermore, The [sic] applicant does not have an approved project to support the application. So as to insure the applicant is not merely applying for this appropriation for speculation and since the combined diversion rate exceeds 10 c.f.s., the State Engineer is requested to review the application/applicant with respect to N.R.S. 533.375, Which [sic] states:

State Engineer may require additional information before approval or rejection of application. Before either approving or rejecting the application, the state engineer may require such additional information as will enable him to guard the public interest properly, and may in case of an application proposing to divert more than 10 cubic feet per second of water, require a statement of the following facts:

1. In the case of an incorporated company he may require the submission of the articles of incorporation, and the names and places of residence of directors and officers, and the amount of its authorized and of its paid-up capital.

Washoe County owns and operates the Desert Springs, Spring Creek and Countryside water delivery systems. The County is responsible for water service to approximately 1060 individual

dwelling units within the Spanish Springs Hydrographic basin. There are presently in excess of 1000 additional units being developed under approved tentative maps not including proposed schools and commercial areas.

Washoe County currently holds approximately 3000 acre feet of water rights for the existing and proposed developments.

The 1992 "Hydrographic Basin Summaries" prepared by the Division of Water Resources and Water Planning state that Spanish Springs Valley has a perennial yield of 1,000 acre feet annually. The summary further states current commitments under permit and certificate exceed 10,000 acre feet annually.

The State Engineer has denied previous applications to appropriate water within Spanish Springs Valley for quasi municipal use. In denying those previous applications the State Engineer found that the granting of additional appropriations within a basin where the water rights of record exceed the perennial yield would conflict with existing rights and threaten to prove detrimental to the public interest and welfare. Further the State Engineer has made findings within his rulings denying applications within similar basins that state:

The perennial yield of a ground water reservoir is the maximum rate at which ground water of suitable chemical quality is available and can be withdrawn economically for an indefinite period of time. If the perennial yield is exceeded, water will be withdrawn from storage and ground water levels will decline.

Withdrawals of ground water in excess of the perennial yield contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased pumping lifts, land subsidence and possible reversal of ground water gradients which could result in significant changes in recharge-discharge relationship. These conditions have developed in several other ground water basins within Nevada where storage depletion and declining water tables have been recorded and documented.

There is evidence within Spanish Springs Basin that suggests the safe perennial yield may not only be limited by recharge but by water quality. The State Engineer has denied applications for appropriation within basins due to water quality.

The protestant is aware that the State Engineer has entered into a stipulation to allow applications to remain pending

within the basin until such time a study is completed. The State Engineer, United States Geological Survey and this protestant Washoe County are funding and participating in the study. This study does not take into account the individual domestic wells within the basin or the potential claims of vested rights which may exist within the basin. The study does not intend to address water quality or its relationship to perennial yield or the potential implications.

The State Engineer should not consider approval of additional appropriations until all rights are established and the vested rights adjudicated so as to assure the protection of existing rights and the public interest.

N.R.S. 534.110,6., States [sic] in part that:

"The state engineer shall conduct investigations in any basin or portion thereof where it appears that the average annual replenishment to the ground water supply may not be adequate for the needs of all the permittees and all vested-right claimants, and if his findings so indicate the state engineer may order that withdrawals be restricted to conform to priority rights."

History shows us that the dedication of water rights for municipal or quasi-municipal service does not occur with relation to priority of the water rights.

If in the event the State Engineer was to issue additional appropriations for quasi-municipal purposes within a basin that:

1. Has existing permits and certificates which exceed the perennial yield of the basin
2. Has unadjudicated ground water rights
3. Has a portion of the yield which occurs due to artificial recharge from a non guaranteed surface source
4. Has evidence of water quality problems
5. Has an undefined portion of the yield consumed by domestic wells
6. Which said appropriations, if approved and accepted for dedication by the county, would require supply
7. The State Engineer subsequently found that the annual replenishment to the ground water supply may not be adequate for the needs of all the permittees and regulation was required under N.R.S. 534.110.

Then, in that event, the issuance of said appropriations would ultimately impair existing rights and be detrimental to the public interest and require the regulation of all rights equally rather than by priority.

Furthermore, the State Engineer may under N.R.S. 534.120(3).(b) deny applications to appropriate groundwater for any purpose in areas served by a municipality. This proposed development lies within the place of use of existing water rights held by the protestant and within the above mentioned systems from which Washoe County will provide service. The application is located within an area which could impact the economic pumping lifts of the municipality and could through additional withdrawals migrate water of poor quality into the pumping radius.

Washoe County respectfully requests that the state engineer work with Washoe County as both the water purveyor and the agency which would ultimately accept any water for dedication. The State Engineer, prior to approving additional appropriations should consider whether the purveyor Washoe County would accept additional appropriations for new development in the Spanish Springs Basin.

III.

Application 58913 was filed by K & M and Associates, Inc. on June 11, 1993, to appropriate 0.691 cfs, not to exceed 500 afa, of water from an underground source for quasi-municipal and domestic purposes for a 385 lot residential subdivision plus commercial development. The proposed point of diversion is described as being located within the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 3, T.20N., R.20E., M.D.B. & M. The place of use is described as being parts of Sections 3 and 4, T.20N., R.20E., and all or parts of Sections 11, 13, 14, 15, 22, 23, 26, 27, 34 and 35, all in T.21N., R.20E., M.D.B. & M.⁶ Application 58913 was timely protested by Washoe County on grounds nearly identical to those listed above in reference to its protests to Applications 57690, 57691 and 57692.

IV.

The State Engineer initially described and designated the Spanish Springs Ground Water Basin on March 10, 1975, under the provisions of NRS § 534.030, as a basin in need of administration.⁷

⁶ File No. 58913, official records in the office of the State Engineer.

⁷ State Engineer's Order No. 533, dated March 10, 1975, official records in the office of the State Engineer.

V.

The Nevada Division of Water Resources and the U.S.G.S. have cooperated in studies of the Spanish Springs Valley resulting in prepared reports such as Water Resources-Reconnaissance Series Report 43 in 1967 and Water-Resources Investigations Report 96-4297 in 1997.⁸

FINDINGS OF FACT

I.

The State Engineer finds that Water-Resources Investigations Report 96-4297 is the study of the Spanish Springs Valley Ground Water Basin cited in the Stipulation and Order for Dismissal which reversed State Engineer's Ruling No. 3873 and the denial of Application 55612.

II.

The perennial yield of a hydrologic basin is the maximum amount of water of usable chemical quality that can be consumed economically each year for an indefinite period of time. Perennial yield cannot exceed the natural replenishment to an area indefinitely, and ultimately is limited to the maximum amount of natural recharge that can be salvaged for beneficial use. If the perennial yield is continually exceeded groundwater levels will decline until the groundwater reservoir is depleted.⁹ Withdrawals of ground water in excess of the perennial yield contribute to adverse conditions such as water quality degradation, storage

⁸ Rush, F. Eugene and Glancy, Patrick A., Water Resources Appraisal of the Warm Springs-Lemon Valley Area, Washoe County, Nevada, Water Resources-Reconnaissance Series Report 43, Nevada Department of Conservation and Natural Resources and U.S.G.S., 1967; Berger, David L., Ross, Wyn C., Thodal, Carl E., Robledon, Armando R., Hydrogeology and Simulated Effects of Urban Development on Water Resources of Spanish Springs Valley, Washoe County, West-Central Nevada, Water-Resources Investigations Report 96-4297, Nevada Division of Water Resources and U.S.G.S., 1997.

⁹ State Engineer's Office, Water for Nevada, State of Nevada Water Planning Report No. 3, p. 13, Oct. 1971.

depletion, diminishing yield of wells, increased economic pumping lifts, land subsidence and possible reversal of groundwater gradients which could result in significant changes in the recharge-discharge relationship.¹⁰ Perennial yield is further defined as the amount of naturally occurring ground water that can be withdrawn from an aquifer on a sustained basis without impairing the native groundwater quality or creating undesirable effects such as environmental damage.¹¹

The State Engineer finds that because imported surface water recharges the Spanish Springs Valley aquifer the term augmented yield is used to describe the total quantity of potentially available ground water and is defined as the perennial yield plus salvable secondary recharge resulting from the use of imported surface water.¹²

III.

Salvable secondary recharge from imported surface water is dependent upon the volume of water imported, ditch losses, water actually applied to the irrigated fields, infiltration of the applied water, and outflow from the basin. Under 1994 conditions, salvable secondary recharge resulting from surface water imported from the Truckee River was estimated to be 1,400 afa.¹³ The State

¹⁰State Engineer's office, Water for Nevada, State of Nevada Water Planning Report No. 3, p.13, Oct. 1971.

¹¹ Berger, David L., Ross, Wyn C., Thodal, Carl E., Robledon, Armando R., Hydrogeology and Simulated Effects of Urban Development on Water Resources of Spanish Springs Valley, Washoe County, West-Central Nevada, Water-Resources Investigations Report 96-4297, Nevada Division of Water Resources and U.S.G.S., pp. 50-51, 1997.

¹² Berger, David L., Ross, Wyn C., Thodal, Carl E., Robledon, Armando R., Hydrogeology and Simulated Effects of Urban Development on Water Resources of Spanish Springs Valley, Washoe County, West-Central Nevada, Water-Resources Investigations Report 96-4297, Nevada Division of Water Resources and U.S.G.S., p. 51, 1997.

¹³ Berger, David L., Ross, Wyn C., Thodal, Carl E., Robledon, Armando R., Hydrogeology and Simulated Effects of Urban Development on Water Resources of Spanish Springs Valley, Washoe County, West-

Engineer finds that the perennial yield of the Spanish Springs Groundwater Basin is 1,000 afa and the augmented yield of the basin-fill aquifer in Spanish Springs Valley is estimated to be 2,400 afa, assuming that 1,400 afa of groundwater recharge was salvaged from infiltration of imported Truckee River water in 1994.¹⁴

However, the State Engineer further finds that the dependence of salvable secondary recharge upon the volume of imported water, which is dependent upon Truckee River flow and mountain snow-pack, gives the augmented yield a very unpredictable value and if the quantity of imported surface water or its management changes, the augmented yield for the basin-fill aquifer must be revised to account for changes in groundwater recharge. The State Engineer finds that to consider salvable secondary recharge in the management of this groundwater basin would not be good management of the groundwater basin as the continued importation of surface water is not guaranteed in the future and to allow development based on said importation would threaten to prove detrimental to the public interest.

IV.

The State Engineer finds that the estimated groundwater pumpage in the Spanish Springs Groundwater Basin for 1994 was 2,600 afa¹⁵ and that existing permitted and certificated ground water rights total more than 6,260 afa.¹⁶ The State Engineer finds that

Central Nevada, Water-Resources Investigations Report 96-4297, Nevada Division of Water Resources and U.S.G.S., p. 51, 1997.

¹⁴ Id.

¹⁵ Berger, David L., Ross, Wyn C., Thodal, Carl E., Robledon, Armando R., Hydrogeology and Simulated Effects of Urban Development on Water Resources of Spanish Springs Valley, Washoe County, West-Central Nevada, Water-Resources Investigations Report 96-4297, Nevada Division of Water Resources and U.S.G.S., p. 49, 1997.

¹⁶ Hydrographic Basin Abstract, Basin 6-85, December 31, 1997, official records in the office of the State Engineer.

existing groundwater rights in the Spanish Springs Valley Groundwater Basin exceed the perennial yield and the augmented yield of the groundwater basin. The State Engineer finds that Applications 55612, 57690, 57691, 59672 and 58913 proposed to divert an additional 4,008 afa from the Spanish Springs Groundwater Basin and that to grant any additional water rights in the groundwater basin in the quantities asked for under these applications would interfere with existing water rights and threaten to prove detrimental to the public interest.

V.

The State Engineer has previously denied applications to appropriate ground water for quasi-municipal purposes in the Spanish Springs Ground Water Basin.¹⁷

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.¹⁸

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where¹⁹:

- a. there is no unappropriated water at the proposed source, or
- b. the proposed use conflicts with existing rights, or
- c. the proposed use threatens to prove detrimental to the public interest.

III.

The State Engineer concludes that existing groundwater rights exceed the estimates of perennial yield or augmented yield in the Spanish Springs Valley Groundwater Basin. The State Engineer

¹⁷ State Engineer's Rulings Nos 2348, 2381 and 3872, official records in the office of the State Engineer.

¹⁸ NRS Chapters 533 and 534.

¹⁹ NRS Chapter 533.370(3).

concludes that to consider salvable secondary recharge from imported surface water in the management of the groundwater basin would not be good practice.

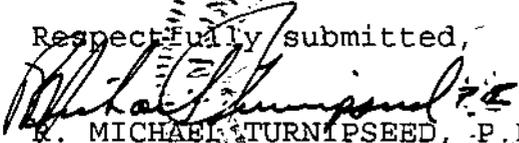
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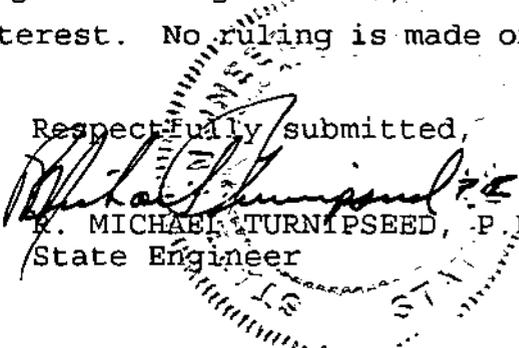
The State Engineer concludes that to approve additional appropriations totalling 4,008 afa as requested under Applications 55612, 57690, 57691, 57692 and 58913 would interfere with existing water rights and threaten to prove detrimental to the public interest.

RULING

Applications 55612, 57690, 57691, 57692 and 58913 are hereby denied on the grounds that the granting of these applications for the appropriation of additional ground water in a basin where recorded water rights exceed the perennial yield and the augmented yield would conflict with existing water rights and threaten to prove detrimental to the public interest. No ruling is made on the other protest issues.

Respectfully submitted,


E. MICHAEL TURNIPSEED, P.E.
State Engineer



RMT/CAB

Dated this 2nd day of
February, 1998