

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

IN THE MATTER OF APPLICATION 54077 AND)  
APPLICATION 58591 FILED TO APPROPRIATE)  
THE WATERS OF THE VIRGIN RIVER AND )  
APPLICATION 57643 FILED TO CHANGE THE )  
POINT OF DIVERSION OF THE WATERS OF )  
THE VIRGIN RIVER HERETOFORE REQUESTED )  
UNDER APPLICATION 54077, VIRGIN RIVER )  
VALLEY, CLARK COUNTY, NEVADA. )

RULING

4151

GENERAL

I.

Application 54077 was filed on October 17, 1989 by the Las Vegas Valley Water District to appropriate 500 c.f.s. of water from the Virgin River. The proposed point of diversion is described as being within the NE¼ NW¼ of Section 13, T.14S., R.69E., M.D.B.&M. The proposed manner and place of use is for municipal and domestic purposes within Lincoln, Nye, White Pine and Clark Counties.<sup>1</sup> The application was later assigned to the Southern Nevada Water Authority.

II.

Application 57643 was filed on May 8, 1992 by the Las Vegas Valley Water District to change the point of diversion of the waters of the Virgin River heretofore requested for appropriation under Application 54077. The proposed point of diversion is described as being within the SW¼ NE¼ of Section 32, T.14S., R.69E., M.D.B.&M. The existing point of diversion was within the NE¼ NW¼ of Section 13, T.14S., R.69E., M.D.B.&M. The proposed manner and place of use is for municipal and domestic purposes within Lincoln, Nye, White Pine and Clark Counties.<sup>2</sup> The application was later assigned to the Southern Nevada Water

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<sup>1</sup> Public record in the office of the State Engineer under Application 54077.

<sup>2</sup> Public record in the office of the State Engineer under Application 57643.

Authority.

III.

Application 58591 was filed on March 9, 1993 by the Southern Nevada Water Authority to appropriate 700 c.f.s. of water from the Virgin River. The proposed point of diversion is described as being within the SW¼ NE¼ of Section 32, T.14S., R.69E., M.D.B.&M. The proposed manner and place of use is for municipal and domestic purposes within Clark County.<sup>3</sup>

IV.

Application 54077 was timely protested by the City of Caliente, Bunkerville Irrigation, Co., Bunkerville Water Users Association, Mesquite Farmstead Water Association, Mesquite Irrigation Co., Moapa Band of Paiute Indians, County of White Pine and City of Ely, U.S. Fish and Wildlife Service, Nye County, Las Vegas Fly Fishing Club, Lincoln County, John and Eunes Lonetti, U.S.D.I.-Bureau of Land Management, Nevada Outdoor Recreation Association and the Town of Pahrump.<sup>4</sup>

Application 57643 was timely protested by Nevada Outdoor Recreation Association, U.S. National Park Service, U.S. Fish and Wildlife Service, City of Mesquite and Citizen Alert.<sup>4</sup>

Application No. 58591 was timely protested by Colorado River Board of California, U.S.D.I., Bureau of Land Management, Bunkerville Irrigation Co., U.S. Fish and Wildlife Service, Southern Utah Wilderness Alliance, Citizen Alert, U.S. National Park Service and the Mesquite Farmstead Water Association.<sup>4</sup>

V.

The State Engineer held a public hearing<sup>5</sup> beginning January

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<sup>3</sup> Public record in the office of the State Engineer under Application 58591.

<sup>4</sup> NRS 533.365 allows any interested party to protest an application within 30 days of the last date of public notice.

<sup>5</sup> States Exhibit 8, Public Administrative Hearing January 10-12, 1994. See also Transcript Public Administrative Hearing Vol. I - Vol. III.

10, 1994 and ending January 12, 1994, wherein, the applicant presented evidence and testimony in support of the applications and protestants were given an opportunity to present evidence and testimony in support of their protests. A time was set aside for the general public to comment for the record.

VI.

The Bureau of Land Management was a protestant with standing in Application 54077 and 58591. The National Park Service was a protestant with standing in Application No. 57643 and 58591. The U.S. Fish and Wildlife Service was a protestant with standing in all three of the subject applications. The Bureau of Indian Affairs petitioned to intervene, which was granted, on behalf of all of the Indian Tribes in Southern Nevada. The Solicitor for the U.S. Department of the Interior on behalf of all four Interior Agencies reached agreement with the applicant by stipulation.<sup>6</sup> Therefore, the United States did not actively participate in the evidentiary hearing.

VII.

Counsel for the applicant and Alan Jones representing the Bunkerville Irrigation Company stated at the beginning of the hearing<sup>7</sup> that they had reached an agreement and that the protest of Bunkerville Irrigation Company should be considered withdrawn. The State Engineer received a Stipulated Settlement dated January 20, 1994 along with cover letter dated February 7, 1994 confirming that the protest is withdrawn based on certain conditions.<sup>8</sup>

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<sup>6</sup> States Exhibit 25, Stipulated Settlement of Issues with U.S. Department of the Interior dated November 23, 1993, Public Administrative Hearing January 10-12, 1994.

<sup>7</sup> Transcript of Public Administrative Hearing January 10-12, 1994, Vol I pg. 16.

<sup>8</sup> See letter dated February 7, 1994 and Agreement dated January 20, 1994, in each file 54077, 57643 and 58591, public record in the office of the State Engineer.

VIII.

Numerous parties petitioned the State Engineer to intervene with full standing in the matter of the subject applications. The State Engineer received petitions from the Bureau of Indian Affairs, the Duckwater Shoshone Tribe, the Las Vegas Paiute Tribe, the City of Mesquite and the Las Vegas Fly Fishing Club.<sup>9</sup>

Nevada law provides for a very specific method by which applications are published<sup>10</sup> and by which interested parties may protest an application<sup>11</sup>. The State Engineer does not take lightly the Legislature's intent for proper public notice and, likewise does not take lightly the need for interested parties to read the legal notices for protesting through the statutory process. The U.S. Bureau of Indian Affairs attempted to file timely protests but were late, appearing after business hours on the last day for protesting. Additionally, the Bureau of Indian Affairs has trust responsibility to protect the interests of the various Indian tribes granted in Federal law. Therefore, the Bureau of Indian Affairs was granted intervention in a pre-hearing conference as an indispensable party,<sup>12</sup> and because it did not cause any undue delays or add substantially to the burden of the applicant.

The protest period for Application 54077 was during June and July of 1990. The protest period for change Application 57643 was during June and July 1992 and the protest period for the additional appropriation 58591 was during May 1993.

The petitions to intervene filed by the Duckwater Shoshone Tribe and the Las Vegas Paiute Tribe filed March 13, 1992 and April 10, 1992 respectively, were denied for being filed two years after

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<sup>9</sup> Public record in the office of the State Engineer under Application 53947.

<sup>10</sup> NRS 533.360.

<sup>11</sup> NRS 533.365.

<sup>12</sup> Transcript pg. 112, of Pre-Hearing Conference dated March 18, 1992.

the statutory protest period for Application 54077 and that neither protested the change of that application (57643) nor the additional appropriation (58591).<sup>13</sup> They were, however, given an opportunity to make a statement into the record during the public comment period but failed to take advantage of the opportunity.

**IX.**

On August 26, 1991 the State Engineer issued an Interim Ruling<sup>14</sup> on motions and petition wherein certain criteria had to be accomplished prior to the evidentiary hearing. Two of the requirements were that a list of exhibits be exchanged 60 days prior to the hearing, and a list of witnesses along with a summary of their testimony be exchanged 30 days before the hearing. The applicant complied with the order, however, with the exception of Nye County, none of the protestants complied. Nye County supplied one exhibit and the name of one witness. The one exhibit was later withdrawn and the one witness never appeared to testify. Citizen Alert made an occasional appearance to cross examine witnesses of the applicant, but offered no evidence or testimony to support their protest. They did, however, participate in the public comment portion of the hearing. Therefore, the record in this proceeding is lacking any evidence or testimony in support of the protests. The following findings are based solely on evidence and testimony provided by the applicant, records and expertise in the State Engineer's office and the protests filed against the individual applications.

**FINDINGS OF FACT**

**I.**

The National Park Service, U.S. Fish & Wildlife Service, and Citizen Alert protested change Application 57643 on the grounds that it is invalid because it seeks to change an application and

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<sup>13</sup> States Exhibit 10C and 11B, Public Administrative Hearing January 10-12, 1994.

<sup>14</sup> States Exhibit 4, Public Administrative Hearing, January 10-12, 1994.

not a permit.<sup>15</sup> The State Engineer finds that Nevada Law allows changes in point of diversion, place of use and manner of use<sup>16</sup> of water already appropriated. The State Engineer held hearings on Applications 54077, 57643, and 58591, of which 54077 and 58591 seek to appropriate water. Change Application 57643 seeks only to change the point of diversion of Application 54077. Application 54077 must meet the criteria outlined in NRS 533.370 before it can mature into an appropriation (be issued a permit) and before Application 57643 can be considered. The State Engineer, however, finds nothing in Nevada Law that prevents him from acting on the application to appropriate the water (54077) and then acting on the change application (57643).

## II.

Nye County, Lincoln County, White Pine County, City of Ely, City of Caliente, Moapa Band of Paiute Indians, John and Eunes Lonetti and Nevada Outdoor Recreation Association protested Application 54077 and the Bureau of Land Management protested 54077 and 58591 on the grounds that the applicant failed to provide the protestants relevant information as required in NRS 533.363. The State Engineer conducted a series of informational briefings in Clark, Lincoln, Nye and White Pine Counties from April 22, 1991 through April 25, 1991.<sup>17</sup> In addition, the State Engineer conducted a pre-hearing conference on January 28, 1991 and status conferences on September 17, 1991, March 18, 1992, August 13, 1992 (Pre-Hearing Status Conference) and August 3, 1993 (Pre-Hearing

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<sup>15</sup> See protests to Application 57643, public record in the office of The State Engineer.

<sup>16</sup> NRS 533.325 was further clarified when the 1993 Legislature passed Assembly Bill 337 (now NRS 533.324) to include permits.

<sup>17</sup> State's Exhibit 2, Public Administrative Hearing January 10-12, 1994.

Conference).<sup>18</sup> Additionally, the State Engineer issued an Interim Ruling<sup>19</sup> on August 26, 1991, mandating the exchange of information, and the exchange of lists of witnesses and exhibits. The State Engineer finds that the protestants were given full opportunity to understand the scope of and purpose for the project.

### III.

Most of the protests include the statement, "The undersigned additionally incorporates by reference as though fully set forth herein and adopts as its own, each and every other protest to this Application, Application No. 54077 and/or any application that is associated with the combined appropriations for the Cooperative Water Project and filed pursuant to N.R.S. 533.365." The State Engineer finds this to be a ridiculous statement and does not constitute grounds for denial. The protestant could not have possibly known the content of all other protests. Furthermore, the State Engineer finds that Nevada Water Law requires the protestant to set forth, with specificity, the grounds of the protest.<sup>20</sup> Therefore, the State Engineer discards this portion of the protest for noncompliance with Nevada Water Law.

### IV.

Many of the protests to the above referenced applications are duplicates of protests to the groundwater applications filed by the same applicant at the time of filing Application 54077. The concerns expressed dealt with lowering of water tables, drying up of springs, loss of critical habitat for wildlife and livestock grazing and water quality degradation due to over pumping. The State Engineer finds that all of the applications that are the subject of this ruling deal with the appropriation or change of

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<sup>18</sup> State's Exhibits 1, 3, 5, 6, 7, Public Administrative Hearing January 10-12, 1994.

<sup>19</sup> State's Exhibit No. 4, Public Administrative Hearing January 10-12, 1994.

<sup>20</sup> NRS 533.365(1) requires the protestant to... "set forth with reasonable certainty the grounds of such protest."

appropriation on the Virgin River. Concerns over water level declines, mining groundwater and drying of springs etc., are inappropriate grounds for protest on the subject applications. Therefore, the State Engineer finds that the protests that deal with groundwater development are inapplicable and are dismissed.

V.

The Virgin River has its headwaters in the Dixie National Forest north and east of Zion National Park in Utah<sup>21</sup>. It flows southwesterly toward St. George, Utah and picks up several tributary springs and streams, including the Santa Clara River<sup>22</sup>. The Virgin River crosses the Utah-Arizona stateline, picks up Beaver Dam Wash as a tributary and passes the stream gage at Littlefield, Arizona<sup>23</sup>. This gage is the basis for many of the studies and evidence in this contested case. The Virgin River then flows southwesterly and enters Nevada at Mesquite<sup>24</sup>. In addition to irrigation, municipal and other uses of the Virgin River in the upstream states, the Virgin River supplies water for irrigation to the Mesquite and Bunkerville Irrigation Companies in Nevada<sup>25</sup>. The Virgin River passes through Riverside, Nevada, turns southerly and continues on and becomes tributary to the Colorado River in Lake Mead. Both the Bunkerville and Mesquite Irrigation Companies were protestants and have standing in these proceedings. The

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<sup>21</sup> Figure 3-2 location map, Virgin River Basin, Utah State Water Plan August 1993 pp.3-5.

<sup>22</sup> Public record in the office of the State Engineer.

<sup>23</sup> Nevada, and most western states, have a cooperative funding agreement with the U.S. Geological Survey to measure the surface waters within these states.

<sup>24</sup> Applicants Exhibit No. 7, Public Administrative Hearing, January 10-12, 1994.

<sup>25</sup> States Exhibit No. 24, Public Administrative Hearing, January 10-12, 1994, lists all rights of record to Virgin River water in Nevada including the adjudicated (decreed) rights of the Mesquite and Bunkerville Irrigation Companies.



Bunkerville Irrigation Company withdrew its protest by stipulation dated January 20, 1994 under certain conditions and neither supplied evidence or testimony to support their protests.

Nonetheless, the Nevada State Engineer is bound by law to protect all existing water rights in Nevada. The State Engineer finds that the proposed point of diversion lies downstream of all other uses on the Virgin River with the exception of some wetland and instream uses. The State Engineer further finds that since the point of diversion is downstream from all other water rights, it will not impair the value nor interfere with existing rights. Additionally, the applicant studied three different diversion scenarios bypassing 10 cubic feet per second (cfs), 25 cfs and 45 cfs and leaving that water in stream to flow into Lake Mead<sup>26</sup>. All scenarios proposed to divert Virgin River water from October of each year through May of the following year, letting the entire summer flow continue on to Lake Mead. The State Engineer finds that 17,000 acre-feet annually (AFA) are required for phreatophyte growth downstream of the point of diversion<sup>26</sup>. The State Engineer further finds that in each of the bypass/spill scenarios, sufficient water will be available for the wetlands downstream of the proposed point of diversion and water will be available for in stream uses.

## VI.

The Littlefield, Arizona, United States Geological Survey gage on the Virgin River has measured the flow of the Virgin River from October 1929 to present<sup>27</sup>. There was a gage near Riverside, Nevada for seven of those years<sup>28</sup>. The applicant performed a linear

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<sup>26</sup> Applicants Exhibit No. 3, pp. ES-5, Public Administrative Hearing, January 10-12, 1994.

<sup>27</sup> See U.S.G.S. gage (09415000) Virgin River at Littlefield Arizona period of record (1929 to current); Water Resources Data, Water Year 1993.

<sup>28</sup> Applicants Exhibit No. 7 (2 of 3) pp. 3, Public Administrative Hearing, January 10-12, 1994.

regression, comparing the flows near the proposed point of diversion with those at the Littlefield gage. Then, by computer simulation, the applicant generated a 62 year record of flows at the point of diversion of application 57643 and 58591<sup>29</sup>. A proposal to divert up to 700 cfs from October 1st each year to May 30th the following year and by passing 10 cfs, 25 cfs and 45 cfs for instream uses, yielded at the proposed point of diversion an annual average of 99,499 AFA, 92,618 AFA and 83,419 AFA, respectively. The maximum amount of water that could have been historically diverted under the diversion scenario, and a bypass of 25 cfs, was 201,119 AFA in 1983 and a low of 40,522 AFA in 1963<sup>29</sup>. In order to dampen the supply in years of plenty with years of drought, the applicant proposes to build a reservoir to store 113,000 AFA in Halfway Wash, near the point of diversion, transport it to the Las Vegas Valley, blend it with supplies from the Colorado River, and artificially recharge any excess water into the Las Vegas groundwater basin<sup>30</sup>. There is no evidence or testimony that shows anything other than unappropriated water at the proposed point of diversion. Therefore, the State Engineer finds that there is unappropriated water in the Virgin River at the proposed location in sufficient quantity to grant the subject applications.

#### VII.

Nye County, Lincoln County, White Pine County and City of Ely, the City of Caliente, the Las Vegas Valley Fly Fishing Club, John and Eunes Lonetti, U.S. Fish & Wildlife Service, Unincorporated Town of Pahrump, and Moapa Band of Paiute Indians protested Applications 54077, generally on the grounds that water developed in the rural counties for importation into Las Vegas Valley would damage the rural counties economically, biologically, aesthetically

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<sup>29</sup> Applicants Exhibit No. 7 (2 of 3) pp. 3, Public Administrative Hearing, January 10-12, 1994.

<sup>30</sup> Testimony of Terry Katzer, Las Vegas Valley Water District, transcript of Public Administrative Hearing, January 10-12, 1994.

and otherwise. Mesquite Farmstead Water Users Association, U.S. Fish & Wildlife Service, Bureau of Land Management, National Park Service, Citizen Alert, Southern Utah Wilderness Alliance, protested Application 58591 generally on the same grounds.<sup>31</sup> The State Engineer finds that the points of diversion of the above referenced applications are entirely in Clark County and the place of use includes all four counties. The State Engineer further finds that any economic impact due to the diversion of the water will likely be in the near vicinity of Mesquite and Bunkerville. The proposal calls for less water in the Virgin River from October through May but the project includes off stream storage in Halfway Wash of 113,000 acre feet and backwater behind the diversion structure of 100 acres. There could only be a positive economic impact for aesthetic and recreation purposes. The place of use described in the applications includes the Counties of Clark, Lincoln, Nye and White Pine. If, in fact, any water is transported to the three rural counties there would be a positive economic impact; if not the State Engineer can find no evidence that there would be a negative impact. The State Engineer can find no rationale or reason and certainly no evidence or testimony to show a biologic or aesthetic impact to the rural counties by diversion and use of Virgin River water.

#### VIII.

One of the criteria on which the State Engineer has to base his decision is whether the project represented in the applications and change application, threatens to prove detrimental to the public interest.<sup>32</sup> The State Engineer indicated in the prehearing conference<sup>33</sup> that the public interest criteria includes but is not

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<sup>31</sup> Protests in files 54077 and 58591, public record in the office of the State Engineer.

<sup>32</sup> NRS 533.370(3).

<sup>33</sup> Transcript of prehearing conference pp. 103-106, January 28, 1991.

limited to:

1. Why the applicant needs the water.
2. How the applicant will finance the project.
3. How water conservation of their existing supplies is integrated into their overall water management plan.

Additionally City of Caliente, Mesquite Farmstead Water Association, Unincorporated Town of Pahrump, John and Eunes Lonetti, White Pine County and City of Ely, and Nye County, protested Applications 54077 and 58591 in part on the grounds that it would lock-up the water resources for possible use in the distant future beyond current planning horizons.

The applicant produced several witnesses<sup>34</sup> and reports<sup>35</sup> to address these issues. Testimony indicates that the growth in Las Vegas Valley as determined by consultants and University of Nevada Las Vegas will consume all existing supplies by very early in the next century.<sup>36</sup> The protestants produced no witness or rebuttal witnesses to show that this evidence is anything other than true and complete. The State Engineer finds that the applicant desperately needs to supplement its Colorado River water and groundwater resources by the next decade. The State Engineer further finds that the applicant proposes a reasonable plan to finance the project. Additionally, the State Engineer finds that the applicant has shown a diligent effort in extending their existing supplies through pricing, leak detection, water waste ordinances and public education and, where possible, water features

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<sup>34</sup> See testimony of Patricia Mulroy, David Donnelly, Larry Brown, Dr. Thomas Carroll and Cary Casey, Public Administrative Hearing, January 10-12, 1994.

<sup>35</sup> See Applicant's Exhibits 4, 5 and 6, Public Administrative Hearing, January 10-12, 1994.

<sup>36</sup> See testimony of David Donnelly, transcript of Public Administrative Hearing Volume I, pp. 50-127, January 10-12, 1994.

are being replaced with nonpotable sources.

IX.

Nevada Outdoor Recreation Association, Mesquite Farmstead Water Association, Moapa Band of Paiute Indians, White Pine County and City of Ely, U.S. Fish and Wildlife Service, Nye County, Las Vegas Fly Fishing Club, Lincoln County, John and Eunes Lonetti, U.S.D.I. - Bureau of Land Management, Unincorporated Town of Pahrump, City of Mesquite, Citizen Alert and Southern Utah Wilderness Alliance protested one or more of the above referenced applications generally on the grounds that the project would impact endangered species, wetlands and air quality that the applicant has no access or right of way across Federal and/or Indian lands, and that the applicant has not completed an Environmental Impact Statement (E.I.S.) in compliance with the National Environmental Policy Act (NEPA).<sup>37</sup> The applicant entered into a stipulated settlement with the Solicitor for the U.S. Department of the Interior's agencies, which stated that they would comply with all federal, state and local laws and cooperate with and complete all necessary studies to comply with those laws.<sup>38</sup> In addition, the State Engineer required the applicant to address aquatic, wildlife, wetlands and cultural issues<sup>39</sup> associated with a Virgin River diversion which resulted in the applicant producing an Environmental Report on the Virgin River diversion and transmission facilities.<sup>40</sup> The State Engineer conducted two prior hearings on the work to be accomplished addressing environmental impacts; one for a scope of work and, one for a progress report. Testimony

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<sup>37</sup> See Applications 54077 and 58591, Public Administrative Hearing, January 10-12, 1994.

<sup>38</sup> State's Exhibit 25, Public Administrative Hearing January 10-12, 1994.

<sup>39</sup> State's Exhibit 9A, 9B, 9C, Public Administrative Hearing January 10-12, 1994.

<sup>40</sup> Applicant's Exhibit 3, Public Administrative Hearing January 10-12, 1994.

indicates that there were seven major disciplines represented on the environmental team.<sup>41</sup> The work included assessments of threatened and endangered plants, threatened and endangered fishes, wetlands, salinity and cultural resources. Their research found no Virgin River Chub, Woundfin Minnow, Spinedace or Colorado Sucker below the proposed point of diversion of the project. The potential does exist for threatened or endangered plants to be located in the project area, however, none have been found to date.

A survey sent to the Native Americans was never returned to the environmental team but there are no known cultural resources in the project area.<sup>42</sup> The protestants that were not represented by the Solicitor for the Department of the Interior agencies offered no testimony or evidence to support their protests. The State Engineer finds that there is nothing in the record that would threaten to prove detrimental to the public interest from an environmental standpoint.

In order to minimize the impacts on wetlands, the applicant studied different diversion scenarios. They are now proposing to bypass all of the Virgin River from June through September. In addition, they studied bypass of 10 cfs, 25 cfs and 45 cfs,<sup>42</sup> during the months of October through May of each year. A decision will be made at a later date as to which scenario will maximize the yield of the Virgin River and at the same time minimize the impacts on wetlands and riparian vegetation.

The State Engineer finds that at least a reconnaissance review of the environmental impacts yields nothing that would prevent the approval of these applications. Further study will have to be performed as part of the Environmental Impact Statement in connection with the Federal process pursuant to the stipulation

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<sup>41</sup> See Testimony of Dr. Philip Davis, transcript of Public Administrative Hearing Volume I, pp. 129-191, January 10-12, 1994.

<sup>42</sup> Applicants Exhibit 3, Public Administrative Hearing January 10-12, 1994.

between the applicant and the Solicitor for the Federal agencies.

**X.**

Nye County, Lincoln County, White Pine County and City of Ely, City of Caliente, John and Eunes Lonetti, Nevada Outdoor Recreation Association and Unincorporated Town of Pahrump, protested Application 54077 on the grounds that the applicant did not have the financial capability to develop and complete the project<sup>43</sup>.

The applicant produced a witness<sup>44</sup> to testify as to the project financing and a report on financing alternatives.<sup>45</sup> Two different scenarios were evaluated; one illustrating a combination of connection fees and water rates to repay the debt and second, that 100% of the debt would be paid by connection charges. In either scenario, connection charges would be collected prior to construction when water is committed. With scenario one, water rates within the Southern Nevada Water System remain some of the lowest in the nation for major cities.<sup>46</sup> Under scenario two, although high, connection charges would not be the highest in the nation amongst major cities. The State Engineer finds that even if the entire debt were paid by connection fees of \$4300, this remains insignificant compared to the total cost of a new home. Commercial use and high density housing would be comparatively the same. The State Engineer further finds that the applicant has the ability to bond for the debt and that the debt is affordable and can be repaid.

**XI.**

Nye County, Lincoln County, White Pine County and City of Ely, and City of Caliente, Moapa Band of Paiute Indians, Las Vegas Fly Fishing Club, Nevada Outdoor Recreation Association and

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<sup>43</sup> See protests in file 54077, public records in the office of the State Engineer.

<sup>44</sup> See testimony of Cary Casey, transcript volume II, pp. 320-368, Public Administrative Hearing, January 10-12, 1994.

<sup>45</sup> Applicant's Exhibit 5, Public Administrative Hearing, January 10-12, 1994.

Unincorporated Town of Pahrump protested Application 54077 and Mesquite Farmstead Water Association protested 58591, in part on the grounds that Las Vegas has no comprehensive plan, wastes water and could meet growth demands through better conservation. Additionally, Nye County, Lincoln County, White Pine County and City of Ely, and City of Caliente, Moapa Band of Paiute Indians, Las Vegas Fly Fishing Club, Nevada Outdoor Recreation Association, Unincorporated Town of Pahrump, and Mesquite Farmstead Water Association, believe that demand is based on improper growth projections.<sup>46</sup> The applicant submitted evidence<sup>47</sup> that the Las Vegas Valley Water District has undertaken some water conservation measures since the 1950's but has been more aggressive since 1990. Testimony indicates that the other water purveyors that make up the Southern Nevada Water Authority have similar programs<sup>48</sup>. Their conservation plan is composed of education programs, a desert demonstration project, pricing incentives, research, leak detection and enforcement. In addition, the State Engineer has records to indicate that some of the water features in the Las Vegas Valley are being converted to non-potable shallow groundwater.<sup>49</sup> Additionally, the applicant contracted with Planning and Management Consultants, Ltd. to develop a forecast model capable of evaluating the effectiveness of potential conservation measures. This is better known as the "WRMI" process. They projected supply and

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<sup>46</sup> See protests to Applications 54077 and 58591. Public records in the office of the State Engineer.

<sup>47</sup> Applicant's Exhibit 4, Public Administrative Hearing, January 10-12, 1994.

<sup>48</sup> Testimony of Larry Brown, Transcript of Public Administrative Hearing, January 10-12, 1994, Vol. II, pp. 200-262.

<sup>49</sup> See Permits 56617 through 56644, in the name of Atlandia Design & Furnishings, Inc. and The Mirage Casino-Hotel to convert the water features at the Mirage & Treasure Island to shallow groundwater. Thereby lessening the demand on potable Colorado River and deep aquifer groundwater. Public record in the office of the State Engineer.



demand to the year 2030 with and without conservation.

The protestants offered no evidence or testimony that either the demand projections are inaccurate nor that the conservation measures will be ineffective. The State Engineer finds that the applicant has a definite and immediate need for the water and that water from the proposed project will be integrated into water saved through continued conservation efforts to meet the future demand.

### XII.

Application 54077 was protested by one or more of the protestants generally on the grounds that Las Vegas wastes water and has not utilized wastewater reuse.

As to the waste of water, the Las Vegas Valley Water District has adopted strict ordinances against waste. They have created a conservation "Awareness Patrol" to investigate waste complaints. They have established a conservation hotline to help the general public answer conservation questions and they received 3427 calls during 1992. They have initiated a "Home Water Survey" to audit home water use and will supply, free of charge, retrofit devices to help individuals conserve water<sup>50</sup>. The State Engineer finds that the Las Vegas Valley Water District, which represents 80% of the total water served in the Las Vegas Valley, has made a major effort to eliminate waste.<sup>51</sup>

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<sup>50</sup> Applicant's Exhibits 2 and 4, Public Administrative Hearing January 10-12, 1994, pp. 4-8.

<sup>51</sup> Testimony of Larry Brown, Transcript of Public Administrative Hearing, January 10-12, 1994, Vol. II, pp. 200-262.

Unlike many parts of the west, wastewater reuse is not a viable conservation measure for Las Vegas. Nevada's allocation from the Colorado River is 300,000 AFA consumptive use<sup>52</sup>. Treated effluent from sewage treatment plants returns to Lake Mead via Las Vegas Wash for a "return flow credit." Nevada will eventually be able to divert about 460,000 AFA from the Colorado River based on this return flow credit since it has not all been consumptively used. The diversion in 1993 at the Robert B. Griffith Water Project for Southern Nevada Water Authority was 295,120 acre feet. In 1993 the return flow was 126,753 AFA through Las Vegas Wash as calculated by the Bureau of Reclamation's return flow credit formula. Therefore, the consumptive use for the Las Vegas Valley was 168,367 AFA. The total Nevada diversion in 1993 including diversion for Laughlin and all other Nevada uses was 335,561 AFA with a return flow of 131,159 AFA for a total consumptive use 204,402 AFA.<sup>53</sup> The State Engineer finds that wastewater reuse is not an option for expanding the use of current supplies. One hundred percent of the sewage effluent that originated as Colorado River water is effectively reused by return flow credit and additional Colorado River diversion.

**XIII.**

Nye County protested Application 54077 in part on the grounds that the State Engineer is, by statute, a member of the Environmental Commission. Nye County claims the Environmental Commission has the duty to prevent, abate and control air quality in the Las Vegas Basin. They state that the State Engineer should deny the application because more water means more growth which means more pollution. The State Engineer finds that it is true that he is one member of an 11 member State Environmental

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<sup>52</sup> Arizona v. California 376 U.S. 340 (1964).

<sup>53</sup> Compilation of records in accordance with Article V of the Decree of the Supreme Court of the United States in Arizona v. California dated March 9, 1964.

Commission<sup>54</sup>. The State Engineer further finds that the State Environmental Commission is not the enforcement arm of State Government charged with air quality in Clark County. The State Environmental Commission is the policy setting, rule and regulation-making and appellate body for the Division of Environmental Protection. In the case of Clark County, the Division of Environmental Protection has delegated all air pollution matters except power plant licensing to the Clark County Health Department. The State Engineer finds that he, as administrative head of the Division of Water Resources, is far removed from air quality management for the Las Vegas Basin.

**XIV.**

Nye County protested Application 54077, in part, on the grounds that the State Engineer should not approve the application or be influenced by the application if the purpose was to serve condominiums and lots already approved by the State Engineer.<sup>55</sup> Nye County offered absolutely no evidence or testimony that would indicate that the applicant did not have water to serve new development in 1989, when the hearings were held, or today.<sup>56</sup> The State Engineer finds that the Las Vegas Valley Water District did, in fact, have water available for subdivisions in 1989, 1992 and today.<sup>57</sup>

**XV.**

Nye County protested 54077 and Mesquite Farmstead Water Association protested 58591 on the grounds that the State Engineer has denied applications on the same source. A search of the State

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<sup>54</sup> NRS 445.451.

<sup>55</sup> The State Engineer certifies water availability in his approval of subdivisions pursuant to NRS 278.377.

<sup>56</sup> See transcript of Public Administrative Hearing, January 10-12, 1994, where Nye County offered no witnesses or no exhibits to support this theory.

<sup>57</sup> Public record in the office of the State Engineer.

Engineer's records reveals that applications for Virgin River water have been denied. Further investigations reveals that one was denied because it was filed for irrigation in connection with a Desert Land Entry and the application for public land was withdrawn.<sup>58</sup> Two applications were denied because the statutory permit fees were not paid.<sup>59</sup> Several applications were denied because the applicant failed to supply additional information, pursuant to NRS 533.375.<sup>60</sup> The State Engineer could find no application(s) that represented a viable project or where the proposed use could withstand large fluctuations in flow that was ever denied. Additionally, the majority of the unappropriated water occurs during the winter months and no applications were denied that seek to appropriate this water. The State Engineer finds that this project is viable and has the ability to put to beneficial use, the unappropriated flow of the Virgin River.

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action and determination.<sup>61</sup>

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<sup>58</sup> See File 16645, public record in the office of the State Engineer.

<sup>59</sup> See Files 6064 and 6892, public records in the office of the State Engineer.

<sup>60</sup> See Files 7834, 8866 and 28142, public records in the office of the State Engineer.

<sup>61</sup> NRS Chapter 533.

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where:<sup>62</sup>

- A. There is no unappropriated water at the proposed source, or
- B. The proposed use conflicts with existing rights, or
- C. The proposed use threatens to prove detrimental to the public interest.

III.

There is uncontroverted evidence in the record that the Virgin River yields water in excess of the existing water rights before emptying in Lake Mead. The record reflects a great deal of variation in the flow of the Virgin River between wet years and dry years as well as seasonal variation between the months of normal precipitation and the dry summer months. The applicant purposes an off stream reservoir that is capable of storing 113,000 AFA to dampen these variations. Based on a diversion scenario of 700 cfs between October and May of each year, the State Engineer concludes that as much as 205,730 AFA and as little as 30,838 AFA could have been appropriated for beneficial use over the past 60 years of recorded flow depending on the year and whether they bypass 10 cfs, 25 cfs or 45 cfs. The State Engineer further concludes that there is unappropriated water.

IV.

There is uncontroverted testimony in the record that the Virgin River becomes very salty during times of low flow, however, the record also reflects a salinity during the wetter months that can be blended with existing water resources to meet the safe drinking water standards. The State Engineer concludes that the quality of the Virgin River is suitable for diversion and beneficial use as a municipal supply.

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<sup>62</sup> NRS Chapter 533.370(3).

V.

The record reflects that diversions for the Bunkerville Irrigation Company and Mesquite Irrigation Company fall upstream of the diversion proposed in these applications. The State Engineer's records reflect no other water rights to the Virgin River below the proposed point of diversion. The State Engineer concludes that this water can be appropriated for beneficial use without interfering with existing water rights.

VI.

The applicant supplied uncontested evidence that the project is feasible, that they needed the water and that they have the capability to finance the project. The applicant has the ability to bond for capital projects. Evidence shows that the debt service can be repaid with connection fees, water service fees or a combination of the two and still have rates that are reasonably compared to other western municipalities. The State Engineer concludes that the project is economically feasible as well as hydrologically feasible. Evidence shows that there are very few alternatives available to the applicant to supply additional resources to meet the growth in the Las Vegas Valley, and that without additional resources there would be a tremendous economic impact on Las Vegas Valley and the State of Nevada. The State Engineer concludes that it is in the public interest to supplement the existing water resources for the Las Vegas Metropolitan area in order for the continued economic vitality of the region and the state as a whole.

VII.

A number of the protests dealt with waste of water by the applicant, wastewater reuse or lack thereof and that the growth could be served by conservation. There is undisputed evidence in the record that the Metropolitan area of Las Vegas has made great strides in their conservation effort. Further, total wastewater reuse is not an option to meet the growth in Las Vegas Valley. All sewage is returned to Lake Mead to allow additional diversions of

Colorado River water. Therefore, additional supplies are not realized from wastewater reuse. With water features being converted to polluted groundwater, the per capita use in Las Vegas Valley is not that far different from other southwest cities when taking into account tourist days and climate. The State Engineer concludes that there is no wholesale waste of water in Las Vegas Valley and that while the conservation effort is effective, and will get better, conservation cannot be considered a long term water supply option for the Las Vegas Valley.

**RULING**

The protests to Applications 54077, 58591 and change Application 57643 are hereby overruled and said applications are hereby approved subject to:

1. Payment to statutory fees.
2. The stipulation between the applicant and the United States.
3. The stipulation between the applicant and Bunkerville Irrigation Company.
4. The decreed, permitted and certificated water rights on the source.
5. Further study to determine the exact amount of water that can be diverted and placed to beneficial use but shall in all cases be limited to 700 cubic feet per second not to exceed 190,000 acre feet annually.

Respectfully submitted,

  
R. MICHAEL TURNIPSEED, P. E.  
State Engineer

RMT/pm

Dated this 10th day of  
NOVEMBER, 1994.