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

IN THE MATTER OF APPLICATIONS 72868-72896, 73351-73357, 73743-73749, 73919-73929, 74354-74357, 74957-74976, INCLUSIVE, FILED TO APPROPRIATE THE UNDERGROUND WATERS OF THE GRANITE SPRINGS VALLEY HYDROGRAPHIC BASIN (078), PERSHING AND CHURCHILL COUNTIES, NEVADA.	)	**RULING** **#5782**

GENERAL

I.

Applications 72868 – 72896 were filed on May 27, 2005, by Aqua Trac, LLC to appropriate 52.5 cubic feet per second, not to exceed 38,000 acre-feet annually (afa) under the combined applications, of the underground water of the Granite Springs Valley Hydrographic Basin for quasi-municipal purposes within the Hydrographic Basins identified as the Fernley Area (076), Tracy Segment (083), Warm Springs Valley (084), Spanish Springs Valley (085), and Truckee Meadows (087).[1]

Pershing County protested Applications 72868-72893 and 72896; the United States Department of Interior, Bureau of Land Management protested Applications 72868-72896; C-Punch Ranch protested Applications 72868 through 72896; ATI Systems International protested Applications 72869-72877 and 72855-72893, and Churchill County protested Applications 72868-72895.

II.

Applications 73351 – 73357 were filed on October 18, 2005, by Aqua Trac, LLC to appropriate 35 cubic feet per second, not to exceed 38,000 afa under the combined applications, of the underground water of the Granite Springs Valley Hydrographic Basin for quasi-municipal purposes within the Hydrographic Basins identified as the Fernley Area, Tracy Segment, Warm Springs Valley, Spanish Springs Valley, and Truckee Meadows.

Frank Lipera protested Applications 73351 and 73353 and Churchill County protested Applications 73351 through 73357.

---

[1] A complete listing of the applications is found as Attachment 1 to this ruling.

III.

Applications 73743 - 73749 were filed on January 26, 2006, by Aqua Trac, LLC to appropriate 68.3 cubic feet per second, not to exceed 88,000 afa under all the applications it has filed in the Granite Springs Valley Hydrographic Basin, of the underground water of the Granite Springs Hydrographic Basin for quasi-municipal purposes within the Hydrographic Basins identified as the Fernley Area, Tracy Segment, Warm Springs Valley, Spanish Springs Valley, and Truckee Meadows.

C-Punch Ranch, ATI Systems International, Churchill County, and the United States Department of Interior, Bureau of Land Management protested Applications 73743-73749.

IV.

Applications 73919 - 73929 were filed on March 1, 2006, by Aqua Trac, LLC to appropriate 107 cubic feet per second, not to exceed 88,000 afa under all the applications it has filed in Granite Springs Valley, of the underground water of the Granite Springs Valley Hydrographic Basin for quasi-municipal purposes within the Hydrographic Basins identified as the Fernley Area, Tracy Segment, Warm Springs Valley, Spanish Springs Valley, and Truckee Meadows.

Churchill County, Pershing County, C-Punch Ranch, ATI Systems International, and the United States Department of Interior, Bureau of Land Management protested Applications 73919 through 73929.

V.

Applications 74354 - 74357 were filed on June 6, 2006, by Aqua Trac, LLC to appropriate 39.6 cubic feet per second, not to exceed 88,000 afa under all the applications it has filed in Granite Springs Valley, of the underground water of the Granite Springs Valley Hydrographic Basin for quasi-municipal purposes within the Hydrographic Basins identified as the Fernley Area, Tracy Segment, Warm Springs Valley, Spanish Springs Valley, and Truckee Meadows.

Churchill County and the United States Department of Interior, Bureau of Land Management protested Applications 74354 through 74357.

VI.

Applications 74957 - 74976 were filed on October 26, 2006, by Aqua Trac, LLC to appropriate 200 cubic feet per second, not to exceed 130,000 afa under all the applications it has filed in Granite Springs Valley, of the underground water of the Granite Springs Valley Hydrographic Basin for quasi-municipal purposes within the Hydrographic Basins identified as Lovelock Valley (073), Lovelock Valley – Oreana Subarea (073A), White Plains (074), Brady Hot Springs Area (075), Fernley Area (076), Fireball Valley (077), Granite Springs Valley (078), Kumiva Valley (079), Winnemucca Lake Valley (080), Pyramid Lake Valley (081), Dodge Flat (082), Tracy Segment (083), Warm Springs Valley (084), Spanish Springs Valley (085), Sun Valley (086), Truckee Meadows (087), Pleasant Valley (088), Washoe Valley (089), Lake Tahoe Basin (090), Truckee Canyon Segment (091), Lemmon Valley (092), Antelope Valley (093), Bedell Flat (094), Dry Valley (095), Newcomb Lake Valley (096), Red Rock Valley (099), Cold Spring Valley (100), Carson Desert (101), Churchill Valley (102), Dayton Valley (103), Eagle Valley (104), Carson Valley (105), Antelope Valley (106), Smith Valley (107), and Mason Valley (108)

Churchill County, Pershing County, C-Punch Ranch and ATI Systems International protested Applications 74957 through 74976.

VII.

The applications were protested on the following grounds as summarized:[2]

1. There is no unappropriated water in the basin when existing rights and pending senior applications are considered.
2. The amount requested exceeds the perennial yield of the ground-water basin and could possibly cause depletion in other basins. The appropriation could impact surface-water sources, including claims by the BLM of public water reserves.
3. The Applicant has failed to justify the need to export water as required by NRS § 533.370(6).
4. The proposed diversion and export of water from the basin is not environmentally sound in violation of NRS § 533.370(6). The proposed use of the water will cause the soil to subside, causing cracks in foundations and roadbeds.

[2] Exhibit Nos. 3, 4, 5, 8, 20, 37, 38, 46, 47-53, 61-72, 84, 85, 90-93.

5. The extraction of large volumes of ground water has the potential to affect wetlands, springs, seeps, surface-water flows, artesian wells, wells, domestic wells, riparian and native vegetation, water quality, and flora and fauna within the hydrographic basin. If interbasin flows exist, they could also be impacted. In the case of springs or seeps, the Applicant has failed to ensure that wildlife that customarily utilizes the water will have continued access to it in violation of NRS § 533.367. The water transfer will have a negative impact on flows to wetlands and will adversely affect water quality and quantity.
6. The export of the water is not an appropriate long-term use of the water and will unduly limited the future growth and development of the basin of origin in violation of NRS § 533.370. These applications will limit the future growth and development to the detriment of the rural counties and ground-water basins to the benefit of the urbanizing areas which are experiencing uncontrolled growth in violation of NRS § 533.370(6)(d). The requested allocation will negatively impact future use of land in the basin of origin.
7. The Applicant lacks the financial capability for developing and transporting the water and putting the same to beneficial use.
8. Importation of ground water to support uncontrolled and irresponsible growth in urbanizing areas will create many unknown impacts to the hydrologic resources, socioeconomics and environment.
9. The Applicant does not own any land within the Granite Springs Valley and would have to acquire significant rights on private and public land to gain access to and transport the water and has not demonstrated it is feasible to obtain said easements. The Applicant has not received permission from the BLM to conduct any activity on public land.
10. The Applicant does not have existing infrastructure to transport the water.
11. The appropriation would impact existing rights and other water resources within the basin, including rights held by the BLM. C-Punch Ranch, Inc. and ATI Systems International, Inc. who own land and water rights in the basin also protested many of the applications with specific references to their existing rights being made in the protests to Applications 73743-73749 and 73919-73929.

12. The water would be transported across county lines and would negatively impact Pershing County and not satisfy the requirements of the Nevada Revised Statutes for transfers outside the county.
13. The requested allocation would be against the public interest of the citizens of Pershing County.
14. The Applicant has not provided any evidence of beneficial use of the water.
15. The applications are speculative in nature as they do not cite a defined ultimate use or project and accordingly are not in the public interest. Approval of the applications would be detrimental to the public interest inasmuch as it may allow the Applicant to "lock up" vital water resources for speculative use sometime in the distant future beyond current planning horizons. The applications violate the anti-speculation doctrine found in NRS § 533.370(1)(c)(2) in that the Applicant does not intend to put the water to beneficial use for its own benefit and has no contractual or agency relationship with a person, business association, or governmental body that will place the water to beneficial use. *Bacher v. State Engineer*, 122 Nev. Adv. Op. No 95 (November 22, 2006).
16. The requirements for interbasin transfers found in NRS§ 533.370(6) must be fulfilled.
17. The Applicant does not own or control the proposed places of use.
18. The export of the water will lower the water table causing damage to Mr. Lipera's domestic well located in Section 9, T.24N., R.26E., M.D.B.&M.[3]

VIII.

After all parties of interest were duly noticed by certified mail, an administrative hearing was held with regard to the protested applications on March 19 - 22, 2007, at Carson City, Nevada, before representatives of the Office of the State Engineer.[4]

---

[3] Exhibit No. 37.

[4] Public Administrative Hearing before the Office of the State Engineer, March 19-22, 2007, official records in the Office of the State Engineer. Herein, the exhibits and transcripts will be referred to solely by the exhibit number and transcript page.

FINDINGS OF FACT

I.

During the administrative hearing, the Applicant objected to testimony and evidence presented by Mr. Bell and Mr. Berger, witnesses for the United States Department of Interior, Bureau of Land Management (BLM), on the grounds that the evidence was not presented in the ordered initial evidentiary exchange, but rather was presented for the first time in the second exchange of evidence, which was to be confined to rebuttal evidence.[5] In the initial exchange, the BLM indicated that it would review the Applicant's evidence and then provide any analysis it deemed appropriate in support of its protest during the second evidentiary exchange. The Applicant argued that clearly the intent of the ordered exchange was that everyone has the opportunity to review the other side's evidence and have a chance to respond to that evidence in the second exchange. The BLM argued that its main concern is subsidence and it did not have sufficient information because it was not clear what the intent of the Applicant really was with regards to its proposed project and that the testimony and evidence it submitted was rebuttal in nature.

The State Engineer allowed admission of the BLM's evidence; however, he also left the hearing record open and provided the Applicant an opportunity to respond to the BLM's evidence, that being the reports of Mr. Berger and Mr. Bell, which were a review of the Applicant's ground-water budget and report on the potential for subsidence associated with pumping ground water in Granite Springs Valley.[6] On April 23, 2007, the Applicant filed a binder of documents titled Rebuttal to Report of Protestants that includes the following documents:

1. A review of County master plans (Exhibit No. 251)
2. Churchill County's Master Plan (Exhibit No. 252)
3. Pershing County's Master Plan (Exhibit No. 253)
4. Rebuttal to Mr. Berger's Report of 3/6/07 (Exhibit No. 254)
5. Rebuttal to Report of Protestant BLM (Exhibit No. 255)
6. Plate 1B – Aeromagnetic Data with proposed fault liners (Exhibit No. 256)

---

[5] Transcript, p. 16.
[6] Exhibit Nos. 204 and 205.

7. Site of Geologic Mapping (Exhibit No. 257)
8. Technical Memorandum dated April 19, 2007(Exhibit No. 258)

In response to the Applicant's post-hearing evidentiary filing, Protestants Churchill County, Pershing County, ATI Systems International, Inc., and C-Punch Ranch, Inc. filed a Joint Motion to Strike Rebuttal Evidence and Reply to Applicant's Post-Hearing Brief.[7] The State Engineer finds that he did not provide for the filing of reply briefs to the post-hearing briefs allowed and the reply will not be considered. Protestants first object to Exhibit Nos. 251, 252 and 253, which are a commentary on county master plans, Churchill County's Master Plan and Pershing County's Master Plan, indicating this is new evidence which they have not had an opportunity on which to comment.

At the administrative hearing, the State Engineer gave the Applicant a period of time to submit notarized statements of witnesses indentified in their pre-hearing filing that went to the need for the water or public interest. No such statements were filed. Additionally, the State Engineer indicated to the Applicant that it had not provided information on the statutory criteria found in NRS § 533.370(6)(d), which requires an analysis of whether the proposed action is an appropriate long-term use that will not unduly limit the future growth and development in the basin from which the water is exported.[8] In response to the motion to strike, the Applicant argues that the purpose of Exhibit Nos. 251, 252 and 253 is to address the statutory criterion of whether the proposed action is an appropriate long-term use that will not unduly limit the future growth and development in the basin from which the water is exported and to show that there are no plans by either Churchill County or Pershing County for any development in Granite Springs Valley area, except for an industrial area located at the interchange of U.S. 95 and Interstate 80 and the development of approximately 3,000 acres at the Hot Springs/Nightingale interchange for industrial purposes, areas the Applicant argues are within the boundaries of the Applicant's proposed service area. The State Engineer finds Exhibit Nos. 251, 252 and 253 were filed in response to the State Engineer's request for information and are not rebuttal evidence even though they were placed in a notebook so

[7] Exhibit No. 262.
[8] Transcript, pp. 828-830.

titled. They were provided in response to the State Engineer. However, Exhibit No. 251 is obviously not a public record, but rather is more akin to testimony and is something specifically prepared by the Applicant and no foundation is provided as to this unsigned document. The motion to strike is granted as to Exhibit No. 251 and denied as to Exhibit Nos. 252 and 253. The State Engineer finds the Protestants did not provide any evidence on this statutory criterion and any comment they had on the long-term growth and development of the Granite Springs Valley Hydrographic Basin could have been provided at the time of the hearing.

As to Exhibit No. 254, Rebuttal to Mr. Berger's Report of 3/6/07, the Protestants argue that "the document affords the State Engineer no appreciation for the creation of the document nor for its creator. It is without foundation. It is not signed. We cannot say that it was the creation of any person tendered as an expert in hydrology, geohydrology, or any other specialty for which an expert witness was qualified to participate in the proceedings."[9] The Applicant responds indicating it is interesting these Protestants are objecting to the evidence as it is not these Protestants' evidence to which it is responding, and the BLM, which did present the evidence, has not objected. The State Engineer also is concerned with a rebuttal report that provides no foundation for its preparation and is obviously a form of testimony by an expert witness without any indication of who is the creator/author; therefore, the motion to strike is granted.

Protestants move to strike Exhibit No. 255 on the grounds that not one of the persons who signed the document was qualified to rebut Mr. Berger's testimony and the rebuttal is beyond the scope of direct testimony and without proper foundation. The State Engineer agrees and the portion of Exhibit No. 255 that is rebuttal to Mr. Berger's testimony is not admitted; however, as to the portion related to rebuttal to Mr. Bell's testimony, the motion is denied.

Protestants move to strike Exhibit Nos. 256 and 257 on the grounds that they present new evidence that is not rebuttal, but rather serves to augment the record and which implicates testimony of witnesses to which they were not given permission to provide additional rebuttal evidence. The State Engineer agrees and Exhibit Nos. 256 and 257 are not admitted.

---

[9] Exhibit No. 262.

Protestants move to strike Exhibit No. 258 on the grounds that it is a memorandum presented by people who were not identified on a witness list and went far beyond reviewing the evidence presented by the BLM. Furthermore, it rebutted evidence presented by Protestants other than the BLM and is actually a peer review of all the evidence presented at the hearing. The State Engineer agrees and Exhibit No. 258 is not admitted.

II.

Protestants allege that there is no unappropriated water in the basin when existing rights and pending applications senior to those under review here are considered and that the amount requested exceeds the perennial yield of the ground-water basin and could possibly cause depletion in other basins.

In determining the amount of ground water available for appropriation in a given hydrographic basin, the State Engineer evaluates available hydrologic studies to provide relevant data to determine the perennial yield for a basin. The perennial yield of a ground-water reservoir may be defined as the maximum amount of ground water that can be salvaged each year over the long term without depleting the ground-water reservoir. Perennial yield is ultimately limited to the maximum amount of natural discharge that can be salvaged for beneficial use. The perennial yield cannot be more than the natural recharge to a ground-water basin and in some cases is less. If ground-water withdrawals exceed the perennial yield, ground-water levels will continually decline and steady-state conditions may not be achieved, a situation commonly referred to as ground-water mining. Additionally, withdrawals of ground water in excess of the perennial yield may contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased pumping lifts, and land subsidence.[10]

In most of Nevada's hydrographic basins, ground water is discharged primarily through evapotranspiration (ET). In closed hydrographic basins, the perennial yield is approximately equal to the estimated ground-water ET, the assumption being that ground water lost to natural ET can be captured by wells and placed to beneficial use. However, many of the basins throughout the state also discharge ground water via subsurface flow to adjacent basins. In basins with substantial subsurface outflow, the perennial yield may

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

include a portion of that outflow; however, the amount of that subsurface discharge that can be readily captured by wells is highly variable and uncertain. Perennial yields for basins with no ground-water ET, that is, ground water is discharged solely by subsurface flow, has generally been established as equal to one-half of the outflow. In hydrographic basins with both ground-water ET and subsurface outflow, the perennial yield has most often been determined to be the sum of the ET and one-half of the subsurface outflow. However, there are many exceptions to this general rule-of-thumb based on considerations of local hydrology, as well as prior rights appropriated in other basins within the same ground-water flow system.

There are many techniques available to estimate the total amount of ground-water recharge and ET discharge and estimates often vary considerably. The State Engineer has historically used water budget and perennial yield estimates from the reconnaissance series reports that were completed during the 1950's, 1960's and 1970's. Hydrographic basin water budgets for many basins have been updated by USGS and private-party studies in the intervening years, and in many cases the State Engineer has updated the perennial yield. Reconnaissance Report 55 authored by Jim Harrill originally established the perennial yield of Granite Springs Valley.[11] Using the 1964 Hardman precipitation map,[12] which estimated 350,000 afa of precipitation, and the standard Maxey-Eakin recharge coefficients,[13] Harrill estimated 3,500 acre-feet of ground-water recharge per year in the Granite Springs Valley Hydrographic Basin. In addition to in-basin recharge, Harrill also estimated the full 1,000 acre-feet of ground-water recharge from the adjacent Kumiva Valley Hydrographic Basin discharges via subsurface flow to Granite Springs Valley. Ground-water ET in Granite Springs Valley was estimated to be 4,400 acre-feet per year. The perennial yield was estimated to be 4,500 acre-feet, the approximate amount of the basin's ground-water ET. Harrill did not recognize measureable subsurface discharge from the Granite Springs Valley Hydrographic Basin. The report

---

[11] Harrill, J.R., Water-Resources Appraisal of the Granite Springs Valley Area, Pershing, Churchill, and Lyon Counties, Nevada, Water Resources - Reconnaissance Series Report 55, United States Geological Survey and Nevada Division of Water Resources (1970).

[12] Hardman, G., Nevada precipitation map, adapted from map prepared by George Hardman and others, 1936; Nevada University Agricultural Experimental Station Bulletin 185 (1965).

[13] Eakin, T., et al., Contributions to the Hydrology of Eastern Nevada: Nevada State Engineer, Water Resources Bulletin No. 12, United States Geological Survey and Office of the State Engineer, p. 80 (1951).

also estimated perennial yield for Kumiva Valley to be 500 afa, an amount equal to one half of the subsurface outflow. Those reconnaissance estimates of the perennial yield are currently accepted by the State Engineer as the limit of the ground water available for appropriation in the Granite Springs Valley and Kumiva Valley Hydrographic Areas. It is worth noting that the combined perennial yield in the reconnaissance report for the two basins is greater than both the total ground-water ET and the recharge.

The Applicant completed an independent analysis of the Granite Springs Valley water budget and offered a revised estimate of the perennial yield. Ground-water recharge was estimated with the "Nichols" method. This method was presented by William Nichols in USGS Professional Paper 1628.[14] The Nichols method uses a combination of the 1961 to 1990 PRISM precipitation map[15] with recharge coefficients calibrated to his estimates of ground-water discharge. The basins Nichols used for his calibration are located in eastern Nevada and most of those basins are within what is generally thought of as the carbonate-rock aquifer. The Applicant's estimate of average annual precipitation and recharge is 527,000 and 30,500 acre feet, respectively.[16] The Applicant also estimated recharge in adjacent Kumiva Valley to be 11,300 afa, of which 7,500 afa is proposed to flow through the subsurface into Granite Springs Valley. Therefore, they estimate total inflow into Granite Springs Valley to be 38,000 afa (30,500 af + 7,500 af).[17] They also estimated recharge in the basins by using the Maxey-Eakin recharge coefficients in conjunction with the 1961 to 1990 PRISM precipitation map, and computed recharge of 25,000 and 11,000 afa in Granite Springs Valley and Kumiva Valley, respectively.[18] The Applicant did not present any evidence to estimate ground-water ET from Granite Springs Valley.[19] The Applicant hypothesized that most of the ground-water discharge occurs by subsurface flow to Winnemucca Lake Basin to the west of Granite Springs Valley.[20] Evidence and testimony in support of their hypothesis

---

[14] Nichols, W. D., Regional Ground-Water Evapotranspiration and Ground-Water Budgets, Great Basin, Nevada, United States Geological Survey Professional Paper 1628 (2000).
[15] Daly, C., et al., 1994, A statistical-topographic model for mapping climatological precipitation over mountainous terrain: Journal of Applied Meteorology. V.33, pp. 140-158.
[16] Exhibit No. 169, pp. 71 and 72.
[17] Exhibit No. 169, pp. 72-74.
[18] *Id.*, p. 72.
[19] Transcript, p. 290.
[20] Exhibit No. 152.

of ground-water discharge to the west included structural (fault) studies by their geologist, Mr. Martin. Mr. Martin provided evidence for the presence of faults in the granitic bedrock that would provide a pathway for water flow from Granite Springs Valley, through the Shawave and Nightingale mountains, to Winnemucca Lake Valley, a distance of approximately 20 miles.[21] The potential for flow was described by witness Swanson, who noted a head difference of 100 feet between the valley floors.[22] Ground-water outflow to Winnemucca Lake Valley would then discharge from the playa and the phreatophytic vegetation via ET.

Protestants C-Punch Ranch and Churchill County presented combined testimony in the form of a panel. They estimated precipitation using a linear regression between altitude and measured average annual precipitation from many locations of data throughout the general Granite Springs Valley area in western Nevada. Their estimates are 400,000 and 140,000 afa of precipitation in Granite Springs and Kumiva Valleys, respectively. They did not estimate recharge directly, but assume a closed hydrographic system for Kumiva and Granite Springs Valleys, with ground water in Kumiva Valley being discharged by subsurface flow to Granite Springs Valley. Total recharge was assumed to equal ground-water ET. They estimate ground-water ET in Granite Springs Valley to be approximately 6,000 afa. No subsurface discharge to Winnemucca Lake Valley was recognized.[23]

There was considerable testimony and evidence presented concerning the average annual precipitation in Granite Springs Valley and vicinity. Average annual estimates of precipitation ranged from 350,000 acre feet with the Hardman map to 527,000 acre feet with PRISM. While it is generally accepted that more precipitation will result in more ground-water recharge, the argument that the Hardman precipitation map underestimates average annual precipitation therefore estimates of recharge using the Maxey-Eakin recharge coefficients and the Hardman precipitation map are low - does not necessarily follow. The method was calibrated to estimates of ground-water ET, and if the ET estimates are correct, then the recharge estimates would be correct. As stated above, the State Engineer prefers to use estimates of ground-water discharge to determine the

[21] Testimony of W. Martin and Exhibit No. 170.
[22] Exhibit No. 152.
[23] Exhibit No. 222.

perennial yield of a basin. Therefore, the State Engineer finds that revised estimates of precipitation alone are not sufficient for justifying higher ground-water recharge estimates and are not applicable in revising the perennial yield of a basin.

There is a large disparity between estimates of ground-water recharge of the Harrill report, the Applicant, and the Protestants. The Applicant used two methods: the Nichols method and a derivative of the Maxey-Eakin method. Their use of the Nichols method was questioned by the Protestants, primarily due to their use of a June 1998 PRISM precipitation map rather than the May 1997 version, which was the version Nichols used to derive the recharge coefficients.[24] It was not clarified at the hearing what the actual difference was between the PRISM map used by the Applicant and the May 1997 version of the map, or what effect those differences might have on the recharge computation for Granite Springs Valley. However, the State Engineer has been hesitant to revise perennial yield estimates for any hydrographic basin on the basis of Nichols' recharge estimates. This hesitation stems from the fact that Nichols recharge coefficients were calibrated to estimated ground-water discharge, where ground-water ET was estimated from an empirical relationship between plant cover and ground-water ET with source data almost entirely from Ash Meadows, Nevada, and Owens Valley, California. Both of these sites are likely to have greater ET rates for the given plant cover than in northern or central Nevada, and the method may significantly overestimate ground-water recharge by over-estimating ground-water ET.

The use of the Maxey-Eakin recharge coefficients with any of the PRISM maps has been addressed in several recent rulings and was addressed in questioning at the hearing. In short, the State Engineer finds that the use of the Maxey-Eakin recharge coefficients with any precipitation map other than the Hardman map is inappropriate, because the recharge coefficients were computed by trial and error using the Hardman map to balance recharge with discharge. To use any other precipitation map would require recalibration of the coefficients. The State Engineer finds that recharge estimates alone are rarely sufficient to re-estimate a basin's perennial yield, particularly when there are other, more reliable methods available such as estimation of ground-water discharge.

---

[24] Transcript, pp. 537 and 538.

The State Engineer finds the Applicant's estimates of ground-water recharge lack adequate technical support and therefore are discounted.

III.

Ground-water discharge was estimated by the Protestants to be approximately 6,000 afa from the Granite Springs Valley playa area. Their estimate is based on a ET rates similar to those applied in a USGS publication for the Carson Desert.[25] They estimated an average ground-water ET rate for the entire phreatophyte assemblage of 0.2 feet per year, somewhat less than the USGS estimate for Carson Desert of 0.3 feet per year on the basis of less dense vegetation and lower ground-water levels.[26] ET rates for the playa were estimated at 0.1 to 0.15 feet per year, which is somewhat lower than the rate estimated for the Carson Desert of 0.1 to 0.3 feet per year. The Applicant did not estimate ground-water ET in Granite Springs Valley, but they did not dispute the ET estimate of 6,000 afa proffered by the Protestants. The State Engineer finds that, while the Protestants' estimate of ground-water ET in the Granite Springs Valley Hydrographic Basin may be based on more up to date information than the earlier estimate of Harrill, no actual ET measurements were collected and their calculation of basin ET remains a reconnaissance-level estimate. Their information will add to the volume of information currently available, but on its own accord is not of sufficient detail or rigor to warrant a revision of the currently established perennial yield of the basin.

The Applicant argues that most of the ground water in the Granite Springs Valley discharges via subsurface flow to Winnemucca Lake Valley. This assertion is an important point because it is this subsurface discharge that would allow for an increase in the perennial yield of the basin to an amount significantly greater than currently accepted. The Applicant's geologist Martin presented evidence indicating that a number of faults connect the Granite Springs Valley basin to the Winnemucca Lake basin, which lies approximately 20 miles (~100,000 feet) west of the Granite Springs Valley playa. Mr. Martin hypothesized that these faults could provide the fracturing necessary to increase the permeability of the granite and to be conduits for water flow. The hydraulic head differential between the two valleys is approximately 100 feet, which equates to a

[25] Maurer, D., et al., Hydrology and Potential Effects of Changes in Water Use, Carson Desert Agricultural Area, Churchill Co., Nevada, United States Geological Survey Water-Supply Paper 2436 (1996).
[26] Exhibit No. 236, p. 25.

hydraulic gradient of approximately 0.001 feet per foot. Witness Martin, who was not qualified as an expert hydrogeologist, assumed a hydraulic conductivity of about 33 feet per day for the entire expanse of granite between the two areas, which is the upper limit for a fractured igneous rock with an estimated range of 0.003 to 33 feet per day.[27] Further assuming an aquifer thickness of 500 feet and a width of approximately 137,000 ft. (the length of Winnemucca Lake playa), he used Darcy's law to estimate flow through the bedrock of 18,200 afa.[28] He further attributed 14,800 afa of flow from Granite Springs Valley to Winnemucca Lake playa through other large faults such as the Coyote Canyon fault zone, so that the total underflow is estimated to be 33,000 afa.[29] The Applicant's hydrogeologist Swanson estimated there is 19,000 afa of subsurface outflow to Winnemucca Lake Valley, although it was not clear exactly what his basis was for that amount.[30] The Protestants' witnesses raised questions about the existence of through-going fault structures, and presented evidence to support their argument that no such structures exist. They cite the lack of publications in support of the Applicant's structural model, as well as an absence of adequately documented data and/or mapping by the Applicant.[31] The Applicant presented evidence of fault structures in the mountain ranges surrounding the basin,[32] but did not present sufficient or convincing evidence that these structures are of a regional nature and transect the Shawave and Nightingale mountains and Sage Hen Valley, which lie between Granite Springs Valley and Winnemucca Lake Valley. The Applicant's outflow estimate requires the upper 500 feet of the entire 20 mile by 25 mile mass of granite to have an average hydraulic conductivity equal to the maximum for a fractured granite of 33 feet per day, yet they presented no evidence to support the estimate. Protestants also questioned the hydraulic gradient across the width of the zone between Granite Springs Valley and Winnemucca Lake Valley. In order for flow to be permissible from Granite Springs Valley to Winnemucca Lake Valley there must be a continual gradient between the valleys. The Protestants cite a lack of water-level data in the region between the valleys and suggest a ground-water divide exists

[27] Exhibit No. 170, p. 155.
[28] Exhibit No. 170, p. 154.
[29] *Id.*, p. 156.
[30] Transcript, pp. 485-490.
[31] Exhibit No. 236, p. 9.
[32] Testimony of Martin and Exhibit No. 170.

between the two basins, which would preclude such flow. Based on the bulk of the evidence and their experience, the Protestants concluded that subsurface discharge from Granite Springs Valley does not occur.[33] Critical information needed to demonstrate the potential for outflow includes the collection of hydraulic head data between the two basins, collection of aquifer properties such as hydraulic conductivity, aquifer thickness and width, and ET studies in the discharge areas. The Applicant has repeatedly recognized the need for additional study to support their conceptual view of ground water flow during the hearing, but such data was not collected. It is not reasonable to expect the State Engineer to accept what can only be considered a highly speculative hypothesis when sound scientific data collection could have provided the critical evidence to support or impugn their estimates of recharge, discharge and flow path.

The State Engineer finds the available data do not support the amount of ground-water flow suggested by the Applicant. The State Engineer finds that the Applicant did not provide any credible evidence to support a hydraulic conductivity of approximately 33 feet per day in granitic bedrock, a continual gradient along the theorized flow path or the necessary thickness and width of the aquifer to support the proposed amount of subsurface flow between Granite Springs Valley and Winnemucca Lake Valley. Subsurface, basin-to-basin flows of the magnitude claimed by the Applicant are recognized in the carbonate aquifer of eastern and southern Nevada, but appreciable thicknesses of carbonate basement rocks are not present in this area. The State Engineer finds that the available independent evidence indicates that subsurface flow from Granite Springs Valley to Winnemucca Lake Valley does not occur in any appreciable quantities. The State Engineer further finds that information necessary to modify the perennial yield of Granite Springs Valley from the current amount of 4,500 afa was not collected or presented by either the Applicant or the Protestants.

IV.

In support of their respective arguments, the parties presented a variety of other evidence. The Protestants presented oxygen-18 and deuterium isotopic evidence from ground-water samples which indicates that the ground water in Granite Springs Valley is from recharge during a cooler climate, likely during the Pleistocene epoch age. The

[33] Exhibit No. 222.

Protestants also presented radiocarbon evidence from ground-water samples implying that the age of the ground water is approximately 12,500 years old, a Pleistocene epoch age. From these data, the Protestants suggested that there is a lack of current recharge mixing with the existing ground water in storage.

The Applicant presented Tritium isotopic evidence from a ground-water sample which indicates that some amount of recharge from precipitation has occurred since 1952. However, the State Engineer finds that the use of one Tritium ground-water sample is inadequate to infer the magnitude of recharge from precipitation.

Ground-water ET on Winnemucca Lake Playa was not measured by the Applicant, but was estimated to be "significant."[34] However, witnesses for the Protestants pointed out the absence of large springs near the range front/valley floor interface in Winnemucca Lake Valley such as one would expect with the large magnitude of flow as suggested by the Applicant. The Protestants also point out that the apparent gradient between the Granite Springs Valley playa and Winnemucca Lake is less than the gradient between Pyramid Lake and Winnemucca Lake; therefore Pyramid Lake – rather than Granite Springs Valley - might be the source for any ground water in Winnemucca Lake playa that exceeds local contributions.[35] The State Engineer finds the ET discharge from Winnemucca Lake playa was not demonstrated to be more than available from local recharge, and if it were, sources other than Granite Springs Valley are possible. The State Engineer finds that the Granite Springs oxygen-18 and deuterium isotopic signature of the Granite Springs Valley ground-water aquifer indicates a ground-water aquifer with minimal contributions from recharge derived from local precipitation which contradicts the conceptual view of flow put forth by the Applicant of substantial subsurface outflow derived from local precipitation. Additionally, the State Engineer finds that the lack of any significant spring complexes along the Winnemucca Lake Valley range front/valley floor interface is contradictory to the Applicant's conceptual view of a large magnitude of flow discharging as ET on the Winnemucca Lake Playa.

---

[34] Transcript, p. 481.
[35] Transcript, p. 511.

V.

The Applicant presented testimony and evidence regarding the thickness of the basin-fill deposits, the volume of water in storage, and the productivity of their test well. Witness Carpenter testified regarding various estimates of the maximum depth to bedrock and thickness of the valley fill.[36] Witness Baumann testified that the volume of water in storage is estimated to be approximately 19,000,000 acre-feet.[37] Witnesses Swanson and Gallagher testified that five test wells have been drilled in Granite Springs Valley and three of the wells "were extremely impressive" and one well was run for seven days at 4,500 gallons per minute.[38]

The State Engineer finds the evidence presented by the Applicant regarding the thickness of the basin-fill deposits, the volume of water in storage, and the productivity of their test wells are not material in estimating the perennial yield of the basin.

VI.

At the time of the administrative hearing on these applications, several applications with senior priority dates were pending that required resolution prior to the State Engineer acting on the applications that are under consideration in this ruling. Testimony and evidence was provided by both the Applicant and Protestants as to existing water rights and senior pending applications in Granite Springs Valley. The Applicant's evidence is found in Exhibit No. 148. The Protestant's evidence was that as of the date of the hearing 2,792 acre-feet of committed ground-water rights existed in Granite Springs Valley and approximately 56 acre-feet was pending for stock-water use and 2,560 acre-feet was pending for irrigation use with priorities senior to the applications under consideration here, which essentially appropriates the underground water in the basin.[39]

The Applicant argues that the C-Punch Ranch agricultural water rights are for the most part unused and are not the highest and best use of the high-quality potable ground water found in Granite Springs Valley given the high permeability of the sandy soils, excessive watering and fertilizer that would be required for successful alfalfa growth,

---

[36] *See*, Transcript, pp. 151-174.
[37] Transcript, p. 196.
[38] Transcript, pp. 91 443.
[39] *See*, Mahannah testimony, Transcript, pp. 586-592 and Exhibit No. 237.

with resultant contamination of a prime potable water resource. Therefore, the Applicant argues that the State Engineer should deny C-Punch Ranch's senior pending applications for irrigation and its current water rights should be revoked in favor of Aqua Trac.[40]

The State Engineer finds action was taken on all senior pending applications in Granite Springs Valley prior to action on the applications under consideration in this ruling. The State Engineer finds Nevada is a prior appropriation state, meaning first in time, first in right. The State Engineer finds Nevada water law does not designate municipal use as the highest and best use. The State Engineer finds the Granite Springs Valley Hydrographic Basin has not been designated as a preferred use for the quasi-municipal use applied for here. The State Engineer finds there is no authority for revoking C-Punch Ranch's water rights in favor of Aqua Trac's applications.

VII.

Protestant BLM alleged in its protest that the appropriation could impact surface water sources, including claims by the BLM of public water reserves. The State Engineer finds no evidence was presented on this protest claim; therefore, the claim is dismissed.

VIII.

Protestants alleged that the Applicant has failed to justify the need to export water as required by NRS § 533.370(6). As to this statutory criterion, the Applicant provided testimony that the State Engineer has indicated that numerous basins in Lyon County are over appropriated, and therefore, there is a need to import water.[41] A witness for the Applicant testified that he has talked to the City of Fernley and groups like Encore Group and Asset Management who have large land holdings in Lyon County and in southern Washoe County. It was testified to that the Applicant's focus right now is around Fernley and Dayton in Lyon County and Wadsworth in Washoe County because they know that the lack of water there "is a big deal." A witness from the Encore Group testified that it had worked with the Applicant on a letter of intent, but had let it expire.[42] In Exhibit No. 135, there are various letters of support for the project and letters from persons or entities interested in purchasing water. However, the Applicant has not entered into any contract with any entity for the purchase of water and is not in an agency relationship with any

[40] Exhibit No. 155, p. 12; Transcript, pp. 353-354.
[41] Transcript, p. 94.
[42] Transcript, pp. 419-423.

others. In testimony, Aqua Trac indicated that it is proposing to build the project to the wholesale meters, but it would rather find someone else who wants to run the pipeline and deliver water, and the Applicant testified that it wants to get the project going and then get out. [43] The Applicant also did not provide any evidence on the specifics of where water would be used and in what quantities; thus, there is no evidence of the actual beneficial use.

The State Engineer notes NRS § 533.370(6) is a provision of the water law that applies to criterion that must be addressed in the case of an interbasin transfer of water and requires an applicant show the need to import the water. This provision is distinct from that portion of the water law found in NRS § 533.035, which provides that beneficial use in the basis the measure and the limit of the right to use water, which the State Engineer interprets to mean that each applicant is required to show the actual use to which water applied for will be made.

The Nevada Supreme Court in *Bacher v. State Engineer*, 122 Nev. Adv. Op. No. 95, 146 P.2d 793 (November 22, 2006) held that an applicant can satisfy the "need to import water" requirement of NRS § 533.370(6)(a) by providing evidence of third-party need. The court concluded that an agent may request a water right permit based on the ultimate user's need for water, but also adopted the anti-speculation doctrine, which requires the agent to have a contractual or agency relationship with **the water's appropriator.** The court concluded nearly 100 years ago "that he who applies the water to the soil, for a beneficial purpose, is in fact the actual appropriator."[44] In the *Bacher* opinion, the court addressed absolute fundamentals of Nevada water law such as, the right to use water for a beneficial use depends on a party actually using the water, and once beneficial use is established, the quantity of water appropriated shall be limited to the amount reasonably required for the beneficial use to be served, and found that an applicant's ability to satisfy NRS § 533.370(6)(a)'s requirement by demonstrating third-party need is limited by the "anti-speculation doctrine."

---

[43] Transcript, pp. 101-104, 127.
[44] *Prosole v. Steamboat Canal Co.*, 37 Nev. 254, 258-259, 140 P. 720, 722 (1914).

> This doctrine precludes speculative water right acquisitions without a showing of beneficial use. Precluding applications by persons who would only speculate on need ensures satisfaction of the beneficial use requirement that is so fundamental to our State's water law jurisprudence. Thus, we agree with this limit on an applicant's showing of third-party need and adopt the anti-speculation doctrine's formal relationship requirement for Nevada. Further, we note that our adoption of this doctrine comports with the language and goals of NRS 533.370(1)(c)(2), which, to protect against speculation, requires the applicant to show both financial ability and a reasonable expectation with respect not only to constructing any work needed to apply the water, but also to "apply the water to the intended beneficial use with reasonable diligence."

Aqua Trac did not provide any evidence of an agency or contractual relationship with an ultimate user of the water, did not provide any evidence of the **actual** beneficial use to be made, and did not provide any evidence that specifically supports the quantity of water applied for under these applications. Since beneficial use is the basis and the measure and the limit of the right to appropriate water, Aqua Trac did not satisfy NRS § 533.035 in that it did not adequately demonstrate what the actual beneficial use will be. What Aqua Trac showed is that if water were imported into the proposed place of use and made available for purchase, there is an interest by developers in purchasing the water. The State Engineer finds that even if Aqua Trac had evidence of contracts or an agency relationship, it is still required to demonstrate the need for the water and the actual beneficial use of the water to be made. Just because an applicant has a contract, that does not overcome the beneficial use requirement of Nevada water law. The State Engineer is not discounting that an Applicant may develop a project as a wholesale provider of water; however, Aqua Trac did not provide evidence of the actual beneficial use that is to be made with the water and the actual quantity needed for that beneficial use.

The Applicant argues that the Nevada Supreme Court erred in adopting Colorado's "anti-speculation" doctrine in *Bacher* and the *Bacher* decision should not be applied in this case because Aqua Trac is the ultimate appropriator and user of the water. It argues that Aqua Trac has met the statutory requirements under NRS § 533.370(6) for an interbasin transfer of water and nowhere in Nevada's water law does it use the term "anti-speculation doctrine." While the Applicant may not agree with the Nevada

Supreme Court's decision, it is the current state of the law in Nevada and the State Engineer will follow it.

The Applicant argues that it is the same as a municipal provider like the Las Vegas Valley Water District (LVVWD), an argument with which the State Engineer does not agree. The LVVWD was specifically created by the Nevada Legislature and designated by the Legislature as the agency responsible for water distribution and to provide for the procurement, storage, distribution and sale of water.[45] The LVVWD was created for the purpose of providing water resources to citizens, the ultimate users, within the specified service area. The State Engineer finds the Applicant was not created by the Nevada Legislature for the purpose of providing water to Northern Nevada communities, is not the ultimate user of the water and is not going to put the water to actual beneficial use, but rather the Applicant merely intends to build the project to the wholesale meters, and intends for an eventual third party(s) to ultimately run the pipeline and deliver the water for someone else to place the water to actual beneficial use.[46]

The State Engineer finds since the Applicant is not a municipality or governmental agency that supplies water to its inhabitants, the Applicant did not satisfy the *Bacher* requirement to provide evidence of a contractual or agency relationship with the party intending to put the water to beneficial use. The State Engineer finds the Applicant did not provide any evidence of the amount of water reasonably required for the beneficial use to be served. NRS § 533.070(1). Therefore, State Engineer finds the Applicant did not satisfy the requirement set forth in NRS § 533.370(6) to justify the need to export the water and did not provide sufficient evidence of the actual beneficial use to be made of the water.

IX.

Protestants alleged that the proposed diversion and export of water from the basin is not environmentally sound in violation of NRS § 533.370(6). The BLM's concern is that proposed use of the water will cause the land surface to subside. The BLM provided evidence that indicates that compressible sediments are present in the valley, and that

[45] Chapter 167, Statutes of Nevada 1947.
[46] Transcripts, pp. 102 – 103.

pumping in excess of the perennial yield would result in land subsidence.[47] The Granite Springs Valley has little development other than through-going transmission and gas lines. A memo from Sierra Pacific Power Company appears to dismiss potential problems due to land subsidence.[48] There is no evidence concerning the potential effects of subsidence on the gas lines. The State Engineer finds potential effects from land subsidence due to pumping could be mitigated and this protest claim is overruled. The only evidence provided by the Applicant on this statutory criterion was testimony and evidence that went to activity at the well sites themselves.[49] The State Engineer finds the Applicant did not adequately address this statutory criterion and believes it was intended to address the impact of the water withdrawal on the basin as a whole and not just the activity that takes place around a well pad.

X.

Protestants allege that the extraction of large volumes of ground water has the potential to affect wetlands, springs, seeps, surface water flows, wells, riparian and native vegetation, water quality, and flora and fauna within the hydrographic basin. If interbasin flows exist, they could also be impacted. In the case of springs or seeps, they argue that the Applicant has failed to ensure that wildlife that customarily utilizes the water will have continued access to it in violation of NRS § 533.367 and the water transfer will have a negative impact on flows to wetlands and will adversely affect water quality and quantity. The State Engineer finds NRS § 533.367 only goes to a request for an appropriation from a spring or seep and is therefore irrelevant to the applications under consideration here and the protest claim is overruled; however, this issue may be within § 533.370(6) which addresses whether the interbasin transfer of water is environmentally sound as it relates to the basin of origin. The State Engineer finds no evidence was provided to support the protest claim that the extraction of large volumes of ground water has the potential to affect wetlands, springs, seeps, surface water flows, riparian and native vegetation, water quality, flora and fauna within the hydrographic basin; therefore, the protest claim is dismissed. However, the State Engineer believes that the extraction of large volumes of water far in excess of the established perennial yield might cause a

[47] Exhibit No. 205.
[48] Exhibit No. 164.
[49] Transcript, pp. 140-150, Exhibit No. 145.

unreasonable lowering of the water table at the Lipera's well. The State Engineer finds that if these applications were granted as filed they would exceed the perennial yield of the basin and may likely impact Mr. Lipera's domestic well.

XI.

Protestants allege that the export of the water is not an appropriate long-term use of the water and will unduly limit the future growth and development of the basin of origin in violation of NRS § 533.370. They allege that these applications will limit the future growth and development to the detriment of the rural counties and ground-water basins to the benefit of the urbanizing areas which are experiencing uncontrolled growth in violation of NRS § 533.370(6)(d). And, they allege that the requested allocation will negatively impact future use of land in the basin of origin. The Applicant provided evidence[50] and argument that neither the Churchill nor Pershing County Master Plans indicate much future growth or development within the Granite Springs Hydrographic Basin. The State Engineer finds neither master plan indicates growth is anticipated in Granite Springs Valley and the Protestants did not provide any evidence as to the anticipated growth in the valley and therefore the protest claim is overruled.

XII.

Protestants allege that the applications should be denied because the Applicant lacks the financial capability for developing and transporting the water and putting the same to beneficial use. Nevada Revised Statute § 533.370(1)(c)(2) requires that an applicant provide proof satisfactory of the financial ability and reasonable expectation to actually construct the work and apply the water to beneficial use with reasonable diligence. During the administrative hearing, the Applicant testified that Phase I of the project would cost probably in excess of $150 million dollars and that Aqua Trac has commenced conversations with various financial institutions.[51] The Applicant also testified that "we have talked to agencies that we have pending things going with, companies like Merrill Lynch have been in on this since ground zero and I was with them again last week. We were in New York meeting with Matlin Patterson last week. We have a whole lot of interest in financing the thing. We don't have any question but that

[50] Exhibit Nos. 252 and 253.
[51] Transcript, p. 96. Transcript, p. 133 estimate of $120 - $150 million.

we have the financial capability to do it."[52] "[B]onds is one option but a lot of it could be generated by developers that wanted the water immediately."[53] The Applicant indicated that they as a group had fairly substantial means, but did not want to present that information in a public forum.[54] The issue of disclosure raised concern as to the requirements of proof to meet the statutory criteria and public records.

In response, the State Engineer allowed the parties to brief the issue of whether the information on financial ability could be kept confidential and issued Interim Ruling #1, which required the Applicant to provide the information on its financial ability in a form accessible to the public.[55] In the Interim Ruling, the State Engineer found that in enacting NRS § 533.370(1)(c)(2), the Legislature was very concerned about speculating in water rights. The reason for the financial disclosure provision was to prevent or at least curb speculation on water in Nevada. There was a concern that the government should regulate persons who acquire water rights with the view of selling them to someone else and not for their own use.[56] The requirement was to assure that the water right applicant has the ability itself or can reasonably acquire the ability to place the water to beneficial use and ordered the Applicant supplement the record with its evidence as to the requirement of NRS § 533.370(1)(c)(2).

The additional evidence submitted consists of a letter dated April 24, 2007, from Matlin Patterson Global Advisors, LLC, which indicates that it is willing to provide the capital necessary for the project to proceed and is confident that the Aqua Trac Project can raise sufficient debt financing for completion of the project, and that it was willing to finance up to $160 million dollars.[57] The State Engineer finds the Applicant provided sufficient evidence of the ability to reasonably acquire financing.

XIII.

Protestants allege that importation of ground water to support uncontrolled and irresponsible growth in urbanizing areas will create many unknown impacts to the hydrologic resources, socioeconomics and environment. The State Engineer finds he has

---

[52] Transcript, p. 133.
[53] Transcript, pp. 133-134.
[54] Transcript, pp. 134-136.
[55] Exhibit Nos. 248, 249, 250 and 259.
[56] *See*, Legislative history Assembly Bill 624 (1993 Session) and Senate Bill 98 (1995 Session).
[57] Exhibit No. 260.

not been delegated the responsibility to control growth and has not been delegated the responsibility for land use planning in Nevada. The decisions as to growth control are the responsibility of other branches of government; therefore, the protest claim is overruled.

XIV.

Protestants allege that the Applicant does not own any land within the Granite Springs Valley and would have to acquire significant rights on private and public land to gain access to and transport the water and has not demonstrated it is feasible to obtain said easements. They argue that the Applicant has not received permission from the BLM to conduct any activity on public land. The State Engineer finds that the water right permit does not grant the permittee the right of ingress or egress to any land and such entry is required in order for a permittee to prove beneficial use of the water. The State Engineer finds while in some instances, such as a stockwater application on the federal lands, the State Engineer requires proof of access to the land before acting on an application, in other instances he issues a permit with a permit term that indicates the permit is conditioned on the applicant complying with other state, federal and local laws; thus, enabling the applicant time to obtain the required right of entry. The State Engineer finds in this case that the lack of access to a specifically identified right-of-way does not prevent him from acting on the Applications and overrules the protest claim.

XV.

Protestants allege that the Applicant does not have existing infrastructure to transport the water. The State Engineer finds the Applicant does not have permission to build the project until it has permission to use the water and overrules the protest claim.

XVI.

Protestants allege the appropriation would impact existing rights and other water resources within the basin. The State Engineer finds, as filed, these applications will substantially exceed the perennial yield of the basin and thus would impact existing rights and this protest claim is upheld.

XVII.

Protestants allege that the water would be transported across county lines and would negatively impact Pershing County and not satisfy the requirements of the Nevada Revised Statutes for transfers outside the county. The State Engineer finds no evidence was provided on this protest claim and the claim is dismissed.

XVIII.

Protestants allege that the requested allocation would be against the public interest of the citizens of Pershing County. The State Engineer finds this protest claim is not adequately expounded upon to enable the State Engineer to rule on it and the claim is dismissed.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.[58]

II.

The State Engineer is prohibited by law from granting a permit to appropriate the public waters where:[59]

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.

The State Engineer concludes there is insufficient information/data to support revising the established perennial yield of the hydrographic basin to support the quantity of water requested for appropriation; therefore, the State Engineer must rely on existing reports and based on the established perennial yield there is insufficient unappropriated water available to grant the applications. The State Engineer concludes just because an applicant drills a well that produces a high quantity of water that does not warrant

[58] NRS chapters 533 and 534.
[59] NRS 533.370(5).

changing the established perennial yield of a ground-water basin; thus, the only conclusion that can be reached is that there is insufficient unappropriated water to grant the applications.

IV.

The State Engineer concludes because the quantity of water requested so substantially exceeds the established perennial yield that to grant the applications would interfere with existing rights and protectible interests in domestic wells.

V.

Protestants allege that the applications are speculative in nature as they do not cite to a defined ultimate use or project and accordingly are not in the public interest. They argue that approval of the applications would be detrimental to the public interest inasmuch as it may allow the Applicant to "lock up" vital water resources for speculative use sometime in the distant future beyond current planning horizons. Additionally, they allege that the applications violate the anti-speculation doctrine found in NRS § 533.370(1)(c)(2) in that the Applicant does not intend to put the water to beneficial use for its own benefit and has no contractual or agency relationship with a person, business association, or governmental body that will place the water to beneficial use. Churchill County moved to deny the applications based on the Nevada Supreme Court decision in *Bacher v. State Engineer*, 122 Nev. Adv. Op. No. 95, 146 P.2d 793 (November 22, 2006). The County argues that the *Bacher* decision held that there must be a threshold showing that there is a beneficial non-speculative use of the water and the Applicant must have a contractual or agency relationship with the party intending to put the water to beneficial use and the Applicant has not made such a showing.[60]

In response, the Applicant argues the facts in this case are distinguishable from *Bacher* in that it is the Applicant who will put the water to beneficial use and the Nevada Supreme Court erred in adopting Colorado's anti speculation doctrine and that the *Bacher* decision should not be applied in this case because Aqua Trac is the ultimate user of the water. "While Aqua Trac will ultimately provide water to those who purchase the water from its pipeline, the water will be withdrawn from the aquifer and transported to its

[60] Transcript, p. 128.

place of use by Aqua Trac."[61] Therefore, the Applicant argues the holding in *Bacher* does not apply. The Applicant argues that Aqua Trac is appropriating water for its purposes and not for others and that Aqua Trac will enter into contracts shortly for use of the water.

Speculation is defined as an assumption of unusual business risk in hopes of obtaining commensurate gain,[62] buying or selling with the expectation of profiting by a rise or fall in price.[63] The State Engineer does not agree with the Applicant's argument. Aqua Trac is not the same as a municipal provider. There is a great distinction between a municipal provider and a private company wanting to provide water for profit, an issue Nevada's Legislature was specifically addressing when it enacted new provisions of Nevada water law to address what it deemed to be speculating in water rights. Prior to the *Bacher* decision, the anti-speculation provisions were not in the provisions of Nevada's water law that apply to interbasin transfers of water, but rather were found in NRS § 533.370(1)(c) that requires an applicant provide proof satisfactory of his intention in good faith to construct any work necessary to apply the water to the intended beneficial use with reasonable diligence and his financial ability and reasonable expectation to actually construct the work and apply the water to the intended beneficial use with reasonable diligence.

However, in *Bacher*, the Nevada Supreme Court applied the anti-speculation doctrine to the provisions of NRS § 533.370(6) and concluded that an agent may request a water right permit based on the ultimate user's need for water, but that requires the agent to have a contractual or agency relationship with **the water's appropriator.** The court concluded nearly 100 years ago "that he who applies the water to the soil, for a beneficial purpose, is in fact the actual appropriator." In the *Bacher* opinion, the court addressed absolute fundamentals of Nevada water law such as the right to use water for a beneficial use depends on a party actually using the water, and the quantity of water appropriated shall be limited to the amount reasonably required for the beneficial use to be served. However, the court found that an applicant's ability to satisfy NRS § 533.370(6)(a)'s requirement by demonstrating third-party need is limited by the "anti-

[61] Exhibit No. 250.
[62] *Webster's Ninth New Collegiate Dictionary* 1133 (1979).
[63] *Black's Law Dictionary* 1255 (5th ed. 1979)

speculation doctrine" and adopted the anti-speculation doctrine's formal relationship requirement for Nevada.

The State Engineer concludes that since Aqua Trac did not provide evidence of contracts or agency relationships with the ultimate users of water and did not provide evidence of where the water would actually be used or in what quantities, there is not sufficient evidence to overcome a conclusion that the applications are filed for speculative purposes. The State Engineer concludes the Applicant did not provide sufficient evidence of the beneficial use of the water applied for under these applications. Under NRS § 533.070 the quantity of water which may be appropriated in this state shall be limited to such water as shall reasonably be required for the beneficial use to be served. The State Engineer concludes the Applicant did not provide sufficient evidence of the amount of water reasonably required for any specific beneficial use and to grant water rights under these conditions would violate the anti-speculation doctrine and threaten to prove detrimental to the public interest.

RULING

Applications 72868 - 72896, inclusive, 73351 - 73357, inclusive, 73743 - 73749, inclusive, 73919-73929, inclusive, 74354-74357, inclusive, and 74957-74976, inclusive, are hereby denied on the grounds that:

1. There is insufficient water in the proposed source to support the applications.
2. No contracts with those who would place the water to beneficial use were demonstrated nor was any agency relationship with a municipality or other entity was demonstrated; therefore, the Applicant did not satisfy the requirements for demonstrating a need for the water under NRS §533.370(6).
3. No demonstration was made of the actual project to be constructed; therefore, no specific beneficial use of the water was identified.
4. No evidence was provided as to the amount of water reasonably required for any specific project.

5. To grant the applications under these conditions would thereby threaten to prove detrimental to the public interest.

Respectfully submitted,

Tracy Taylor, P.E.
State Engineer

TT/jm

Dated this 17th day of September, 2007.

ATTACHMENT 1

Application 72868 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SW¼ of Section 7, T.28N., R.27E., M.D.B.&M.

Application 72869 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NE¼ of Section 18, T.28N., R.27E., M.D.B.&M.

Application 72870 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the SE¼ NE¼ of Section 5, T.28N., R.27E., M.D.B.&M.

Application 72871 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SE¼ of Section 4, T.28N., R.27E., M.D.B.&M.

Application 72872 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the SE¼ NW¼ of Section 6, T.28N., R.28E., M.D.B.&M.

Application 72873 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NE¼ of Section 22, T.28N., R.27E., M.D.B.&M.

Application 72874 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NW¼ of Section 26, T.28N., R.27E., M.D.B.&M.

Application 72875 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 26, T.28N., R.27E., M.D.B.&M.

Application 72876 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SE¼ of Section 28, T.28N., R.28E., M.D.B.&M.

Application 72877 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NE¼ SE¼ of Section 35, T.28N., R.27E., M.D.B.&M.

Application 72878 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NW¼ of Section 12, T.27N., R.27E., M.D.B.&M.

Application 72879 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NW¼ of Section 24, T.27N., R.27E., M.D.B.&M.

Application 72880 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NE¼ of Section 26, T.27N., R.27E., M.D.B.&M.

Application 72881 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NE¼ of Section 24, T.26N., R.26E., M.D.B.&M.

Application 72882 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NW¼ of Section 26, T.26N., R.26E., M.D.B.&M.

Application 72883 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the SE¼ SE¼ of Section 26, T.26N., R.27E., M.D.B.&M.

Application 72884 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 34, T.26N., R.27E., M.D.B.&M.

Application 72885 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NE¼ of Section 2, T.25N., R.27E., M.D.B.&M.

Application 72886 was filed to appropriate 3.0 cubic feet per second with a proposed point of diversion described as being located within the NE¼ NW¼ of Section 12, T.25N., R.26E., M.D.B.&M.

Application 72887 was filed to appropriate 3.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NW¼ of Section 12, T.25N., R.26E., M.D.B.&M.

Application 72888 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NE¼ of Section 10, T.25N., R.27E., M.D.B.&M.

Application 72889 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 16, T.25N., R.27E., M.D.B.&M.

Application 72890 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 72891 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the SE¼ NW¼ of Section 24, T.25N., R.27E., M.D.B.&M.

Application 72892 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SW¼ of Section 24, T.25N., R.27E., M.D.B.&M.

Application 72893 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NW¼ of Section 26, T.25N., R.27E., M.D.B.&M.

Application 72894 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NW¼ of Section 34, T.25N., R.27E., M.D.B.&M.

Application 72895 was filed to appropriate 2.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NE¼ of Section 4, T.24N., R.27E., M.D.B.&M.

Application 72896 was filed to appropriate 1.5 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NW¼ of Section 4, T.26N., R.28E., M.D.B.&M.

Application 73551 was filed to appropriate 4.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SE¼ of Section 34, T.25N., R.25E., M.D.B.&M.

Application 73552 was filed to appropriate 3.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NW¼ of Section 34, T.25N., R.27E., M.D.B.&M.

Application 73553 was filed to appropriate 3.0 cubic feet per second with a proposed point of diversion described as being located within the NE¼ NW¼ of Section 12, T.25N., R.26E., M.D.B.&M.

Application 73554 was filed to appropriate 4.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NE¼ of Section 6, T.24N., R.27E., M.D.B.&M.

Application 72555 was filed to appropriate 6.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SW¼ of Section 28, T.25N., R.27E., M.D.B.&M.

Application 73556 was filed to appropriate 7.0 cubic feet per second with a proposed point of diversion described as being located within the NE¼ NW¼ of Section 24, T.25N., R.27E., M.D.B.&M.

Application 73557 was filed to appropriate 8.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73743 was filed to appropriate 9.8 cubic feet per second with a proposed point of diversion described as being located within the NE¼ SW¼ of Section 28, T.26N., R.27E., M.D.B.&M.

Application 73744 was filed to appropriate 9.6 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NW¼ of Section 26, T.26N., R.27E., M.D.B.&M.

Application 73745 was filed to appropriate 9.8 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NE¼ of Section 26, T.26N., R.27E., M.D.B.&M.

Application 73746 was filed to appropriate 9.6 cubic feet per second with a proposed point of diversion described as being located within the NE¼ SW¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73747 was filed to appropriate 9.9 cubic feet per second with a proposed point of diversion described as being located within the NE¼ SW¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73748 was filed to appropriate 9.9 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SE¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73749 was filed to appropriate 9.7 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SE¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73919 was filed to appropriate 9.6 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 34, T.26N., R.27E., M.D.B.&M.

Application 73920 was filed to appropriate 9.6 cubic feet per second with a proposed point of diversion described as being located within the SE¼ SE¼ of Section 26, T.26N., R.27E., M.D.B.&M.

Application 73921 was filed to appropriate 9.6 cubic feet per second with a proposed point of diversion described as being located within the SE¼ SE¼ of Section 26, T.26N., R.27E., M.D.B.&M.

Application 73922 was filed to appropriate 9.6 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NE¼ of Section 2, T.25N., R.27E., M.D.B.&M.

Application 73923 was filed to appropriate 9.9 cubic feet per second with a proposed point of diversion described as being located within the NE¼ NW¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73924 was filed to appropriate 9.8 cubic feet per second with a proposed point of diversion described as being located within the NE¼ NW¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73925 was filed to appropriate 9.8 cubic feet per second with a proposed point of diversion described as being located within the SE¼ NW¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73926 was filed to appropriate 9.8 cubic feet per second with a proposed point of diversion described as being located within the SE¼ NW¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73927 was filed to appropriate 9.7 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73928 was filed to appropriate 9.8 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 18, T.25N., R.28E., M.D.B.&M.

Application 73929 was filed to appropriate 9.8 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NE¼ of Section 10, T.25N., R.27E., M.D.B.&M.

Application 74354 was filed to appropriate 9.9 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SW¼ of Section 16, T.26N., R.27E., M.D.B.&M.

Application 74355 was filed to appropriate 9.9 cubic feet per second with a proposed point of diversion described as being located within the SW¼ SW¼ of Section 16, T.26N., R.27E., M.D.B.&M.

Application 74356 was filed to appropriate 9.9 cubic feet per second with a proposed point of diversion described as being located within the NE¼ SW¼ of Section 16, T.26N., R.27E., M.D.B.&M.

Application 74357 was filed to appropriate 9.9 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NE¼ of Section 8, T.26N., R.27E., M.D.B.&M.

Application 74957 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NW¼ of Section 10, T.26N., R.27E., M.D.B.&M.

Application 74958 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SW¼ of Section 10, T.26N., R.27E., M.D.B.&M.

Application 74959 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NE¼ NE¼ of Section 8, T.26N., R.27E., M.D.B.&M.

Application 74960 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NE¼ SE¼ of Section 8, T.26N., R.27E., M.D.B.&M.

Application 74961 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 8, T.26N., R.27E., M.D.B.&M.

Application 74962 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SW¼ of Section 22, T.26N., R.27E., M.D.B.&M.

Application 74963 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SW¼ of Section 22, T.26N., R.27E., M.D.B.&M.

Application 74964 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NE¼ NW¼ of Section 34, T.26N., R.27E., M.D.B.&M.

Application 74965 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the SE¼ SE¼ of Section 28, T.26N., R.27E., M.D.B.&M.

Application 74966 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NE¼ NE¼ of Section 20, T.26N., R.27E., M.D.B.&M.

Application 74967 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ NE¼ of Section 20, T.26N., R.27E., M.D.B.&M.

Application 74968 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NW¼ of Section 28, T.26N., R.27E., M.D.B.&M.

Application 74969 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the SE¼ SE¼ of Section 32, T.26N., R.27E., M.D.B.&M.

Application 74970 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the SW¼ NW¼ of Section 6, T.25N., R.27E., M.D.B.&M.

Application 74971 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the SE¼ NE¼ of Section 8, T.25N., R.27E., M.D.B.&M.

Application 74972 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SE¼ of Section 8, T.25N., R.27E., M.D.B.&M.

Application 74973 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the SE¼ SW¼ of Section 8, T.25N., R.27E., M.D.B.&M.

Application 74974 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SW¼ of Section 16, T.25N., R.27E., M.D.B.&M.

Application 74975 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NW¼ SW¼ of Section 16, T.25N., R.27E., M.D.B.&M.

Application 74976 was filed to appropriate 10.0 cubic feet per second with a proposed point of diversion described as being located within the NE¼ SW¼ of Section 16, T.25N., R.27E., M.D.B.&M.