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

IN THE MATTER OF APPLICATION 75475)
FILED TO CHANGE THE POINT OF)
DIVERSION AND PLACE OF USE OF)
PUBLIC WATERS OF AN UNDERGROUND) **RULING**
SOURCE PREVIOUSLY APPROPRIATED)
UNDER PERMIT 47102, WITHIN THE) **#6184**
DAYTON VALLEY HYDROGRAPHIC)
BASIN (103), LYON COUNTY, NEVADA.)

GENERAL

I.

Application 75475 was filed on March 22, 2007, by Art Wilson to change the point of diversion and place of use of 1.0 cubic feet per second (cfs) of water previously appropriated under Permit 47102 from an underground source for mining, milling and domestic purposes. The proposed place of use is described as being located within the S½ N½, N½ NW¼, NE¼ NE¼ and a portion of the NW¼ NE¼ of Section 25, T.16N., R.20E., M.D.B.&M. The existing place of use is located within the N½ of Section 25, T.16N., R.20E., M.D.B.&M. excluding therefrom the NW¼ NE¼. The proposed point of diversion is described as being located within the NW¼ NE¼ of Section 25, T.16N., R.20E., M.D.B.&M. The existing point of diversion is described as being located within the NW¼ NW¼ of Section 25, T.16N., R.20E., M.D.B.&M.[1]

II.

Permit 47102 was approved June 26, 1986, for 1.0 cfs, but not to exceed 39.41 million gallons annually or approximately 120.94 acre-feet annually (afa).[2]

III.

Application 75475 was timely protested by the Pyramid Lake Paiute Tribe of Indians on the following grounds:

1. Granting the application would threaten to prove detrimental to the public interest in light of the over-appropriation of the groundwater available in the basin, and the resulting inability of the perennial yield to serve existing permits and commitments with groundwater, and in light of the obligations of

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[1] File No. 75475, official records in the Office of the State Engineer.
[2] File No. 47102, official records in the Office of the State Engineer.

the State Engineer pursuant to NRS Chapters 533, 534, and 278 to require that there be adequate plans to protect existing rights uses and commitments of groundwater, and to exercise all appropriate authority and discretion to control over-demand on the source and to protect both the public and other right holders of both surface and groundwater rights.

2. The base water rights sought for change by Application No. 75475 have their origin in Application No. 47102 which was filed in 1983 to appropriate groundwater. It appears that the Proof of Beneficial Use associated with the water rights currently sought for change by Application No. 75475, which proof was originally required to be filed on or before July 26, 1989, according to the permit terms under Application No. 47102, has not been made, and the appropriation has not been pursued with reasonable diligence and should be cancelled because the water has not been put to beneficial use within a reasonable time. Therefore, the base water rights sought for change by Application No. 75475 have been forfeited and/or abandoned, the application should be denied, and Permit No. 47102 should be cancelled.
3. Granting the application would threaten to prove detrimental to the Tribe, to the purposes for which the Pyramid Lake Indian Reservation was created, and to the public interest, by depleting flows in the Carson River and reducing inflows to Lahontan Reservoir, for the reasons stated above and because of the connection, both legal and physical, between groundwater and surface water in the basin, to the detriment of senior surface water right holders in the Newlands Project, which senior right holders are entitled to divert Truckee River water through the Truckee Canal to make up for insufficient Carson River flows which are the primary source to satisfy their rights, and which greater diversions of Truckee River water away from Pyramid Lake would operate to the detriment of the threatened and endangered species inhabiting Pyramid Lake and the lower Truckee River, and impair instream flows.
4. Granting the application may threaten to prove detrimental to the public interest in ways that are not yet known to this Protestant, but which may arise or first become known to this Protestant in the period between the date of filing of the Application and the hearing on the protested Application – by way of example Fernley's Application #57555 was filed on May 1, 1992, and the hearing was not held until February 6, 2006 – and in light of the position of the State Engineer that a specifically stated protest ground may not be amended regardless of the extensive passage of time between the date and the protest is required to be filed, and the date of the hearing on a protested application.
5. Granting the application would threaten to prove detrimental to the public interest.
6. This Protestant incorporates in this Protest by reference, as if fully set forth herein, every relevant protest ground set forth in any other Protest filed by any other Protestant regarding this application.

FINDINGS OF FACT

I.

Nevada Revised Statute (NRS) § 533.365(4) provides that it is within the State Engineer's discretion to determine whether a public administrative hearing is necessary to address the merits of a protest to an application to appropriate the public waters of Nevada. The State Engineer finds that in the case of protested Application 75475 there is sufficient information contained within the records of the Office of the State Engineer to gain a full understanding of the issues and a hearing on this matter is not required.

II.

Upon review of the map filed in support of Application 75475, the State Engineer finds that the change in place of use is only to expand the place of use to include an additional portion of the NW¼ NE¼ (approximately 5.0 acres) of Section 25, T.16N., R.20E., M.D.B.&M.

III.

Application 75475 proposes to change the entire diversion rate of base permit 47102, being 1.0 cfs; therefore, the State Engineer finds that the maximum duty that could be allowed to be changed under Application 75475 is 120.94 afa.

IV.

The protest asserts that the permitted and certificated groundwater rights in the Dayton Valley Hydrographic Basin far exceed the estimated perennial yield, and as such, the pumping of groundwater is or will be taking Carson River surface water that is claimed by senior water right holders in the Newlands Project; thus, the use of groundwater is impacting existing rights and Pyramid Lake. It should be noted that the Protestant is not a water right holder on the Carson River, does not have any existing decreed right to Carson River surface water, and is not the owner of record of any groundwater within the Dayton Valley Hydrographic Basin. Pyramid Lake is the terminus of the Truckee River.

A portion of the Dayton Valley Hydrographic Basin was designated in 1973, as being in need of additional administration.[3] The entire Dayton Valley Hydrographic Basin was

[3] State Engineer's Order No. 487, dated January 22, 1973, official records in the Office of the State Engineer.

designated in 1977, as a basin being in need of additional administration.[4] Both before and after the final designation order, the State Engineer denied several requests for large appropriations of water for quasi-municipal and irrigation purposes.[5] Over the years, various State Engineers have denied a total of 94 applications seeking to appropriate additional groundwater within the basin.[6]

The Office of the State Engineer spends a significant amount of time in the Dayton Valley area performing fieldwork. Pumpage inventories have been conducted since 2001 to monitor the quantity of water pumped in the Dayton Valley Hydrographic Basin. In conjunction with this field work, the State Engineer enforces permit compliance and investigates any improper use of groundwater. Also, water levels are measured at selected sites and field investigations are conducted throughout the year as needed. It should be noted that water level data collected by the staff from the Office of the State Engineer in Dayton Valley do not indicate any significant declining trends in water levels that would support the allegation that the basin is over-appropriated.[7]

Although the State Engineer does not believe he needs to analyze for over-appropriation on change applications, the State Engineer will address the Protestant's argument as to water appropriated and used in the Dayton Valley in order to demonstrate why the protest claim is unfounded. The Protestant alleges over-appropriation of the groundwater in the basin, and the resulting inability of the perennial yield to serve existing permits and commitments with groundwater. Simply comparing the amount of water approved under existing permits and the commitments from the groundwater basin to the perennial yield may make it appear that Dayton Valley is over-appropriated; however, that type of analysis does not present a full and complete analysis of whether or not a basin is over-appropriated The State Engineer finds consideration of the actual use of the water, including factors such as consumptive use, the limited use of

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[4] State Engineer's Order No. 688, dated August 23, 1977, official records in the Office of the State Engineer.

[5] State Engineer's Ruling Nos. 2173, 2220, 2226 and 2436, dated October 27, 1976, July 8, 1977, July 25, 1977, and December 18, 1978, respectively, official records in the Office of the State Engineer.

[6] Nevada Division of Water Resources' Water Rights Database, Hydrographic Abstract, Dayton Valley Hydrographic Basin (103), May 1, 2012, official records in the Office of the State Engineer.

[7] State of Nevada, Division of Water Resources Website, Water Use and Availability, Water Level Database for Dayton Valley (103).

supplemental water rights and dedication requirements will show that the use of water under the committed water rights in the basin is within the acceptable range of recharge.

Dayton Valley is a stream dominated basin, and it is difficult to effectively capture groundwater evapotranspiration (ET) by pumping. Therefore, the State Engineer has determined, in such basins, that the best measure of perennial yield is groundwater recharge, rather than groundwater ET discharge, as used in closed basins throughout the state. Groundwater recharge and the perennial yield for the Dayton Valley Hydrographic Basin were re-examined in State Engineer's Ruling No. 5823 and it was found that perennial yield in Dayton Valley is equal to annual recharge, which was estimated to range between 8,000 and 20,000 acre-feet.[8] The State Engineer finds that the estimated range of recharge of between 8,000 and 20,000 acre-feet is still applicable for Dayton Valley Hydrographic Basin.

V.

In State Engineer's Ruling No. 5823, an in-depth analysis of the groundwater resources showed the Dayton Valley Hydrographic Basin is not severely over-appropriated and is not over-pumped.[9] The following current analysis shows that the Dayton Valley Hydrographic Basin is not severely over-appropriated and is not over-pumped.

The 2011 Dayton Valley Pumpage Inventory indicates that 23,928 acre-feet of groundwater rights are committed in the Dayton Valley Hydrographic Basin. Of that amount, 7,288 acre-feet were classified as irrigation water rights. Analysis into the supplemental nature of these irrigation rights shows 1,976 acre-feet are non-supplemental irrigation water rights and 5,312 acre-feet are supplemental to surface-water rights. In State Engineer's Ruling No. 5823, it was determined that an average of 23 percent of the maximum duty of 4.0 acre-feet per acre annually of the gross duty of the irrigation rights that are supplemental to surface water would be pumped in any one year. Of that amount pumped, 82.5% would be consumptively used (based on 3.3 acre-feet per acre).[10] The State Engineer finds that while he is calculating an effective duty for these supplemental water rights that generally they will not be allowed to be transferred

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[8] State Engineer's Ruling No. 5823, March 18, 2008, official records in the Office of the State Engineer.

[9] State Engineer's Ruling No. 5823, March 18, 2008, official records in the Office of the State Engineer.

[10] State of Nevada, Division of Water Resources Website, Water Use and Availability, Evapotranspiration (ET) and Net Irrigation Requirements for Dayton Valley (103).

to become stand alone water rights because of their supplemental nature that ties them to a primary surface-water right. The State Engineer finds the consumptive use for an irrigation right using groundwater in the Dayton Valley Hydrographic Basin is a maximum of 3.3 acre-feet per acre of land irrigated.[10]

VI.

The State Engineer finds that, using the pumpage data for supplemental groundwater rights in Dayton Valley, the average amount of supplemental groundwater used was 23 percent of the maximum duty of 4.0 acre-feet per acre annually. This analysis results in a supplemental use in Dayton Valley of 1,222 acre-feet (5,312 x .23). The consumptive use portion of the supplemental water rights is 1,008 afa, estimated at 3.3 acre-feet/acre as described in Finding of Fact V.

VII.

1,578 afa of the committed groundwater resources of the basin are for mining and milling or industrial uses,[11] of which 1,043 acre-feet were issued as a preferred use after the basin was designated in 1973.[12] The State Engineer finds that since these post-designation mining and milling and industrial rights are considered temporary in nature and the right to change them to other uses is usually denied, these temporary permits should also be deducted from the committed rights in the basin. The State Engineer finds there are 1,578 acre-feet of combined mining/milling and industrial uses of which 1,043 acre-feet are temporary in nature and will be deducted from the committed rights in the basin; therefore, 535 acre-feet can be considered non-temporary in nature and are included in the committed resource.

VIII.

Prior to 2001, groundwater rights approved for municipal or quasi-municipal uses were dedicated at a rate of 1.12 acre-feet per unit. The 2006 Pumpage Inventory indicates that of the 13,478 acre-feet permitted for municipal use only 4,166 acre-feet was pumped during the 2006 water year. In State Engineer's Ruling No. 5823, it was determined that approximately 50% of the 1.12 acre-feet/home dedication amount would be required to serve those units established

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[11] 2011 Dayton Valley Groundwater Pumpage Inventory.
[12] State Engineer's Order No. 487, dated January 22, 1973, official records in the Office of the State Engineer.

under the dedication allocation of 1.12 acre-feet per unit.[13] There are currently 14,827 acre-feet of combined municipal and quasi-municipal rights in Dayton Valley. It is estimated that approximately 8,300 acre-feet are currently dedicated in the basin under the dedication allocation of 1.12 acre-feet per unit.[14] This amount of dedicated water is the same as described in State Engineer's Ruling No. 5823. Based on the approximate maximum amount that may be delivered, approximately 50% of the 1.12 acre-feet home dedication amount, results in a consumptive use of 4,150 acre-feet. Approximately 1,900 acre-feet are permitted and may pumped by Carson City from groundwater wells within the Dayton Valley Hydrographic Basin and are used throughout their system in the Eagle Valley Hydrographic Basin; therefore, their use is entirely consumptive. Of the remaining, 4,627 acre-feet it is estimated that the consumptive portion will be 80% of the water right, or 3,701 acre-feet on the basis of present dedication policies. The State Engineer finds that of the 14,827 acre-feet of municipal and quasi-municipal water rights, the amount that could be consumptively used, assuming full use of the water would be 9,751 acre-feet.

IX.

The State Engineer takes into consideration pumpage data that indicates an overall decrease in groundwater pumpage in Dayton Valley. The total pumpage in Dayton Valley for the water years of 2007, 2008, 2009, 2010 and 2011 is reported to be 10,246 acre-feet, 9,625 acre-feet, 8,768 acre-feet, 6,440 acre-feet, and 6,197 acre-feet respectively.[15] The use of water for irrigation for the water years of 2007, 2008, 2009, 2010 and 2011 is 3,664 acre-feet, 3,168 acre-feet, 2,410 acre-feet, 832 acre-feet, and 413 acre-feet respectively. The State Engineer finds, as discussed below, that based on current information the amount of water that is expected to be consumed assuming full use of the total appropriations utilizing the consumptive use analysis in the Dayton Valley Hydrographic Basin is within the 8,000 to 20,000 acre-feet annual recharge calculations, and as such the basin is not over-committed or over-pumped.

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[13] State Engineer's Ruling No. 5823, March 18, 2008, official records in the Office of the State Engineer.

[14] State Engineer's Ruling No. 5823, March 18, 2008, official records in the Office of the State Engineer.

[15] 2007, 2008, 2009, 2010 and 2011 Dayton Valley Groundwater Pumpage Inventories.

X.

Using the above findings, the State Engineer finds the total consumptive use of groundwater under the permitted rights in the Dayton Valley Hydrographic Basin is as follows:

Table 1. Groundwater Consumptive Use Estimate

Manner of Use	Permits[1] (acre-feet)	Consumptive Use (acre-feet)
Irrigation[1]	7,288	NA
Non-supplemental irrigation	1,976	1,630[2]
Supplemental irrigation	5,312[3]	1008[4]
Mun/QM[1,5]	14,827	9,751[5]
MM/Ind[1]	1,578	535[6]
Stock/Rec/Env[1]	20	20
Com[1]	197	197
Domestic (rights)	18	18
Domestic (wells)	NA	1,513[7]
Total water rights	23,928	
Total consumptive use		**14,672**

1. 2011 Dayton Valley Groundwater Pumpage Inventory.
2. Equal to total irrigation less supplemental irrigation, 82.5% consumptive.
3. Estimated by State Engineer.
4. Equal to 23% of gross duty, 82.5% consumptive.
5. Consumptive portion as described in text.
6. Consumptive portion equal to 100% of non-temporary permits.
7. 2011 Dayton Valley Pumpage Report 1,513 wells @ 1.0 acre-feet/well.

XI.

The State Engineer finds that the Nevada Division of Water Resources has and continues to perform its obligations in regards to management of the water resources of the Dayton Valley Hydrographic Basin. The State Engineer further finds that the Dayton Valley Hydrographic Basin is not over-appropriated and a review of the data collected by the Division, such as, pumpage inventories and water levels also supports this finding.

XII.

The State Engineer is prohibited by law from granting a permit under a change application if the proposed use or change conflicts with protectable interests in existing domestic wells as set forth in NRS § 533.024.[16] Also, the State Engineer shall include as a condition of the permit that pumping water pursuant to the permit may be limited or prohibited to prevent any unreasonable adverse effects on an existing domestic well located within 2,500 feet of the well, unless the holder of the permit and the owner of the domestic well have agreed to alternative measures that mitigate those adverse effects.[17] NRS § 534.024 applies only to uses of water for municipal, quasi-municipal or industrial uses. Application 75475 is a change of existing Permit 47102, approved for mining, milling and domestic purposes; therefore, this statute does not apply to Application 75475. The State Engineer finds a review of the Well Driller's Reports (Well Logs) shows that there are no domestic wells within 2,500 feet of the proposed point of diversion described under Application 75475.[18]

XIII.

Application 75475 is not requesting a new appropriation of water; rather, the application is seeking to change only the point of diversion and place of use of an existing permitted water right. The State Engineer finds that protesting the change of an existing right is not the proper vehicle in which to address the issue of over appropriation in a particular basin. The State Engineer finds that if the Protestant had any issue with the initial granting of these groundwater rights, it should have protested when the notice of the original, new appropriation was made and appealed that granting of the original base right permit at that time.

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[16] NRS § 533.370(2).
[17] NRS § 534.370(3b).
[18] State of Nevada, Division of Water Resources Website, Programs, Well Log Search.

XIV.

Application 75475 was protested on the grounds that the base water right sought for change by Application 75475 has been forfeited and/or abandoned, the application should be denied, and Permit 47102 should be cancelled. A review of the base right, Permit File No. 47102, shows that the water right is currently a valid permit and in good standing at this time.[2] Nevada Revised Statute § 533.410 provides a process by which a permitee can apply for an extension of time for filing proof of beneficial use. Permit 47102 has been kept in good standing pursuant to this process. The doctrine of forfeiture found in NRS § 534.090 does not apply to a permit, but only a certificated water right; therefore, the forfeiture claim is without merit.

Abandonment is a question of fact to be determined from all the surrounding circumstances and an intent to forsake the water right is a necessary element. In the case of Permit 47102, the Applicant, has kept the base right in good standing and has filed a change application to move the point of diversion approximately 3/8 of a mile to the east northeast of its current location to the actual physical location of the well drilled under Permit 47102.[19] The State Engineer finds there is no evidence of an intent to abandon the water right. The State Engineer finds that the water sought for change under Application 75475, represented by Permit 47102, is currently in good standing and is not subject to cancellation, abandonment or forfeiture.

XV.

The protest alleges that granting the application would threaten to prove detrimental to the public interest in ways that are not yet known to it, but which may arise before the application is actually considered by the State Engineer. The State Engineer finds that NRS § 533.365 provides that a protest must set forth with reasonable certainty the ground of the protest, which shall be verified by the affidavit of the protestant, his agent or attorney and this protest issue does not set forth its ground with reasonable certainty and is thereby dismissed.

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[19] File No. 47102, official records in the Office of the State Engineer, letter from the Office of the State Engineer dated March 5, 2007, to the Applicant.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.[20]

II.

The State Engineer is prohibited by law from granting a permit under a change application that requests to appropriate the public waters where:[21]

A. there is no unappropriated water at the proposed source;
B. the proposed use or change conflicts with existing rights;
C. the proposed use or change conflicts with protectible interests in existing domestic wells as set forth in NRS § 533.024; or
D. the proposed use or change threatens to prove detrimental to the public interest.

III.

Application 75475 seeks to move the point of diversion approximately 3/8 of a mile to the east northeast of its current location. The existing water right is a permitted underground water right in good standing and the only change sought is in the point of diversion and a slight expansion of the place of use to include approximately 5 acres of additional land within a portion of the NW¼ NE¼ of Section 25, T.16N., R.20E., M.D.B.&M. All other elements of the existing water right will remain unchanged. The State Engineer concludes that the protest issues raised may be overruled.

IV.

The State Engineer concludes that change Application 75475 will not conflict with existing rights and protectible interests in existing domestic wells, and will not threaten to prove detrimental to the public interest.

V.

The State Engineer concludes that the water sought for change is in good standing, is not subject to forfeiture, abandonment, or cancellation.

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[20] NRS Chapters 533 and 534.
[21] NRS § 533.370(2).

VI.

The State Engineer concludes that the Dayton Valley Hydrographic Basin is not over-appropriated and is not over-pumped and that the water sought for change under Application 75475 will have no additional effect on the groundwater resource.

RULING

The protest to Application 75475 is hereby overruled and Application 75475 is approved subject to:

1. Existing water rights; and
2. Payment of the statutory permit fee.

Respectfully submitted,

JASON KING, P.E.
State Engineer

Dated this 18th day of June, 2012.