

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

IN THE MATTER OF APPLICATIONS)
67435 AND 67436 FILED TO CHANGE)
THE MANNER OF USE OF THE)
UNDERGROUND WATERS OF THE LOWER)
MEADOW VALLEY WASH HYDROGRAPHIC)
BASIN (205), LINCOLN COUNTY,)
NEVADA.)

RULING

5262

GENERAL

I.

Application 67435 was filed on April 18, 2001, by the Union Pacific Railroad Company to change the manner of use of 0.89 cubic feet per second (cfs) of water previously appropriated from an underground source at Rox, Nevada, under Proof 04367 in the Lower Meadow Valley Wash Hydrographic Basin. The manner of use is requested to be changed from railroad and domestic uses to industrial use. The point of diversion is described as being located within the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 24, T.12S., R.65E., M.D.B.&M.¹

Application 67436 was filed on April 18, 2001, by the Union Pacific Railroad Company to change the manner of use of 0.25 cfs of water previously appropriated from an underground source at Carp, Nevada, under Proof 04366 in the Lower Meadow Valley Wash Hydrographic Basin. The manner of use is requested to be changed from railroad and domestic uses to industrial use. The point of diversion is described as being located within the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 3, T.10S., R.67E., M.D.B.&M.²

¹ File No. 67435, official records in the Office of the State Engineer.

² File No. 67436, official records in the Office of the State Engineer.

II.

Applications 67435 and 67436 were timely protested by the Moapa Valley Water District (MVWD) on the grounds that:^{1,2}

1. If Applications 67435 and 67436 are granted they would have an adverse effect upon and therefore conflict with prior rights of the protestant.
2. The groundwater basin in which Applications 67435 and 67436 seek ground water is fully appropriated; therefore, there is no unappropriated water in the proposed source of supply.
3. The underlying claimed water rights, being Proofs of Appropriation 04366 and 04367, are forfeited and/or abandoned since they have not been placed to beneficial use for railroad purposes for many years longer than five consecutive years. By lodging the protests, the protestant indicated it was petitioning the Nevada State Engineer to promptly schedule an administrative hearing on the issue of forfeiture and/or abandonment for Proofs of Appropriation 04366 and 04367.
4. The granting of the applications, in light of the above allegations, would definitely prove detrimental to the public interest.

III.

On December 20, 2001, Union Pacific Railroad Company filed a response to the Moapa Valley Water District's protests to the applications.^{1,2}

FINDINGS OF FACT

I.

Applications 67435 and 67436 are requesting to change the manner of use of Proofs of Appropriation 04366 and 04367, water rights that were decreed on June 9, 1999, by the Seventh Judicial District Court of the State of Nevada in and for the County of

Lincoln.³ Proof 04366 was for the diversion of water from the Carp well for railroad and domestic use by the Los Angeles & Salt Lake Railroad Company, Union Pacific Railroad as lessee. Proof 04367 was for the diversion of water from the Rox well for railroad and domestic use by the Los Angeles & Salt Lake Railroad Company, Union Pacific Railroad as lessee. The State Engineer finds that while the final decree established a diversion rate at which the water is allowed to be diverted from the source, it does not set forth the annual duty of water, that is, how many acre-feet per year total was put to beneficial use under each proof.

II.

In Nevada, there are two ways that a right to the use of water can be acquired. One is the non-statutory or pre-statutory claim of vested water right,⁴ and the other is by applying for a water right permit pursuant to the statutory appropriation process.⁵

Irrigation development had been proceeding for decades in Nevada before the legislature provided any method by which an appropriative right could be acquired. The greater portion of the water rights in the State had been acquired prior to that time, according to the supreme court, and such rights were uniformly recognized by the courts as vested rights. [Footnote omitted.]

³ Findings of Fact, Conclusions of Law, Judgment and Decree, *In the Matter of the Determination of the Relative Rights in and to the Waters of Camp Valley Creek, Eagle Valley Creek, Panaca Big Spring, Clover Valley Wash, Meadow Valley Wash and Their Tributaries in Lincoln and Clark Counties, Nevada*, June 9, 1999, hereinafter "Meadow Valley Wash Decree."

⁴ See NRS § 533.090 through 533.324, inclusive.

⁵ See generally, NRS chapters 533 and 534.

Such nonstatutory appropriations were made by actually diverting the water from the source of supply, with intent to apply the water to a beneficial use, followed by an application to such beneficial use within a reasonable time.[Footnote omitted.]⁶

In relation to both the non-statutory and statutory appropriation of water, beneficial use is the basis, the measure and the limit of the right to the use of water. "An appropriative right is a usufructuary right, and the basis of its acquisition is beneficial use."⁷ As noted by the Nevada Supreme Court in the *Manse Spring* case, which is a case that dealt with a non-statutory vested water right:⁸

We find ourselves in agreement with the argument of appellant that the legislature has declared all water within this state, whether above or beneath the surface of the ground, to belong to the state; that the use of water is authorized by law; and this court has, since the overruling of the riparian doctrine in the case of *Jones v. Adams*, 19 Nev. 78, 6 P. 442, 3 Am.St.Rep. 788, held that there is no ownership in the corpus of the water, but that the use thereof may be acquired, and the basis of such acquisition is beneficial use.

The Meadow Valley Wash Decree identifies the rate of diversion of water allowed under Proofs 04366 and 04367; however, it did not specifically quantify the annual duty allowed, that is the maximum total quantity of water that had been placed to beneficial use.

⁶ W.A. Hutchins, *The Nevada Law of Water Rights*, United States Department of Agriculture in cooperation with the State Engineer of Nevada at 12 (1955).

⁷ *Id.* at 17, citing *In re Manse Spring and Its Tributaries*, 60 Nev. 280, 286, 108 P.2d 311 (1940) and *Application of Filippini*, 66 Nev. 17, 21-22, 202 P.2d 535, 537 (1949).

⁸ *In the Matter of the Determination of the Relative Rights in and to the Waters of Manse Spring and Its Tributaries in Nye County, State of Nevada*, 60 Nev. 280, 286 (1940).

While in some instances statutory water right permits or vested water rights established in decrees only set forth the diversion rate, the total water right is still limited to the annual duty that was put to beneficial use.

"The concept that to accord with public policy of the State, use of the public water must be made for a useful or beneficial purpose, is fundamental in the water law philosophy of the West."⁹

The concept is declared in specific terms in the majority of Western State constitutions. Positive statements and necessary implications appear in all western "water codes." The principle runs through the leading water rights decisions of the courts. Exceptions and deviations from a strict application of the long-established principle exist and in some situations have caused serious difficulties. Nevertheless, the declaration that "Beneficial use shall be the basis, the measure, and the limit of the right to the use of water" has been controlling in the acquisition and exercise of appropriative rights throughout the history of the West and it has come more and more to pervade riparian philosophy as well."¹⁰

* * *

Consider first the generally more arid States: Statutes of Nevada not only declare that beneficial use shall be the basis, the measure, and the limit of the right to the use of water, but restrict such rights to such quantity of water as may be necessary, when reasonably and economically used for beneficial purposes, irrespective of the carrying capacity of the ditch.¹¹ In an early decision in a controversy arising in Nevada, a Federal court stated that an excessive diversion of water for any purpose cannot be regarded

⁹ W.A. Hutchins, *Water Rights Law in the Nineteen Western States*, U.S. Dept. of Agriculture, Vol. 1 at 9 (1971).

¹⁰ Ibid.

¹¹ Nev. Rev. Stat. §§ 533.035 (Supp. 1969) and 533.060 (Supp. 1967).

as a diversion to a beneficial use, inasmuch as water in this State "is too scarce, needful, and precious for irrigation and other purposes, to admit of waste."¹²

Nevada Revised Statute § 533.035 provides that beneficial use shall be the basis, the measure and the limit of the right to the use of water. Nevada Revised Statute § 533.060 provides that rights to the use of water must be limited and restricted to as much as may be necessary. Nevada Revised Statute § 533.070 provides that the quantity of water that may be appropriated in this state shall be limited to such water as shall reasonably be required for the beneficial use to be served. While recognizing that these statements arise from the statutory water law, the State Engineer finds they are basic doctrines of Western and Nevada water law.

The State Engineer finds the Meadow Valley Wash Decree only established the upper limit of the rate at which water could be diverted from the source, that is, it established the diversion rate. The State Engineer finds that since beneficial use is the basis, the measure and the limit of any water right, the total annual duty of the water that was placed to beneficial use under these proofs must be established. The State Engineer finds that Proof 04366 established a diversion rate of 0.25 cfs, and Proof 04367 established a diversion rate of 0.89 cfs. The State Engineer finds the annual duty is not determined by what is known as a diversion rate expanded analysis, which is derived by taking the diversion rate and expanding it out as if the well pumped 24 hours a day 365 days a year, unless that was the actual quantity of water put to beneficial use. The State Engineer finds it is extremely rare for any well to operate under the conditions of constant pumping 24 hours a day, 365 days a year, at the maximum diversion rate authorized.

¹² W.A. Hutchins, *Water Rights Law in the Nineteen Western States*, U.S. Dept. of Agriculture, Vol. 1 at 10 (1971); *Union Mill & Min. Co. v. Dangberg*, 81 Fed. 73, 97 (D.Nev. 1897).

III.

In order to determine the annual duty under these proofs, the State Engineer in the following estimates finds he gave every benefit to the applicant. The intent of the estimates set forth below is to determine the possible upper limit of the total annual duty of water that would have been used to fill steam engines and maintain the facilities at Carp and Rox, Nevada.

Proof 04366 with a priority date of 1904 is for the Carp well and Proof 04367 with a priority date of 1925 is for the Rox well. The railroad stops at Carp and Rox, Nevada, were points along the Los Angeles & Salt Lake Railroad Company's (Union Pacific Railroad's) line known as the Salt Lake Route.¹³

As the Salt Lake Route took shape, division points were established and regular train and engine crew districts were set up for freight and passenger runs. On the east end of the line, freight crews ran between Salt Lake City and Lynn(dyl), Utah, by way of Tintic - a distance of 118 miles; from Lynn(dyl) to Milford (89 miles), from Milford to Caliente (125 miles) and from Caliente to Las Vegas (125 miles).

* * *

A regular helper district was established out of Caliente covering over 82 miles of 1.55 percent maximum grades between St. George (Carp) on the west and Uvada on the east over the 5,992-foot summit at Crestline, Nevada.¹⁴

On April 27, 1921, the Union Pacific Railroad purchased the remaining capital stock and bonds in the Los Angeles & Salt Lake Railroad; and thus, became joint owners with the Oregon Short Line of the Los Angeles & Salt Lake Railroad (LA&SL).¹⁵ Thereafter, the

¹³ J.R. Signor, *The Los Angeles and Salt Lake Railroad Company, Union Pacific's Historic Salt Lake Route*, Golden West Books, San Marino, California, 1988.

¹⁴ *Id.* at 42.

¹⁵ *Id.* at 87.

Company laid plans to develop and exploit the full potential of the Salt Lake Route.¹⁶ In 1923, a new employee clubhouse was built at Caliente for train and engine crews, and all remaining wood lined tunnels between Caliente and Crestline, Nevada were enlarged and concreted with six of the tunnels between Stine (which is west of Caliente) and Islen (which is east of Caliente) widened enough to accept double track.¹⁷ "During the summer of 1924, continuing improvements to the track and structures of the LA&SL had allowed the Union Pacific to cut the running time of the *Los Angeles Limited* between Salt Lake City and Los Angeles to 24 hours and 45 minutes."¹⁸

In sharp contrast to the lean Depression years, in 1940, a boom in the economy, brought on by the war in Europe, began to affect tonnage figures over the Union Pacific line into Southern California. In fact, a modest recovery had been underway since 1938, when a longshoreman strike had closed the Panama Canal. But when war was declared against Japan in December 1941, the defense buildup shifted to the Pacific theater and the LA&SL tonnage figures skyrocketed. During the first quarter of 1942, traffic handled over the LA&SL was 35.5 percent greater than during the same period of 1941 and over 60.5 percent greater than the first three months of 1940. Factors contributing to this surge in business were the great Kaiser steel mill at Fontana, California, and the Colorado Fuel & Iron mill at Provo, Utah. The world's largest basic magnesium plant was located at Royson (later Henderson), just outside of Las Vegas, to take advantage of the enormous amount of energy being generated at Hoover Dam.¹⁹

In the 1940's, the Union Pacific was developing its Centralized Traffic Control system (CTC). "Throughout the fall of 1943 and on into 1944 signal crews worked feverishly across

¹⁶ Ibid.

¹⁷ Id. at 98.

¹⁸ Id. at 110.

¹⁹ Id. at 128.

Nevada. Gradually the eastern limit of CTC was pushed to Moapa, later Elgin and finally, early in 1945 to the yard limits of Caliente."²⁰ "By early summer 1943, the entire 171-mile second subdivision [from Yermo to Kelso, California] was under the control of the CTC dispatcher at Las Vegas."²¹ "The railroad was now able to handle 40 percent more business with the same number of crews and engines."²²

The State Engineer recognizes that using figures from World War II is a relatively long time past the priority dates of these non-statutory water rights. However, based on the fact that it appears a recovery of the railroad had been underway since 1938, the State Engineer finds he will assume the World War II steam traffic returned to levels that had been seen in earlier years.

IV.

By the summer of 1951 diesel engines had arrived and the use of steam engines or helpers declined. "The last steam helper, OSL No. 5317, a 2-10-2, worked light east to Yermo on October 24, 1951."²³ "Thus, even though the diesels were now in command of virtually all through freight and passenger runs, for a time steam still filled in on yard, local and helper assignments at Caliente. When Caliente's yards and shops were closed in 1949, the remaining LA&SL steam operations shifted to Utah, with the Provo shops providing maintenance."²⁴

In the end, steam centered around Provo handling primarily transfer and yard assignments. The handwriting was on the wall, however, when in October 1951 UP announced plans to phase out the Provo shops

²⁰ Id. at 149.

²¹ Id. at 148.

²² Id. at 148.

²³ Id. at 162.

²⁴ Id. at 162.

and erect a \$5.6 million diesel repair shop at Salt Lake City. Just exactly when steam was withdrawn from the Provo subdivision is unclear. One dispatcher recalled ordering an 800 series Northern out of Provo on a Salt Lake City drag in December 1957! This, if correct, would place total dieselization of "all lines south and west of Salt Lake City" nearly ten years behind Ashby's optimistic prediction of 1946. Nevertheless, dieselization of the LA&SL main line did come about earlier and more rapidly than most other railroad lines in the country.

The diesel locomotive affected operations in many ways. The traditional water stop, a troublesome necessity of the steam age, became a thing of the past. Stops for fuel were also drastically reduced. The freight diesels with the 1,500 gallon fuel tanks, could travel an average range of 500 miles without refueling. Operating through from Salt Lake City to Los Angeles, it was now only necessary to refuel once at Las Vegas. This resulted in many water tanks, pumping plants and fuel facilities being abandoned.²⁵

The State Engineer finds it is quite likely that relatively little water was used from either the Carp or Rox wells since the late 1950's.

V.

Carp and Rox, Nevada are located between Moapa and Leith, Nevada.

The power and breaking capabilities of the road freight diesels affected no other LA&SL terminal as quickly and drastically as Caliente, Nevada. East from Moapa, at an elevation of 1,671 feet, the UP main line ascends steadily for 110 miles through Caliente to the 5,992-foot summit at Crestline - the gateway to the flat barren high country of southwestern Utah. Although one of the longest sustained climbs in the country, helper grades of 1.5 percent or greater were confined to the 78.5 miles between Carp and Crestline.²⁶

Crestline is east of Caliente near the Utah border. The distance between Las Vegas and Caliente is approximately 125

²⁵ Id. at 165.

²⁶ Id. at 166.

miles, and Las Vegas to Moapa is approximately 48 miles.²⁷ Las Vegas sits at an elevation of 2,034 feet above sea level, and Moapa at an elevation of 1,671; however, at Apex the train climbed over elevations of 2,465 feet. The distance between Moapa and Rox is approximately 15 miles with Rox sitting at an elevation of 1,913 feet above sea level.²⁸ From Rox the train climbs 688 feet in elevation over the approximately 21-mile climb to Carp. Carp sits at an elevation of 2,601 and finally the train climbs 1,695 feet over approximately 40 miles to Caliente, which sits at an elevation of 4,296 feet above sea level²⁹

In the days of steam, the roundhouse and yards at Caliente had grown to provide employment for nearly 2,500 men, surpassing even Las Vegas in importance, primarily because of the terminal's strategic location midway in the 78.5-mile Carp to Crestline helper district. At times as many as 14 "Salt Lake" helper assignments were bulletined east out of Caliente, and a like number of "LA" helpers west. Everything from 2700 series Consolidations through the massive SA-C class 2-8-0's were used.

Dispatched west out of Caliente, light helpers would turn on the wye at Leith, then drop further downgrade to Carp in reverse, where they would cut into eastbound tonnage. At Caliente, one or two additional helpers would cut into the train. Usually the Carp helper, having assisted the train through several short stretches of 2.0 percent grade above Minto, would cut out upon reaching Islen.³⁰

The State Engineer finds that at the height of steam traffic possibly 14 light helpers were bulletined daily west out of Caliente and dispatched downgrade to Carp where they cut into eastbound trains assisting those trains uphill to Islen.

²⁷ Id. at 42, 114.

²⁸ Id. at 114, 237.

²⁹ Id. at 114, 237.

³⁰ Id. at 169.

VI.

In estimating train traffic for Carp and Rox, the State Engineer made use of available and comparative reference material. Since some of the material used required comparison to other trains in like situations, assumptions are made in order to be able to use available reference material. The State Engineer assumes the Union Pacific Railroad used similar sizes of steam engines operating from Carp to Caliente, Nevada, as those used by the Southern Pacific Railroad operating from Colfax to Emigrant Gap, California.³¹ This assumption is made because the mainline distance from Carp to Caliente is about 40 miles with an average uphill grade of approximately 0.79% and some grades of 1.5% or greater,³² and the mainline distance from Colfax to Emigrant Gap is about 29 miles with an average uphill grade of 1.81%.³³

Later models of Southern Pacific Railroad steam engines made water stops at Colfax and Emigrant Gap when traveling eastbound on the uphill grade, a 29-mile run. When traveling westbound on the mostly downhill grade, water stops were made at Truckee and Roseville, California; a distance of approximately 100 miles, noting that from Truckee to Donner Summit approximately 15 miles is uphill and the other 85 miles is downhill to Roseville.³⁴ The

³¹ J. Signor, *The Los Angeles and Salt Lake Railroad Company, Union Pacific's Historic Salt Lake Route*, Golden West Books, San Marino, California at 162 provides a table of the rating of the locomotives in freight service between Moapa and Caliente.

³² *Id.* at 114, 166, 169, 237.

³³ J.R. Signor, *Donner Pass, Southern Pacific's Sierra Crossing*, Golden West Books, San Marino, California, p. 30 (1985); D. Duke, *Southern Pacific Steam Locomotives, A Pictorial Anthology of Western Railroading*, Golden West Books, San Marino, California, p. 58 (1962).

³⁴ J.R. Signor, *Donner Pass, Southern Pacific's Sierra Crossing*, Golden West Books, San Marino, California, pp. 30, 155 (1985).

Southern Pacific's average uphill grade from Colfax to Emigrant Gap is more than twice the Union Pacific's average uphill grade from Carp to Caliente; therefore, for the same train size an uphill distance of greater than 29 miles between water stops is reasonable for later model Union Pacific steam engines, and a much greater distance between water stops is reasonable for a downhill run.

The State Engineer finds it is reasonable to compare similar Union Pacific and Southern Pacific operations in estimating the use of water by steam engines.

VII.

Downhill run from Caliente to Las Vegas.

Normally, freight crews ran from Milford, Utah, to Caliente, Nevada, with another crew running from Caliente to Las Vegas, Nevada.³⁵ Therefore, one can assume there were crew changes at Caliente, Nevada, and during those crew changes the engine tenders were refilled, if necessary. Since Caliente was a station of origin, it was assumed that the engine tenders were filled to maximum capacity. Since the grade from Caliente to Moapa is a relatively steep downhill grade, a westbound train would probably be braking on this run and not pulling; therefore, the engine would be consuming the least amount of water.³⁶ Since the distance from Caliente to Carp is approximately 40 miles and from Carp to Rox is approximately 21 miles, it was assumed the west bound trains would probably pass Carp and Rox without "taking on water" at these stations. Therefore, the State Engineer finds no water

³⁵ J.R. Signor, *The Los Angeles and Salt Lake Railroad Company, Union Pacific's Historic Salt Lake Route*, Golden West Books, San Marino, California, p. 42 (1988).

³⁶ Downhill operation of a steam engine probably consumed 20% of the water required for normal operation. Discussion on April 15, 2003, with Christopher deWitt, Supervisor of Railroad Restoration, Nevada State Railroad Museum.

was found to be beneficially used by engines on the downhill run at either Carp or Rox.

VIII.

Uphill run from Las Vegas to Caliente.

For the Carp well, since the helper engines were dispatched to Carp to assist in the uphill climb to Caliente, it was assumed that the helper engines were filled at Caliente and refilled at Carp. Even though the helper engines were most likely not empty from the downhill portion of the run to get to Carp, the State Engineer is going to assume they were empty.

For the Rox well, the State Engineer is going to make the assumption that the train engine tenders were empty since the previous water stops and were filled to make the 61-mile trip to Caliente. While they may have had additional water added at Carp, as found below, all the water authorized by the diversion rate decreed at the Carp well is being determined to have been placed to beneficial use; therefore, that additional water would have to be counted against that supplied by the surface water source, as discussed below. The State Engineer finds for purposes of the quantification of the water used at the Rox and Carp wells that 14 train engines a day were filled at the Rox well and 14 helper engines were filled at the Carp well to assist the trains on the climb to Caliente.

IX.

Engine tender capacities.

For this estimate, it was assumed the larger size steam engines were used as train engines, because these engines could pull more cars, and these engines were of similar size as those used by the Southern Pacific Railroad between Colfax and Emigrant Gap.

Tender capacities for the Southern Pacific steam engines varied from 12,000 to 22,000 gallons.³⁷ Various types and sizes of

³⁷ D. Duke, *Southern Pacific Steam Locomotives, A Pictorial*

Union Pacific steam engines were used as helpers, and tender capacities for the Union Pacific steam engines varied from 15,000 to 25,000 gallons.³⁸ The State Engineer assumes 20,000 gallons as a reasonable average figure for the helper engine tender capacity, and 25,000 gallons for train engine tender capacity.³⁹

Therefore, the State Engineer finds that, for the purpose of the calculation of the quantities of water used, the assumed capacity for helper engines is 20,000 gallons and for train engines is 25,000 gallons.

X.

If 14 train engines per day maximum were going eastbound at 25,000 gallons per engine 365 days per year the maximum quantity of water that would have been required to fill the engines would have been 127.75 million gallons annually or 392.05 acre-feet annually. Adding another 5.00 acre-feet annually for the maintenance of way at Rox⁴⁰ and another 2.02 acre-feet annually for other industrial or domestic uses at Rox the total quantity of water placed to beneficial use at Rox was 399.07 acre-feet annually. The State Engineer finds the maximum quantity of water placed to beneficial use under Proof 04367 was 399.07 acre-feet annually.

Anthology of Western Railroading, Golden West Books, San Marino, California, pp. 35, 47, 65, 72 (1962) and L.H. Westcott, *Steam Locomotives*, Kalmbach Publication, p. 177.

³⁸ *Locomotive Cyclopedia of American Practice, Definitions and Typical Illustrations of Railroad and Industrial Locomotives, Their Parts and Equipment; also Locomotives Built in America for Operation in Foreign Countries*, Eleventh Edition - 1941, Compiled and Edited for the Association of American Railroads - Mechanical Division, Simmons-Boardman Publishing Company, N.Y., N.Y.

³⁹ J.R. Signor, *Donner Pass, Southern Pacific's Sierra Crossing*, Golden West Books, San Marino, California, p. 169 (1985).

⁴⁰ Discussion on May 16, 2003, with Greg L. Pinker, Manager Real Estate Special Projects, Union Pacific Railroad Company.

If 14 helper engines per day maximum were being dispatched westbound out of Caliente to assist with the eastbound climb from Carp to Caliente at 20,000 gallons per engine 365 days per year, the maximum quantity of water that would have been required to fill the engines would have been 102.2 million gallons annually or 313.64 acre-feet annually.

The Meadow Valley Wash Decree established a diversion rate at Carp of 0.25 cfs, which is approximately 113 gallons per minute. The Decree also provides for a diversion rate at Carp from a surface water source, i.e., water is diverted from Meadow Valley Wash and Clover Creek and conveyed by pipeline to the Carp Station.⁴¹ Proof 01129 provides for a diversion rate of 0.25 cfs or 113 gallons per minute. If the Carp well were pumped 24 hours per day at the authorized diversion rate it would have yielded 180.99 acre-feet annually. Adding to that the 180.99 acre-feet annually from the surface water source the two sources would have totaled 361.98 acre-feet annually.

The State Engineer notes that the helper engines dispatched to Carp were probably not empty as they had come 40 miles downhill; however, giving the benefit of the doubt to the proof claimant, the maximum amount of water that could have been required to fill the helper engines was 102.2 million gallons annually or 313.64 acre-feet annually. Add to this 5.00 acre-feet annually for maintenance of way, and 2.02 acre-feet for other industrial and domestic use at Carp, the total maximum quantity of water required at Carp would have been 320.66 acre-feet annually.

Since the maximum amount of water that could have been pumped at the Carp well if it were pumped 24 hours per day 365 days per year at the authorized diversion rate is 180.99 acre-feet annually, the State Engineer finds the maximum quantity of water that could have been placed to beneficial use under Proof 04366

⁴¹ See Proof 01129.

was 180.99 acre-feet annually, since the surface water source may not have been continually available.

XI.

The estimated total combined consumption for the helper and train engines, maintenance of way, and other industrial and domestic uses at Carp and Rox is 719.73 acre-feet annually. However, due to the limitation of the diversion rate at the Carp well, the State Engineer finds the estimated total combined consumption from the Carp and Rox wells was 580.06 acre-feet annually.

XII.

The MVWD protested these applications on the ground that if the applications were granted they would have an adverse effect upon and therefore conflict with prior rights of the protestant. The MVWD does not hold any water rights in the Lower Meadow Valley Wash Hydrographic Basin. The MVWD does have pending applications in the Lower Meadow Valley Wash Hydrographic Basin;⁴² however, if permits were granted under these applications, with 1997 priority dates they would be junior to the water rights held by the applicant. The MVWD did not specify any particular water rights that may be adversely affected. The State Engineer finds this protest claim lacks merit.

XIII.

The MVWD protested the applications on the ground the groundwater basin in which the applications seek ground water is fully appropriated; therefore, there is no water available for appropriation. The State Engineer finds these applications involved decreed water rights, which represents water that is already appropriated within the Lower Meadow Valley Wash Hydrographic Basin; therefore, the protest claim lacks merit.

⁴² Applications 63379, 63380 and 63381.

XIV.

The MVWD protested the applications on the ground that the underlying claimed water rights, that is Proofs of Appropriation 04366 and 04367, are forfeited and/or abandoned, because the water rights have not been placed to beneficial use for railroad purposes for many years longer than five consecutive years. By lodging these protests, the MVWD indicated that it was petitioning the State Engineer to schedule an administrative hearing on the issue of forfeiture and/or abandonment for Proofs of Appropriation 04366 and 04367.

The State Engineer notes that historical research identified above indicates that these wells and their use as pumping stations was abandoned by the railroad in the 1950's when dieselization of the railroad took place. The issue of forfeiture and/or abandonment of at least a portion of these water rights probably should have been raised during the adjudication process. However, it was not and these water rights were decreed on June 9, 1999. Therefore, the State Engineer finds that five consecutive years of non-use has not run from the date of the decree and the filing of these applications on April 18, 2001.

XV.

The MVWD protested these applications on the ground that the granting of the applications, in light of the above allegations, would definitely prove detrimental to the public interest. The State Engineer finds he has overruled the other protest claims; therefore, this one does warrant consideration.

XVI.

In the Union Pacific Railroad's response to the MVWD's protests, it indicated that the Railroad by filing the change applications is applying to change the manner of use under the proofs of appropriation from railroad and domestic to industrial.

The Railroad, through continued use of a portion of the water rights for railroad purposes and eventual transfer of the

remaining portion of the water right to Vidler Water Company, intends to use the water beneficially for commercial purposes. Union Pacific indicated, in this case, it is likely that the Vidler water would be used for much needed power production in Southern Nevada.

The Railroad filed the Change Applications to facilitate Vidler's intentions to use the water in connection with power generation or similarly intense industrial uses.

* * *

Here, the Change Applications are being made in conjunction with the proposed sale of the water rights to Vidler Water Company. Vidler fully intends to put the water to beneficial use and has demonstrated the ability to do so. In any event, the existing Change Applications represent only an interim step in the process and the District will have every opportunity to be heard when the owner seeks to change the place of use to the selected location(s).⁴³

The State Engineer finds that change applications are not granted for the mere sale of water to another entity for some unknown project. The purchaser is not the applicant under these applications and there is no evidence of any specific project by which the water will be placed to beneficial use. Nevada Revised Statute § 533.335 provides that an application for a permit must state the purpose for which an application is made and a description of the proposed works, an estimated cost of the proposed works and the time required to construct the works and estimated time required to complete the application of the water to beneficial use. While these items are identified in the applications, if the applicant does not even know what the use of the water will be, it appears these items as identified in the application are not based on actual knowledge. Nevada Revised

⁴³ File Nos. 67435 and 67437, official records in the Office of the State Engineer, pp. 3-4.

Statute § 533.345 provides that a change application must contain such information as may be necessary to a full understanding of the proposed change.

The State Engineer finds that the response to the protests indicates that these requirements have not been met. The applicant does not intend to use the water for some specifically identifiable project, but rather, merely intends to sell much of the water to another entity for some unknown future project. It is the applicant that must demonstrate the water will be placed to beneficial use and that it has a reasonable expectation to place that water to beneficial use in a reasonable time period.

CONCLUSION

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁴⁴

II.

The State Engineer is prohibited by law from granting a permit under a change application to appropriate the public waters where:⁴⁵

- 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 it would threaten to prove detrimental to the public interest to grant a change application

⁴⁴ NRS chapters 533 and 534.

⁴⁵ NRS § 533.370(3).

for merely the ability to sell the water to another entity for some unknown project of which the public has no notice.

RULING

The protests to change Applications 67435 and 67436 are hereby overruled and Applications 67435 and 67436 are denied on the grounds that granting permits on change applications for the mere ability to sell the water to another entity for some unknown project would threaten to prove detrimental to the public interest.

Respectfully submitted,



HUGH RICCI, P.E.
State Engineer

HR/SJT/jm

Dated this 13th day
of June, 2003.