

QA: NA

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

MOL.20090324.0117

IN THE MATTER OF PROTESTED )  
APPLICATIONS 72787, 72788, 72789, 72790, )  
72791, 72792, 72793, 72794, 72795, 72796 AND )  
72797 FILED TO CHANGE THE POINT OF )  
DIVERSION AND PLACE OF USE OF )  
UNDERGROUND WATER PREVIOUSLY )  
APPROPRIATED UNDER PERMIT 53950, )  
PERMIT 53951, PERMIT 54060, PERMIT 54062, )  
PERMIT 54066, PERMIT 54068 AND PERMIT )  
54069, WITHIN THE THREE LAKES VALLEY- )  
SOUTHERN PART, HYDROGRAPHIC BASIN )  
(211), CLARK COUNTY, NEVADA. )

RULING

# 5621

GENERAL

I.

Application 72787 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 6.0 cubic feet per second (cfs) of underground water previously appropriated under Permit 53950. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in Nevada Revised Statute (NRS) § 243.035. The proposed point of diversion is described as being located within the SW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 12, T.16S., R.56E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 30, T.12S., R.61E., M.D.B.&M., within the Tikapoo Valley - Southern Part Hydrographic Basin (169B).<sup>1</sup>

II.

Application 72788 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 10.0 cfs of underground water previously appropriated under Permit 53951. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the SW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 12, T.16S., R.56E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as

<sup>1</sup> File No. 72787, official records in the Office of the State Engineer.

being located within the SE¼ NE¼ of Section 29, T.11S., R.61E., M.D.B.&M., within the Tikapoo Valley - Southern Part Hydrographic Basin (169B).<sup>2</sup>

III.

Application 72789 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 6.0 cfs of underground water previously appropriated under Permit 54068. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the SE¼ NE¼ of Section 12, T.16S., R.56E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NW¼ NE¼ of Section 32, T.13S., R.59E., M.D.B.&M., within the Three Lakes Valley - Northern Part Hydrographic Basin (168).<sup>3</sup>

IV.

Application 72790 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 10.0 cfs of underground water previously appropriated under Permit 54069. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the SE¼ NE¼ of Section 12, T.16S., R.56E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NE¼ NW¼ of Section 3, T.14S., R.59E., M.D.B.&M., within the Three Lakes Valley - Northern Part Hydrographic Basin (168).<sup>4</sup>

V.

Application 72791 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 6.0 cfs, not to exceed 1,700 acre-feet annually, of underground water previously appropriated under Permit 54060. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the SE¼ NE¼ of Section 12, T.16S., R.56E.,

<sup>2</sup> File No. 72788, official records in the Office of the State Engineer.

<sup>3</sup> File No. 72789, official records in the Office of the State Engineer.

<sup>4</sup> File No. 72790, official records in the Office of the State Engineer.

M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the SW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 13, T.13S., R.58E., M.D.B.&M., within the Three Lakes Valley - Northern Part Hydrographic Basin (168).<sup>5</sup>

#### VI.

Application 72792 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 2.0 cfs, a portion of underground water previously appropriated under Permit 54062. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the NW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 13, T.16S., R.56E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 7, T.17S., R.58E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211).<sup>6</sup>

#### VII.

Application 72793 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 2.0 cfs, a portion of underground water previously appropriated under Permit 54062. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the SE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 19, T.16S., R.57E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 7, T.17S., R.58E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211).<sup>7</sup>

#### VIII.

Application 72794 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 2.0 cfs, a portion of

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<sup>5</sup> File No. 72791, official records in the Office of the State Engineer.

<sup>6</sup> File No. 72792, official records in the Office of the State Engineer.

<sup>7</sup> File No. 72793, official records in the Office of the State Engineer.

underground water previously appropriated under Permit 54062. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the SE¼ SE¼ of Section 19, T.16S., R.57E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NE¼ SW¼ of Section 7, T.17S., R.58E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211).<sup>8</sup>

IX.

Application 72795 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 3.33 cfs, a portion of underground water previously appropriated under Permit 54066. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the Lot 9 of Section 34, T.16S., R.57E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NW¼ SE¼ of Section 27, T.14S., R.59E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211).<sup>9</sup>

X.

Application 72796 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 3.34 cfs, a portion of underground water previously appropriated under Permit 54066. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the NW¼ SE¼ of Section 6, T.17S., R.58E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NW¼ SE¼ of Section 27, T.14S., R.59E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211).<sup>10</sup>

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<sup>8</sup> File No. 72794, official records in the Office of the State Engineer.

<sup>9</sup> File No. 72795, official records in the Office of the State Engineer.

<sup>10</sup> File No. 72796, official records in the Office of the State Engineer.

**XI.**

Application 72797 was filed on May 17, 2005, by the Southern Nevada Water Authority to change the point of diversion and place of use of 3.33 cfs, a portion of underground water previously appropriated under Permit 54066. The water is to be used for municipal and domestic purposes. The proposed place of use is all of Clark County as defined in NRS § 243.035. The proposed point of diversion is described as being located within the NE¼ NW¼ of Section 8, T.17S., R.58E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211). The existing point of diversion is described as being located within the NW¼ SE¼ of Section 27, T.14S., R.59E., M.D.B.&M., within the Three Lakes Valley - Southern Part Hydrographic Basin (211).<sup>11</sup>

**XII.**

Applications 72787, 72788, 72789, 72790, 72791, 72792, 72793, 72794, 72795, 72796 and 72797 were timely protested by the following entities:<sup>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11</sup>

Brauer Living Trust (72795, 72796, 72797)

Indian Springs Civic Association (72787 through 72797, inclusive)

Jo Anne Garrett (72787)

Nevada Department of Corrections (72787 through 72794, inclusive)

Russell D. Highfield (72789, 72790, 72791, 72793 through 72797, inclusive)

Sierra Club – Toiyabe Chapter (72787 through 72794, inclusive)

United States Air Force - Nellis Air Force Base (72787 through 72797, inclusive)

United States Department of Energy (72787 through 72797, inclusive)

United States Department of Interior, Fish and Wildlife Service (72787 through 72797, inclusive)

United States Department of Interior, National Park Service (72787 through 72797, inclusive)

**XIII.**

The protests of the Brauer Living Trust and Indian Springs Civic Association are hereby summarized as follows:

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<sup>11</sup> File No. 72797, official records in the Office of the State Engineer.

1. The Southern Nevada Water Authority (SNWA) requests 8,018 acre-feet annually from Three Lakes Valley South (211), which is in excess of the maximum 2,618 acre-feet annually allowed in State Engineer's Ruling No. 5465.
2. SNWA has other applications for appropriations of water in Three Lakes Valley South (211) that have not been heard by the State Engineer. These other applications should be rejected before considering the current applications.
3. The applications will have an adverse impact on water right holders in Indian Springs Valley Basin (161) and the community of Indian Springs, Creech AFB, and Cactus Springs. The applications will essentially eliminate inflow to Indian Springs Valley and will cause a broad lowering of the water table.
4. The proposed points of diversion of many of these applications are near the Indian Springs Valley Basin (161) and in close proximity to one another. Pumping at these locations may cause a drawdown cone and cause a water flow gradient, which will pull water from Indian Springs.
5. The points of diversion will be moved from north of the Las Vegas shear zone to south of the shear zone allowing the impacts of pumping to propagate quicker to points south of the shear zone.
6. Mitigation will not protect affected water rights and senior and domestic water rights could be adversely affected for many years.
7. Downstream basins that would be affected by these applications are already over-appropriated, therefore it is essential that inflow to Indian Springs Valley Basin not be impacted or eliminated.
8. The applications propose to remove groundwater flow before it reaches the Indian Springs Valley Basin, a part of the Death Valley Flow System, endangering regional springs and geological features, which support federally protected flora and fauna thereby, threatening to prove detrimental to the public interest.

9. The public interest is not served by removing groundwater to support unsustainable growth in the Las Vegas Valley. There is no effective indoor conservation of water. Reducing consumption by some users to promote consumption by other users is not conservation. Importation of rural ground water to the detriment of rural residents to promote urban growth is an abuse of public interest.
10. The applications may adversely affect the public interest of nearby communities and result in environmental damage, loss of lifestyle choice, loss of historical continuity or economic hardship.

#### XIV.

The protest of Jo Anne Garrett is summarized as follows:

1. The protest/hearing process is unfair to individuals and small organizations due to initial and subsequent costs. The State Engineer should provide adequate assistance to protestants equal to that provided by the SNWA in completing and pursuing their applications.
2. The fee required to file a protest is a denial of due process, right to petition the government, and equal protection under the law, and the protestant cannot afford an attorney, hydrologist or court reporter expenses.
3. The inter-basin transfer of underground water rights should never be allowed, nor should the exportation of water from one basin to another for a variety of hydrological, biological, technical and socio-economic reasons.

#### XV.

The protest of the Nevada Department of Corrections is hereby summarized as follows:

1. Proposed action conflicts with our existing water rights.

#### XVI.

The protest of Russell D. Highfield is hereby summarized as follows:

Loss of historic spring, loss of Indian Springs, loss of ground water and quality of life, etc.

**XVII.**

The protest of the Sierra Club – Toiyabe Chapter is hereby summarized as follows:

1. State Engineer's Ruling No. 5465 provided for pumping 8,905 acre-feet annually from 4 basins – Three Lakes North and South and Tikapoo North and South. In seeking to change ground water from 3 basins into 1 basin and increase the quantity of water pumped and exported from a single basin, the applications exceed the 2,618 acre-feet annually the State Engineer allowed for appropriation in Three Lakes Valley South.
2. Application 72791 piece-meals the application process and puts an undue burden on Protestants who must defend existing rights and Application 72791 should be included during the review of Applications 72787-72790 and 72792-72797.
3. The SNWA has other applications for appropriations of water in Three Lakes Valley South, Tikapoo and Indian Springs basins yet to be heard and if not rejected, they should be considered in aggregate with the subject applications. The State Engineer should end the extra appropriations hanging over senior water right owners and end the speculation about availability of ground water.
4. The proposed changes in point of diversion could have a serious deleterious effect on State and Federally recognized protected and rare species reliant on spring discharges.
5. Senior water rights could be adversely impacted and nearby basins are over-allocated.
6. SNWA does not have an indoor conservation program and cannot demonstrate the amount of water being conserved through its outdoor conservation program.
7. The certainty of continuous water supply for a municipal use must be extremely high and it would threaten to prove detrimental to the public interest to allow growth to be dependent on a resource where the SNWA will not be in a position to stop pumping if impacts are shown.
8. A decision to allow groundwater pumping and export to Las Vegas growth does not have a high degree of scientific certainty that impacts will not negatively impact Nevada's endemic wildlife.

**XVIII.**

The protests of the United States Air Force - Nellis Air Force Base, United States Department of Energy, United States Department of Interior, Fish and Wildlife Service and United States Department of Interior, National Park Service were withdrawn prior to the administrative hearing.

**XIX.**

After all parties were duly noticed by certified mail,<sup>12</sup> a public administrative hearing was held on November 28, 29 and 30, 2005, regarding protested Applications 72787 through 72797, inclusive, in Carson City, Nevada, before representatives of the Office of the State Engineer.

**FINDINGS OF FACT**

**I.**

The State Engineer finds that the only Protestants who appeared at the public administrative hearing and presented testimony and evidence in support of their protest claims were the Indian Springs Civic Association and the Sierra Club-Toiyabe Chapter with a consolidated case and the Nevada Department of Corrections. Russell D. Highfield and Jo Anne Garrett did not appear at the hearing and did not present any testimony or evidence in support of their protest claims. The Brauer Living Trust did not present an evidentiary case but rather chose to present only public comment.

For the Protestants that did not present a case, their protest claims will be evaluated based on the information provided on the protest form and where the evidence indicates or the State Engineer believes the protest raises meritorious issues those claims will be addressed below. The protests of the Federal agencies were withdrawn in conjunction with a stipulation between themselves and the Applicant.<sup>13</sup> It should be noted that the State Engineer was not a signatory to the stipulation and the stipulation is binding only upon the participating parties and is not binding on the State Engineer.

**II.**

Any person interested may, within 30 days from the date of last publication of the notice of application, file with the State Engineer a written protest against the granting of

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<sup>12</sup> Exhibit No. 1 and Transcript, public administrative hearing before the State Engineer, November 28, 29 and 30, 2005, (hereafter "Transcript" and "Exhibits").

<sup>13</sup> Exhibit No. 92.

the application, setting forth with reasonable certainty the grounds of such protest, which shall be verified by the affidavit of the protestant, his agent or attorney.<sup>14</sup> A nominal filing fee of \$25 must accompany the protest.<sup>15</sup> The State Engineer shall consider the protest, and may, at his discretion, hold a hearing.<sup>16</sup> A protestant has the right to representation by an attorney or other agent at the hearing, but representation is not a requirement and it is not uncommon to have protestants represent themselves at hearings before the State Engineer.

Proceedings at a hearing on protested applications are reported by a certified court reporter and the costs associated with the recordation of the hearing are borne by the applicant and the protestants. The applicant and protestants bear pro rata, based on the percentage of the transcript taken up by their own case, the fees of the court reporter for reporting and transcribing the portion of the transcript taken up by their respective cases.<sup>17</sup> If the protestant chooses not to put on an evidentiary case or otherwise participate in the hearing, the protestant is not charged any fee for the court reporter.

Travel can also be a significant expense for participants in a hearing. The State Engineer's office attempts to minimize this cost as much as practicable. In this case, the hearing was held in Carson City, Nevada, at the Legislative building, but arrangements were made to allow for video conferencing in Las Vegas. A number of individuals took advantage of this option and participated in the hearing through public comment via the video conferencing in Las Vegas. The hearing was also broadcast live over the Internet for those members of the public unable to travel to Las Vegas or Carson City.

One Protestant claimed that there has been a denial of due process and equal protection under the law due to the cost associated with the protest and subsequent hearing process. As an individual, the Protestant states that she does not have the financial resources to protest each application, hire an attorney and expert witnesses, or pay court reporter expenses.<sup>18</sup>

The State Engineer finds the State Legislature has provided the format through which the public can protest and participate in the hearing process. It can require money

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<sup>14</sup> NRS § 533.365.

<sup>15</sup> NRS § 533.435.

<sup>16</sup> NRS § 533.365.

<sup>17</sup> NAC § 533.220.

<sup>18</sup> Exhibit No. 14.

if an attorney and expert witnesses are hired and to pay for the court reporter, but that is the reality of the hearing process. It should be noted that responding to a protest costs the applicant similar expenses, in addition to having to wait for a decision on its application until such time as the protest is resolved.

The constitutional guarantee of equal protection of the laws means that no person or class of persons is denied the same protection of the laws enjoyed by other persons or other classes in like circumstances. The equal protection of the laws of a state means its courts or hearing process is open to all on the same conditions. Due process of law implies the right of the person affected thereby to be present before the tribunal, which pronounces judgments upon the question of life, liberty or property to be heard.

The State Engineer finds the Protestants in this matter were treated no differently than any other protestant and were provided notice and opportunity to be heard in accordance to the protest procedures set forth by the Nevada State Legislature.

### III.

Protestant Garrett raised the issue that an interbasin transfer of underground water should never be allowed. Nevada water law provides for the interbasin transfer of underground water provided the applicant meets all of the necessary criteria found in the Nevada Revised Statutes, including but not limited to NRS §§ 533.370(5) and (6). The State Engineer finds that Nevada water law provides for the interbasin transfer of ground water; therefore, the protest claim is dismissed.

### IV.

Permits 53950, 53951, 54060, 54062, 54066, 54068 and 54069 were issued under State Engineer's Ruling No. 5465 and Ruling No. 5533.<sup>19</sup> These permits were granted for an interbasin transfer of water. An interbasin transfer of water is where the point of diversion is in one hydrographic basin and the place of use is in a different hydrographic basin. The term interbasin transfer does not apply to changes of point of diversion from one hydrographic basin to another.

Criteria that must be considered prior to the approval of an application for an interbasin transfer of water are found in Nevada Revised Statute § 533.370(6) and provide that:

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<sup>19</sup> State Engineer's Ruling No. 5465, dated January 4, 2005, and State Engineer's Ruling No. 5533, dated September 26, 2005, official records in the Office of the State Engineer.

In determining whether an application for an interbasin transfer of groundwater must be rejected pursuant to this section, the State Engineer shall consider:

- (a) Whether the applicant has justified the need to import the water from another basin;
- (b) If the State Engineer determines that a plan for conservation of water is advisable for the basin into which the water is to be imported, whether the applicant has demonstrated that such a plan has been adopted and is being effectively carried out;
- (c) Whether the proposed action is environmentally sound as it relates to the basin from which the water is exported;
- (d) Whether the proposed action is an appropriate long-term use which will not unduly limit the future growth and development in the basin from which the water is exported; and
- (e) Any other factor the State Engineer determines to be relevant.

Change Applications 72787 through 72797, inclusive; seek to change existing Permits 53950, 53951, 54060, 54062, 54066, 54068 and 54069. These change applications still seek an interbasin transfer of water but now from points of diversion all within Three Lakes Valley - Southern Part to places of use within Clark County. The State Engineer finds that Applications 72792, 72793, 72794, 72795, 72796 and 72797 seek to change existing points of diversion to new points of diversion within the same hydrographic basin, that being Three Lakes Valley - Southern Part. However, Applications 72787, 72788, 72789, 72790 and 72791 seek to change existing points of diversion from Three Lakes Valley - Northern Part and Tikapoo Valley - Southern Part to new points of diversion within Three Lakes Valley - Southern Part.

Permits 54062 and 54066 were issued for municipal purposes with the points of diversion being within Three Lakes Valley - Southern Part. The point of diversion under Permit 54062 is located along the U.S. Highway 95 corridor, approximately 30 miles northwest of Las Vegas and 12 miles southeast of the Indian Springs town site. The point of diversion under Permit 54066 is located along the Old Corn Creek Road about 25 miles north of its intersection with U.S Highway 95 or about 22 miles northeast of the Indian Springs town site.

Permits 53950 and 53951 were issued for municipal purposes with the points of diversion being located within Tikapoo Valley - Southern Part. The point of diversion of Permit 53950 is located about 6 miles east and 1 mile north of the intersection of Old Corn Creek Road and the Lincoln/Clark County line. The point of diversion of Permit

53951 is located approximately 6 miles north and 1 mile east of Permit 53950 in Lincoln County.

Permits 54060, 54068 and 54069 were issued for municipal purposes with points of diversion being located within Three Lakes Valley – Northern Part. The point of diversion of Permit 54060 is located southeast of Dog Bone Lake (Dry), about 7 miles west and 3 miles south of the intersection of Old Corn Creek Road and the Lincoln/Clark County line. The point of diversion of Permit 54068 is located about 4 miles west and 5 miles south of the intersection of Old Corn Creek Road and the Lincoln/Clark County line. The point of diversion of Permit 54069 is located about 3 miles west and 6 miles south of the intersection of Old Corn Creek Road and the Lincoln/Clark County line.

Permits 53950, 53951, 54060, 54062, 54066, 54068 and 54069 each allow water to be pumped at the described points of diversion and transferred via pipeline across basin boundaries to places of use within Clark County.

Applications 72787 through 72791 propose to change the points of diversion under Permits 53950, 53951, 54060, 54068 and 54069 to three new well locations within Three Lakes Valley – Southern Part. The proposed three points of diversion (well locations) are located along a short stretch of U.S. Highway 95 near the Three Lakes Valley – Southern Part and Indian Springs Hydrographic Basin boundary and north of the Las Vegas Valley Shear Zone (LVVSZ). It is proposed to drill the three wells into the carbonate rock aquifer.<sup>20</sup>

Applications 72792 through 72797 propose to change the points of diversion under Permits 54062 and 54066 to six new well locations within the same hydrographic basin. The six proposed points of diversion (well locations) would be located along a 10-mile stretch of U.S. Highway 95 and it is planned that the six proposed wells would be completed in the valley fill south of the LVVSZ. A transmission pipeline and related facilities would convey the water to a proposed terminus reservoir in the Las Vegas Valley.<sup>21</sup>

Permits 54062 and 54066 were issued for a total combined duty of 2,618 acre-feet annually. The total combined duty under Permits 54062 and 54066 was based on an analysis that determined the total quantity of water that can be appropriated from the

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<sup>20</sup> Exhibit No. 28, p. ES-1.

<sup>21</sup> *Ibid.*

Three Lakes Valley - Southern Part to be 4,500 acre-feet annually with existing rights totaling 1,882 acre-feet annually leaving 2,618 acre-feet annually of unappropriated water, which was appropriated in its entirety by Permits 54062 and 54066.<sup>22</sup> Applications 72792 through 72797 seek to change the entire duty under the permits, but would not result in the appropriation of any additional water and do not seek to change the manner of use or place of use of Permits 54062 and 54066.

A determination must be made regarding the effect on the interbasin transfer criteria, if any, of changes in point of diversion of Permits 54062 and 54066. A review of change Applications 72792, 72793, 72794, 72795, 72796 and 72797 and Permits 54062 and 54066, which form the basis for these change applications, indicates that approval would not contravene the interbasin transfer criteria found in NRS § 533.370(6). The State Engineer adopts and incorporates the analysis from Ruling No. 5465 regarding the interbasin transfer of these water rights.

The State Engineer finds that Applications 72792, 72793, 72794, 72795, 72796 and 72797 meet the criteria for an interbasin transfer of water from points of diversion within Three Lakes Valley - Southern Part to places of use within Clark County. The State Engineer further finds that the issue of changing points of diversion from one hydrographic basin to another hydrographic basin as proposed under change Applications 72787, 72788, 72789, 72790 and 72791 is distinct from the interbasin transfer review required under NRS § 533.370(6); therefore, Applications 72787, 72788, 72789, 72790 and 72791 will undergo further analysis in later sections.

V.

The State Engineer is prohibited from granting a permit under a change application where the proposed change will conflict with existing rights or threaten to prove detrimental to the public interest.<sup>23</sup> The impact of additional withdrawals of water from the Three Lakes Valley - Southern Part was analyzed in State Engineer's Ruling No. 5465. The State Engineer found that by limiting the appropriations to quantities equal to the natural recharge and by requiring a monitoring plan, any potential effects on existing water right holders would be minimized.<sup>24</sup>

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<sup>22</sup> State Engineer's Ruling No. 5465, p. 57.

<sup>23</sup> NRS § 533.370(5).

<sup>24</sup> State Engineer's Ruling No. 5465.

Change Applications 72792 through 72797 will be subject to the same monitoring program requirement and are still limited to a total combined duty of 2,618 acre-feet annually as provided for under base right permits 54062 and 54066. The State Engineer finds with these same limitations any potential effects on existing water right holders will also be minimized.

## VI.

Applications 72792 through 72794 propose to change the point of diversion of existing Permit 54062, which is currently situated within the Three Lakes Valley - Southern Part south of the LVVSZ, to three new points of diversion within the same hydrographic basin and also south of the LVVSZ. Applications 72795 through 72797 propose to change the point of diversion of existing Permit 54066, which is currently situated within the Three Lakes Valley - Southern Part north of the LVVSZ, to three new points of diversion within the same hydrographic basin but south of the LVVSZ. The six proposed points of diversion under Applications 72792 through 72797 are located along a 10-mile stretch of U.S. Highway 95 south of the LVVSZ within the Three Lakes Valley - Southern Part.

The Protestants argue that pumping from these proposed locations will impact existing water rights in the Three Lakes Valley - Southern Part and Indian Springs Valley Hydrographic Basins. Because Applications 72792 through 72797 propose only to change the points of diversion of existing water rights in Three Lakes Valley - Southern Part previously appropriated under Permits 54062 and 54066, the Applicant must at least demonstrate that the net effect from pumping at the proposed points of diversion relative to the existing points of diversion would not conflict with existing rights, unreasonably impact existing domestic wells or threaten to prove detrimental to the public interest. In Exhibit No. 28, the Applicant evaluated potential water-related effects due to pumping from the alluvial aquifer under Applications 72792 through 72797. In their second conceptual model, the Applicant considered the LVVSZ to be an impermeable barrier to groundwater flow in both the carbonate and alluvial aquifers.<sup>25</sup> Therefore, water-level decline south of the LVVSZ would be solely due to pumping south of the LVVSZ. Because the LVVSZ was modeled as impermeable, simulated water-level declines cannot

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<sup>25</sup> Exhibit No. 28, p. 6-9.

occur north of the shear zone due to pumping from these applications. The Applicant's quantitative analyses indicate there may be 8 to 14 feet of water-level decline in the alluvial aquifer in the Indian Springs town site and 14 to 26 feet of water-level decline in the Indian Springs Prison area due to pumping 2,618 acre-feet annually for 100 years under Applications 72792 through 72797.<sup>26</sup>

The State Engineer finds the LVVSZ has the potential to be a barrier to flow only where there is a structural offset or juxtaposition of the water-bearing horizons. Evidence offered by the Applicant indicates that the majority of movement along the shear zone occurred in the Tertiary Period between 14 and 8.5 million years ago.<sup>27</sup> On the basis of available borehole data, the alluvium in the vicinity of the proposed wells and in the vicinity of the Indian Springs Prison and Indian Springs community is believed to be Quaternary in age, less than 1.8 million years old.<sup>28</sup> This evidence suggests that the alluvial aquifer post-dates most of the displacement along the LVVSZ, and may not be structurally offset. There has probably been movement along the shear zone between 8.5 million years ago and the present time; however, the absence of any visible evidence of the structure cutting Quaternary sediments is prima facie evidence that the LVVSZ has not been active in the recent Quaternary Period and would not act as a barrier to flow in the alluvial aquifer.

The Applicant's analyses utilized image wells to account for the presence of a barrier. An image well is a virtual well used to mathematically create the effect of a flow barrier in the Applicant's Theis analyses. Without a barrier, no image wells would be necessary, predicted water-level declines would extend further north, and the simulated water-level decline in the Indian Springs town site and Indian Springs Prison area due to pumping south of the shear zone would be less, perhaps up to one half of their estimates.

The State Engineer finds that change Applications 72792 through 72797 are unlikely to cause an unreasonable drawdown in the Protestants' wells at the Indian Springs Prison or at the Indian Springs town site. The State Engineer finds that a monitoring program approved by the Office of the State Engineer is required under

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<sup>26</sup> Exhibit No. 28, p. 6-14.

<sup>27</sup> Exhibit No. 28, p. 10-6 W.R. Page et al., 2005, Geologic and Geophysical Maps of the Las Vegas 30' x 60' Quadrangle, Clark and Nye Counties, Nevada and Inyo County, California, U.S. Geological Survey Scientific Investigations Map 2814.

<sup>28</sup> Exhibit No. 28, p. 2-7.

Permits 54062 and 54066, and if any adverse effects are detected, mitigation by the Applicant may be required at the State Engineer's discretion.

## VII.

Applications 72787, 72788, 72789, 72790 and 72791 propose to change points of diversion from Three Lakes Valley - Northern Part and Tikapoo Valley - Southern Part Hydrographic Basins to points of diversion within the Three Lakes Valley - Southern Part. If approved, this would result in 5,400 acre-feet of water being pumped from Three Lakes Valley - Southern Part in excess of the quantity of unappropriated water established in State Engineer's Ruling No. 5465.

The perennial yield of a groundwater reservoir may be defined as the maximum amount of groundwater that can be salvaged each year over the long term without depleting the groundwater 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 groundwater basin and in some cases is less. 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 economic pumping lifts, land subsidence and possible reversal of groundwater gradients, which could result in significant changes in the recharge-discharge relationship.<sup>29</sup> If the perennial yield is exceeded, groundwater levels will decline and steady-state conditions will not be achieved, a situation commonly referred to as groundwater mining.

The Applicant has speculated, in part, that the perennial yield of Three Lakes Valley - Southern Part may be exceeded, as the source of water is contiguous between Tikapoo Valley - Southern Part, Three Lakes Valley - Northern Part and Three Lakes Valley - Southern Part and the source of water is part of the same flow system within the carbonate.<sup>30</sup> The Applicant indicated that pumping from carbonate wells under Applications 72787 through 72791 would eventually cause an elongated cone of depression due to groundwater flow barriers that would ultimately induce flow from Three Lakes Valley - Northern Part and Tikapoo Valley - Southern Part into Three Lakes

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<sup>29</sup> State Engineer's Ruling No. 5465, pp. 31-32.

<sup>30</sup> Transcript, pp. 310-382.

Valley – Southern Part.<sup>31</sup> This seems to conflict with information provided by the Applicant in the first Tikapoo-Three Lakes hearing. At that hearing, the Applicant indicated that it was only asking to appropriate the available perennial yield of each particular groundwater basin independent of the contributions from the underlying regional carbonate flow system.<sup>32</sup>

The Applicant utilized two conceptual models in its Theis analyses to estimate long-term water-level declines due to the proposed pumping. The first model neglected any barriers to flow and the second model incorporated impediments to flow across the LVVSZ and between the carbonate and alluvial aquifers.<sup>33</sup> Those analyses indicate a water-level decline in the Indian Springs area of less than 30 feet after 100 years of continual pumping.<sup>34</sup> The Applicant states that the water-level decline for the 100-year period would be at a rate of 0 to 0.3 feet per year.<sup>35</sup> While technically correct for the 100-year period, the rate of water-level decline is greatest in early years and slows with time. Water-level decline in the Indian Springs area after shorter periods of time was not reported, but the rate of decline might be considerably greater than 0.3 feet per year.

The Applicant accurately documented the assumptions that must be considered in using the Theis method, as well as other considerations and the method's shortcomings.<sup>36</sup> However, the Applicant used 16,000 feet squared per day as the value of transmissivity for the carbonate aquifer, which is representative of fractured to faulted carbonate rock.<sup>37</sup> The effect of using higher values of transmissivity in a Theis analysis is that the drawdown cone of depression will extend further from the pumping center but will be of lower magnitude closer to the pumping. The Applicant did not present any evidence to support aquifer hydraulic transmissivity of this magnitude throughout the simulation area. If transmissivity away from the LVVSZ is significantly lower, as might be expected in a less fractured/faulted carbonate, the effect will be to increase drawdown closer to the pumping centers.<sup>38</sup>

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<sup>31</sup> Transcript, pp. 287, 526.

<sup>32</sup> State Engineer's Ruling No. 5465, p. 26.

<sup>33</sup> Exhibit 28, p. 6-9.

<sup>34</sup> Exhibit 28, Tables 6-4 and 6-5.

<sup>35</sup> Transcript, p. 136.

<sup>36</sup> Transcript, pp. 132 – 133.

<sup>37</sup> Transcript, pp. 284-285.

<sup>38</sup> Transcript, p. 285.

In the Applicant's conceptual model number two, the LVVSZ is impermeable to flow across it, so that none of the pumpage from north of the LVVSZ under Applications 72787 through 72791 has any effect on water levels south of the LVVSZ. The Applicant cites evidence from water levels at Army 2 and Army 3 wells compared to water levels in wells TW-4 and TW-10 to support their evaluation of the LVVSZ as a barrier to groundwater flow. However, in the vicinity of the applications, there is less support for a barrier to flow as illustrated in the Indian Springs inset Figure 3-3.<sup>39</sup> If the LVVSZ is not an absolute barrier to flow in the Three Lakes Valley - Southern Part then there will be some water-level decline south of the LVVSZ due to the proposed pumping north of the LVVSZ. Water-level declines in the Indian Springs town site area could be significantly more than estimated by the Applicant's conceptual model number two.

One of the Applicant's expert witnesses testified that there is little or no flow across the boundary between Three Lakes Valley - Northern Part and Three Lakes Valley - Southern Part.<sup>40</sup> Another expert witness for the Applicant testified that water in the carbonate flows from the north to the south, i.e. toward Three Lakes Valley - Southern Part, but admitted that water could flow east to west and sufficient data supporting flow direction may never be obtained due to the lack of control data and constraints on the managed lands in regards to access.<sup>41</sup> The constraints referred to by the witness arise from the lack of access to drill test/monitoring wells necessary to obtain the data on federal lands. The federal government owns most of the land in Tikapoo Valley - Southern Part, Three Lakes Valley - Northern Part and Three Lakes Valley - Southern Part. Access to these lands is generally restricted to protect national security and sensitive lands due to the Desert National Wildlife Range and the United States Air Force's Nevada Test and Training Range. In addition, the United States Bureau of Land Management manages the central part of Three Lakes Valley - Southern Part, with the eastern half managed as part of the Red Rock Canyon National Conservation Area. The United States Forest Service, as part of the Spring Mountains National Recreation Area, manages the southern portion of Three Lakes Valley - Southern Part.

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<sup>39</sup> Exhibit No. 28, p. 3-10.

<sup>40</sup> Transcript, p. 261.

<sup>41</sup> Transcript, p. 266.

The Applicant admits there may not be sufficient data to support its theory of water flow direction.<sup>42</sup> While the current constraints of access to public lands are real, it should be noted that the Applicant had the opportunity to obtain additional data by means of a previously held special use Permit 02384, issued by the United States Fish and Wildlife Service and accepted by the Las Vegas Valley Water District on October 18, 1991.<sup>43</sup> Permit 02384 authorized the Applicant to drill, test and collect hydrologic data from up to 17 monitor wells within the Desert National Wildlife Range but for reasons unknown the Applicant did not take advantage of this opportunity. Without sufficient data, the State Engineer finds that a flow gradient is a difficult parameter to determine, and that he should recognize this uncertainty and approach proposed alternatives in the perceived flow gradient without sufficient supporting data with caution.

The Applicant's expert witness estimated that under pumping conditions a cone of depression would be created in Three Lakes Valley - Southern Part that would eventually extend into Three Lakes Valley - Northern Part and begin to capture recharge and subsurface flow from Three Lakes Valley - Northern Part. However, the time frame was estimated at 50 years for the cone of depression to begin to extend into Three Lakes Valley - Northern Part, to theoretically induce flow toward the cone of depression.<sup>44</sup> The witness was unable to answer how great a drawdown in the Indian Springs town site would be required to create a cone of depression sufficient to induce the full flow-through from Three Lakes Valley - Northern Part into the proposed wells.<sup>45</sup> It was also conceded, by the Applicant's expert witness, that the full flow-through from Three Lakes Valley - Northern Part into the proposed carbonate wells was unlikely to ever be captured by the proposed pumping in Three Lakes Valley - Southern Part.<sup>46</sup>

An expert witness for the Applicant also recognized the possibility that water could flow east from Tikapoo Valley - Southern Part into Coyote Springs Valley.<sup>47</sup> Any ground water that flows eastward from Tikapoo Valley - Southern Part into Coyote Springs Valley would not be within the Death Valley Regional flow system and such

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<sup>42</sup> *Ibid.*

<sup>43</sup> *See*, Attachment A to this Ruling.

<sup>44</sup> Transcript, pp. 286-287.

<sup>45</sup> Transcript, pp. 288-289.

<sup>46</sup> Transcript, p. 289.

<sup>47</sup> Transcript, p. 282.

water would not be available for capture by pumping in Three Lakes Valley – Southern Part. Neither would it be possible to capture an equivalent amount of water on its path to the Ash Meadows or Death Valley discharge areas. In regards to the Applicant's Theis analysis on water movement and drawdown under pumping conditions, the expert witness admitted, "the system in this area is complex. And I agree ... that Theis cannot adequately reflect all the complexities of this area nor can – nor does the regional flow model. And so we tried to develop these range of possible outcomes."<sup>48</sup>

An expert witness for the Applicant opined on the Applicant's theory of collecting flow from one hydrographic basin from a point of diversion located in a different hydrographic basin when questioned. Specifically, it was questioned how far away you can move a point of diversion from the basin of origin, i.e. could you just go anywhere in the flow system and say it doesn't make a difference? The witness responded that the new point of diversion had to be in close enough proximity that there was a reasonable chance of producing the water that they were seeking.<sup>49</sup>

The Applicant's counsel alluded to the above statements in closing arguments by proffering that the standard that should be applied, as to whether points of diversion can be changed large distances and across basin boundaries, should be where there is a reasonable expectation [chance] that the water that is sought to be captured is going to be actually captured.<sup>50</sup>

The State Engineer finds that to accept the Applicant's theory would allow for a significant over-appropriation of the Three Lakes Valley – Southern Part for decades with the uncertainty that recharge or flow would be induced from the northern basins.

The State Engineer finds that the Applicant failed to provide substantial evidence, and at times presented contradictory evidence, that the proposed carbonate wells under Applications 72787, 72788, 72789, 72790 and 72791 would capture water from Three Lakes Valley - Northern Part and Tikapoo Valley - Southern Part.

The State Engineer finds that the Applicant's proposed standard that there only needs to be a reasonable chance or expectation is unsupported in policy or law. The State Engineer finds that in Ruling No. 5465, he determined the quantity of water that could be

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<sup>48</sup> Transcript, p. 286.

<sup>49</sup> Transcript, p. 364.

<sup>50</sup> Transcript, p. 524.

appropriated out of the Three Lakes Valley – Southern Part and substantial evidence supported that decision. The State Engineer finds that creating a large cone of depression in an effort to alter ground-water flows would threaten to prove detrimental to the public interest, would conflict with existing rights, and may contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased economic pumping lifts, land subsidence and possible reversal of ground-water gradients, which could result in significant changes in the recharge-discharge relationship.

The State Engineer finds the evidence and arguments presented do not provide him with substantial evidence to support the changing of points of diversion from Three Lakes Valley – Northern Part and Tikapoo Valley – Southern Part to Three Lakes Valley – Southern Part, when Three Lakes Valley Southern Part is already fully appropriated under existing water permits and the Applicant failed to provide substantial evidence that the proposed wells would capture the same water as appropriated under Permits 53950, 53951, 54060, 54068 and 54069.

#### VIII.

The novel issue raised by the Applicant regarding changing points of diversion across hydrographic basin boundaries may be one of the most significant issues to ever be addressed by the Office of the State Engineer. Hydrographic Basin boundaries are a critical administrative tool utilized by the Office of the State Engineer in the issuance of groundwater rights in the state of Nevada. Historically, the Office of the State Engineer has not granted a change in a point of diversion from one hydrographic basin to another. In State Engineer's Ruling No. 5465, the State Engineer reiterated the long-standing policy of the Office of the State Engineer to manage groundwater basins on an individual basis. However, he indicated that management of basins on an individual basis allows for the regional consideration of available pumping sites and to regulate and minimize potential impacts. The State Engineer found that the Applicant did not provide substantial evidence to support its theory that Tikapoo Valley - Northern Part and Tikapoo Valley - Southern Part Hydrographic Basins are sub-basins to each other and found that he would not readily change hydrographic basin boundaries or combine

multiple basins into one; therefore, the request to combine Tikapoo Valley - Northern Part and Southern Part Hydrographic Basins into one hydrographic basin was denied.<sup>51</sup>

The Applicant contends that this issue would not be precedent-setting due to the unique circumstance that is presented by the land uses that exist in this setting, by the monitoring stipulation, by the proximity of these valleys to an urban setting (Las Vegas Valley), by the fact that unappropriated water is available and would not be available for use in any other way, that no priorities will be affected and that there is a reasonable chance that there is hydrologic connectivity in the basins of interest.<sup>52</sup> The Applicant presented its evidence and testimony to substantiate these unique circumstances and requested that an exception to the hydrographic basin boundaries can be made in this case, i.e. points of diversion can be changed from one hydrographic basin to another.

The circumstances presented by the land uses are not unique in that a majority of land in Nevada is managed by federal agencies and access is often limited or restricted and there are many plans before the Office of the State Engineer to import water from rural hydrographic basins that are in the proximity of urban areas. The Applicant's own expert witnesses were unable to provide any level of confidence that water could be captured from the adjacent basins without creating adverse effects and conceded that Three Lakes Valley - Southern Part was fully appropriated. The Applicant's point about the priority of water rights being unaffected is suspect because the Applicant did not consider the relative priority of existing water rights or existing domestic wells within the Indian Springs Valley Hydrographic Basin that may be affected by pumping under the proposed change applications. The issue of having a monitor plan is also not unique as it is often a requirement placed on permits issued by the State Engineer. The statement that the water may not be available for use in any other way, if the change applications are not approved, is irrelevant toward the concern of impacts to existing rights.

There are many places within the regional flow systems of southern Nevada where basins are hydrologically connected and there are places in Nevada where waters that are believed to flow into a down-gradient basin were permitted for appropriation in the down-gradient basin. However, in these cases there is strong evidence of a substantial amount of regional flow based on discharge analysis and the State Engineer

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<sup>51</sup> State Engineer's Ruling 5465, p.38.

<sup>52</sup> Transcript, pp. 526-527.

has been very cautious in approving any additional appropriations. The State Engineer does not believe it is prudent to over-pump from one basin for an extended period of time in order to induce flow from another basin because it overly stresses the aquifer system and depletes too much transitional storage. This is one of the primary reasons hydrographic basins were created and ground water is generally managed on a basin-by-basin basis, such that impacts to existing rights are minimized and adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased economic pumping lifts, land subsidence and possible reversal of groundwater gradients are prevented.

The State Engineer finds the evidence does not support the approval of Applications 72787 through 72791 and any approval of these applications would threaten to prove detrimental to the public interest.

#### IX.

Corn Creek Springs are located near the Desert Game Ranch Headquarters in Section 34, T.17S., R.59E., M.D.B.&M., within the Desert National Wildlife Range. A well near the springs provides water to a population of Pahrump Pool fish, a federally listed endangered species. The Applicant's hydrogeological report discusses the potential impact on the Corn Creek Springs area and concludes, "...the effects of pumping the proposed production wells on this area are not expected to occur within the 100-year time period."<sup>53</sup>

This conclusion was based on their conceptual model of the groundwater flow system<sup>54</sup> and on groundwater flow model results.<sup>55</sup> The Office of the State Engineer challenged this conclusion and pointed out that the model used a specified head boundary in the vicinity of Corn Creek Springs and by virtue of this boundary being so close to the spring area, the model was not constructed to accurately predict future water-level decline from pumping at the proposed production wells.<sup>56</sup> The Applicant's conceptual model includes barriers to flow between the pumping centers on the western edge of the Three Lakes Valley – Southern Part Hydrographic Basin and Corn Creek Springs, which

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<sup>53</sup> Exhibit No. 28, p. 6-26.

<sup>54</sup> Exhibit No. 28, pp. 6-22 to 6-26.

<sup>55</sup> Exhibit No. 28, Appendix B.

<sup>56</sup> Transcript, pp. 290-294.

is located approximately 14 miles to the southeast in the Las Vegas Valley Hydrographic Basin. However, both the pumping center and Corn Creek Springs lie along the northern edge of the LVVSZ and the potential for hydrologic continuity created by the structural zone cannot be discounted. The conceptual view is that faults are barriers to flow across them but they may also act as a conduit to flow along the fault zone.<sup>57</sup> Groundwater levels as shown in Figure 3-3 appear to support hydrologic connectivity along the northern margin of the LVVSZ and water-levels in several wells on the northern margin of the LVVSZ are nearly the same.<sup>58</sup> The possibility that there may be enhanced flow along the LVVSZ rather than barriers to flow caused by other fault zones raises some doubt about the Applicant's claim that there will be no impact to water levels or flows at Corn Creek Springs after 100 years of pumping.

The State Engineer finds that the Applicant's groundwater model does not provide the level of confidence necessary to protect the public interest and to protect existing water rights and, due to access restrictions on federally managed public lands, sufficient data may never be available to support the Applicant's analysis of local groundwater flows and impacts on existing rights.

X.

The State Engineer finds he need not act on SNWA's other pending applications for new appropriations in Three Lakes Valley – Southern Part before considering the proposed change applications.

XI.

The Applicant indicated that under a stipulation with the Federal agencies, mitigation may include modifying the location and/or quantity of pumping if necessary and rehabilitating, repairing or replacing resources affected by any pumping.<sup>59</sup> The State Engineer finds the offered mitigation may not be adequate to protect all existing water rights and resources and any such mitigation plan does not alleviate the State Engineer's statutory requirements regarding review of the change applications in accordance with NRS §§ 533.370(5) and (6). The State Engineer finds that consideration of any

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<sup>57</sup> Exhibit No. 37.

<sup>58</sup> Exhibit No. 28, p. 3-10.

<sup>59</sup> Transcript, pp. 49-50.

mitigation plan prior to any water being pumped is premature and whether a mitigation plan exists at this stage of the process is immaterial to the review of the applications.

**XII.**

The State Engineer finds that a thorough review of the testimony and evidence specific to the protest claims of endangerment of regional springs or geologic features, shows no substantial or convincing evidence was presented to support these protest claims; therefore, the protest claims are dismissed.

**XIII.**

The State Engineer finds the rate of growth within the Las Vegas Valley is not within his statutorily mandated duties; therefore, the protest claim is dismissed.

**XIV.**

The State Engineer has found that change Applications 72787, 72788, 72789, 72790 and 72791 cannot be considered for approval, as such the State Engineer finds the remaining proposed changes will not conflict with the Nevada Department of Correction's existing water rights.

**XV.**

The protests of Russell D. Highfield lacked detail, specificity and supporting documentation. Since this Protestant failed to put on a case to substantiate his protest claims, the State Engineer finds that the protest claims must be dismissed.

**XVI.**

The State Engineer finds that the Sierra Club's protest issue regarding the inclusion of Application 72791 with the remaining applications was rendered moot, as the application was part of the administrative hearing and part of this ruling.

**XVII.**

The State Engineer finds whether the SNWA has an indoor conservation program could be a relevant factor under NRS § 533.370(6), but finds the SNWA, as noted in State Engineer's Ruling No. 5465, has been making strides towards water conservation through a variety of conservation efforts.

### XVIII.

The State Engineer finds that he agrees with the protest issue of the Sierra Club that the certainty of a water supply for municipal use is extremely important as demonstrated by the denial of Applications 72787 through 72791.

### CONCLUSIONS

#### I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.<sup>60</sup>

#### II.

The State Engineer is prohibited by law from granting a permit under a change application that requests to appropriate the public waters where:<sup>61</sup>

- 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 threatens to prove detrimental to the public interest.

#### III.

Change Applications 72787, 72788, 72789, 72790 and 72791 would effectively appropriate an additional 5,400 acre-feet of water from Three Lakes Valley - Southern Part Hydrographic Basin. Under State Engineer's Ruling No. 5465, the State Engineer determined that the amount of water available for appropriation in Three Lakes Valley - Southern Part is 2,618 acre-feet annually, an amount that is entirely appropriated under existing water rights. The State Engineer concludes there is no additional water available in Three Lakes Valley - Southern Part to satisfy change Applications 72787, 72788, 72789, 72790 and 72791.

#### IV.

The State Engineer concludes that the additional appropriation of 5,400 acre-feet from Three Lakes Valley - Southern Part, under change Applications 72787, 72788,

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<sup>60</sup> NRS chapters 533 and 534.

<sup>61</sup> NRS § 533.370(5).

72789, 72790 and 72791, would conflict with existing rights and threaten to prove detrimental to the public interest.

V.

It was found that the Applicant failed to provide substantial evidence, and at times presented contradictory evidence, that the proposed wells under Applications 72787, 72788, 72789, 72790 and 72791 would capture water from Three Lakes Valley - Northern Part and Tikapoo Valley - Southern Part, where the existing points of diversion were granted. In addition, the Applicant's hydrogeologic report did not provide the level of confidence necessary to protect the public interest and to protect existing water rights and, due to access restrictions on federally managed public lands, sufficient data may never be available to support the Applicant's analysis of local groundwater flows and impacts on existing rights.

The State Engineer concludes the evidence and testimony does not support the approval of Applications 72787, 72788, 72789, 72790 and 72791 and therefore, the applications are subject to denial.

VI.

The State Engineer concludes that the Applicant's "reasonable chance" or "reasonable expectation" standard, proffered by counsel and expert witness to justify changing points of diversion from one hydrographic basin to another, is not supported by the evidence and is not supported in policy or law; therefore, this new proposed standard is rejected under the facts and circumstances of this case.

VII.

The State Engineer concludes the Applicant's hydrogeologic report does not have sufficient data to support its conclusions. The State Engineer further concludes that the effects analysis results submitted by the Applicant does not provide the level of confidence necessary to make changes in the policies of the State Engineer in regard to denying changes in point of diversion from one hydrographic basin to another under the facts and circumstances of this case.

### VIII.

Permits 54062 and 54066 were issued under State Engineer's Ruling No. 5465. Each permit was granted for an interbasin transfer of water such that the points of diversion are in Three Lakes Valley - Southern Part and the place of use is within Clark County. In granting each permit, it was determined that the statutory requirements for an interbasin transfer, under NRS § 533.370(6), were fulfilled. Applications 72792, 72793, 72794, 72795, 72796 and 72797 propose to change the points of diversion of Permits 54062 and 54066 such that the existing and proposed points of diversion remain in Three Lakes Valley - Southern Part. The manner of use and place of use of Permits 54062 and 54066 are not changed and no additional appropriation of water is requested above the currently permitted duty.

The State Engineer concludes that Permits 54062 and 54066, which form the basis for change Applications 72792, 72793, 72794, 72795, 72796 and 72797, meet the criteria of NRS § 533.370(6) by virtue of their approval under State Engineer's Ruling No. 5465, and the changes in the points of diversion as proposed under Applications 72792, 72793, 72794, 72795, 72796 and 72797 also meet the criteria of NRS § 533.370(6).

### IX.

Based on the findings in this ruling and NRS §§ 533.370(5) and (6), the State Engineer concludes change Applications 72792, 72793, 72794, 72795, 72796 and 72797 can be considered for approval.

### X.

The State Engineer concludes that the protests to Applications 72792, 72793, 72794, 72795, 72796 and 72797 were unsubstantiated by the evidence and testimony and are hereby overruled.

### RULING

The protests to Applications 72787, 72788, 72789, 72790, 72791, 72792, 72793, 72794, 72795, 72796 and 72797 are upheld in part and overruled in part.

The protests to Applications 72787, 72788, 72789, 72790 and 72791 are upheld in part and the applications are hereby denied on the grounds that approval of the proposed

changes would conflict with existing water rights and would threaten to prove detrimental to the public interest.

The remaining protest claims are overruled and Applications 72792, 72793, 72794, 72795, 72796 and 72797 are hereby approved subject to:

1. Existing rights;
2. The payment of the statutory permit fees;
3. A monitoring program must be approved by the State Engineer prior to the diversion of any water permitted for appropriation under these permits;
4. The requirement that if the impacts to existing water rights are demonstrated, the Applicant or any assignee will be required to mitigate the same, including cessation of pumping;
5. The recognition that the permits issued do not waive the requirements of the Applicant to obtain other permits required by State, Federal or local agencies;
6. The recognition that the permits issued do not extend the right of ingress and egress to any public, private or corporate land.

Respectfully submitted,



HUGH RICCI, P.E.  
State Engineer

HR/jm

Dated this 15<sup>th</sup> day of

June, 2006.



UNITED STATES DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE

Desert National Wildlife Refuge

SPECIAL USE PERMIT

Station No. to be Credited 14555	Permit Number 02384
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Date

Period of Use (inclusive)  
From October 1, 19 91 (see specia. conditions)  
To January 1, 19 95

Permittee Name  
**Las Vegas Valley Water District**

Permittee Address  
**3700 West Charleston Boulevard  
Las Vegas, Nevada 89153**

Purpose (specify in detail privilege requested, or units of products involved)  
**The purpose of this Special Use Permit is to authorize the Las Vegas Valley Water District to drill and test up to 17 monitor wells, 8" to 12" in diameter and approximately 2,000' deep, on the Desert National Wildlife Range. The purpose of the wells is to characterize the hydrologic and geologic parameters of the carbonate aquifers and are not to be used as production wells.**

Description (specify unit numbers, metes and bounds, or other recognizable designations)  
**The location of the authorized monitor wells are described on the attachment to the permit titled, "Proposed Well Locations for Las Vegas Valley Water District's Carbonate Terrane Monitor Well Drilling Project".**

Amount of fee \$ 14,450 If not a fixed payment, specify rate and unit of charge: \$850.00 per well  
One-quarter of the fee will be paid in advance. Balance will be paid at the end of each year of drilling period, i.e., Jan. 1, 1993, 1994 and 1995. If less than 17 wells are drilled, the fee will be adjusted.  
 Payment Exempt - Justification:  
 Full Payment  
 Partial Payment - Balance of payments to be made as follows:

Record of Payments

Special Conditions  
**See "Agreement to Special Conditions for Special Use Permit Number 02384".**

This permit is issued by the U.S. Fish and Wildlife Service and accepted by the undersigned, subjected to the terms, conditions, obligations, and reservations expressed or implied herein, and to the conditions and requirements appearing on the reverse side.

Permittee Signature  
*Patricia Mulroy*  
**Patricia Mulroy, General Manager**

Issuing Officer Signature and Title  
*David J. Bennett, Refuge Manager*

Agreement to Special Conditions for Special Use Permit Number 02384

1. The period authorized for drilling and testing is three (3) years, from January, 1, 1992, to January 1, 1995. A Special Use Permit for monitoring will be issued when drilling and testing has been completed. Monitoring of the water level in these wells is to be on a continuing basis with a Special Use Permit for this purpose to be issued at five-year intervals.
2. The intent of this permit is that each site will be restored to its natural condition as soon as drilling and testing at that site is complete. In order to allow the Las Vegas Valley Water District to maintain a reasonable drilling schedule, they are authorized to begin drilling and testing on the second site and third site while the first is being restored. They will not, however, begin work on the fourth site until the first site is restored. This sequence will continue throughout the project. It is expected drilling and testing at each site will take approximately two to four weeks, and the preceding site will be restored during that time period. If restoration is not satisfactory, the Refuge Manager will require the Las Vegas Valley Water District to stop drilling.
3. The monitor well locations are to be placed within 150 feet of existing roads. The Refuge Manager and Las Vegas Valley Water District will visit each site together to select the exact site for each well before drilling begins. To reduce impacts at each site, drilling, testing and restoration equipment may be temporarily stored on the main road as long as it does not unduly restrict traffic.
4. Disturbance at each site will be kept to a minimum. The access approach to each site from the existing road will be chosen to avoid prominent vegetation like yucca, Joshua tree, cactus and bursage. Areas where destruction of plant life is unavoidable will be revegetated. Only one access route will be used and workers will be instructed not to drive over vegetation.
5. At the completion of the drilling and testing period, the site will be restored to as near natural condition as possible. All material brought to the surface during drilling will be spread evenly on the closest established road. All tire tracks and the access road will be smoothed out. It is anticipated that water will be pumped out of each well during the drilling and testing. If this causes any erosion, the disturbed areas will be filled with suitable material. Well casings will be cut off no higher than six inches (6") above ground level and capped. The Water District will advise the Refuge Manager when each site is restored so a final inspection can be made.
6. Personnel conducting future monitoring of water levels in the wells will be required to walk from the main road to the monitoring well. An access road to each well site will not be permitted.
7. Prior to beginning any drilling, the Las Vegas Valley Water District will have a cultural resource inventory and desert tortoise survey

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conducted by qualified individuals for each well site. Approvals for the project from the State Historic Preservation Officer and Endangered Species Office of the U.S. Fish and Wildlife Service will be provided to the Refuge Manager before the project begins. The Las Vegas Valley Water District will also prepare and provide the Refuge Manager with an Environmental Assessment for this project.

8. It will be the responsibility of the Las Vegas Valley Water District to obtain approval from the U.S. Air Force and coordinate access times with them for well sites located on portions of Desert National Wildlife Range covered by the Memorandum of Understanding between the U.S. Fish and Wildlife Service and the U.S. Air Force.
9. If any conflict arises between bighorn sheep hunters and the drilling project, the project will be suspended for the remainder of the hunting season.
10. This permit authorizes only the Las Vegas Valley Water District, and its contractors and cooperators, to conduct activities at these well sites during the drilling, testing and restoration period.
11. This permit authorizes the permanent placement of only the casing and cap at the drill sites and not other structures such as solar panels, recorders, and transmitting equipment. Equipment may be left on-site until completion of the drilling, testing and restoration period, but no longer than two months.
12. A copy of all published findings or other new hydrological and geological data will be provided to the U.S. Fish and Wildlife Service.
13. Use of the Corn Creek equipment storage and water pumping facilities will be approved on a case-by-case basis. The Las Vegas Valley Water District may use well SBH-1 to obtain water during drilling and testing. To minimize disturbance at this site, water will be pumped from the well to trucks parked on the Alamo road. This site will also be restored to a natural condition at completion of the project.
14. Damages to refuge roads from drill rig traffic will be repaired by the Las Vegas Valley Water District.
15. The fee of Eight Hundred Fifty and 00/100 Dollars (\$850.00) per well, to be paid by the Las Vegas Valley Water District, will be adjusted if the amount of time required by the Service to monitor this project is determined to be more or less than initially calculated.
16. The Las Vegas Valley Water District will provide the Refuge Manager with a drilling schedule indicating the date when each well is to be drilled, the name of any contractor involved with the project, and the name of

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the Las Vegas Valley Water District's representative that will be responsible for the drilling and will keep the Refuge Manager advised of all activities.

17. This permit may be revoked by the Refuge Manager for non-compliance with the special or general conditions herein or for violation of laws or regulations governing National Wildlife Refuges.

ACCEPTED BY:

Patricia Mulroy  
Las Vegas Valley Water District  
Patricia Mulroy, General Manager

David J. Bunn  
Refuge Manager,  
Desert National Wildlife Range

DATED:

October 18, 1991

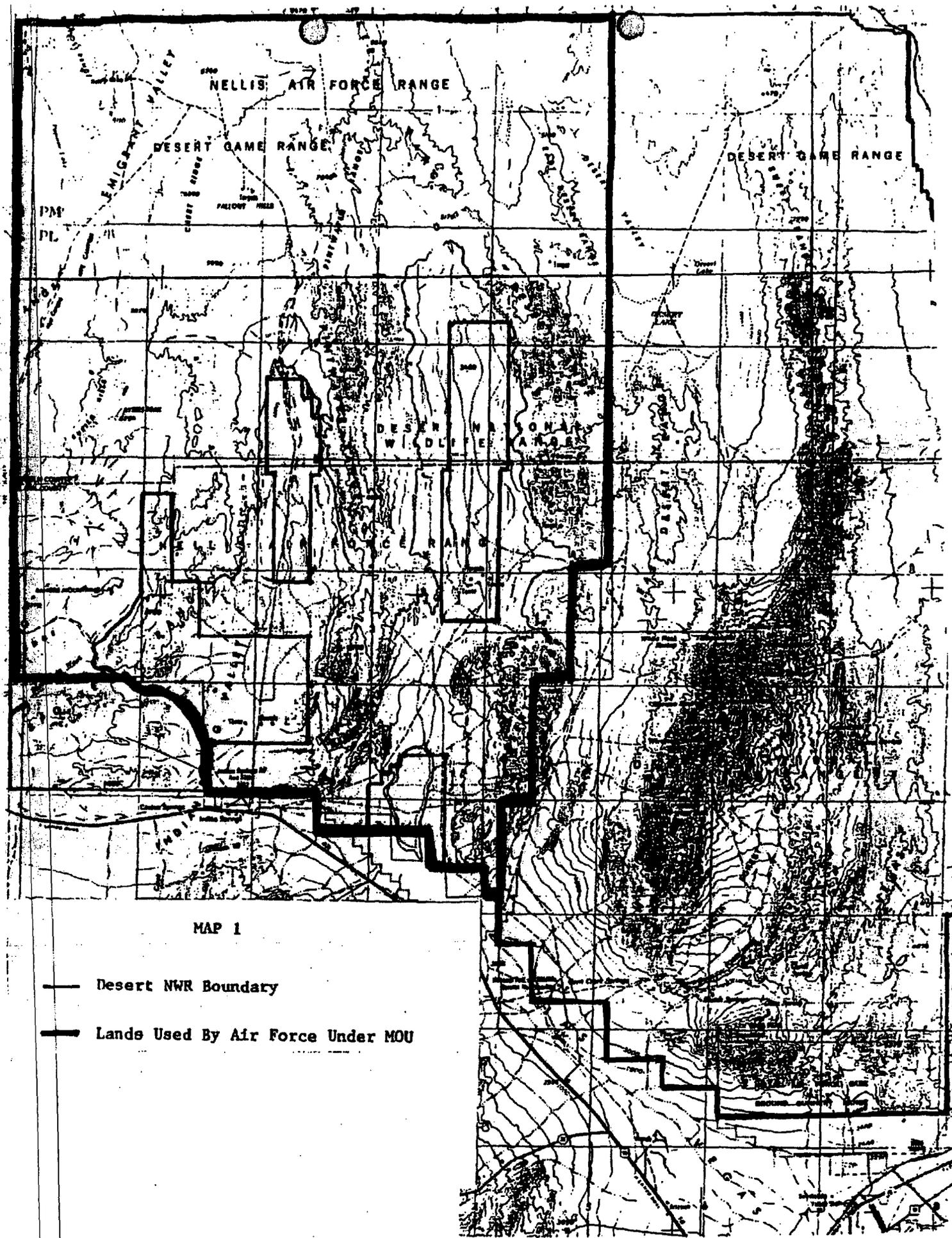
DATED:

Sept 27 1991

PROPOSED WELL LOCATIONS FOR  
LAS VEGAS VALLEY WATER DISTRICT'S  
CARBONATE TERRANE MONITOR WELL DRILLING PROJECT

September 23, 1991

<u>WELL SITE</u>	<u>DESCRIPTION</u>
168-01	SE 1/4, SW 1/4, SEC 18, T13S, R60E
168-02	SW 1/4, NE 1/4, SEC 21, T12S, R59E
168-04a	SE 1/4, NW 1/4, SEC 18, T12S, R60E
168-05	SW 1/4, NW 1/4, SEC 29, T12S, R61E
168-06a	SW 1/4, NW 1/4, SEC 19, T11S, R61E
169-01a	NW 1/4, NE 1/4, SEC 17, T10S, R60E
169-04	NW 1/4, NW 1/4, SEC 28, T9S, R59E
211-01	SW 1/4, SW 1/4, SEC 24, T15S, R59E
211-02	NW 1/4, NE 1/4, SEC 17, T15S, R58E
211-03	NE 1/4, SW 1/4, SEC 15, T16S, R58E
211-04	NE 1/4, NE 1/4, SEC 14, T16S, R58E
211-05	NE 1/4, SE 1/4, SEC 17, T15S, R59E
211-09b	SE 1/4, NE 1/4, SEC 17, T15S, R59E
211-10	NE 1/4, SE 1/4, SEC 29, T14S, R59E
211-11a	NE 1/4, SW 1/4, SEC 17, T14S, R60E
211-12	SW 1/4, NW 1/4, SEC 30, T13S, R60E
211-13	SW 1/4, NW 1/4, SEC 30, T13S, R60E



MAP 1

- Desert NWR Boundary
- Lands Used By Air Force Under MOU