

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

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LEMMON VALLEY
HYDROGRAPHIC BASINS 7-092A AND 7-092B

GROUNDWATER PUMPAGE INVENTORY

WATER YEAR 2015

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ABSTRACT

This inventory represents the status and usage of all permitted, certificated and claims of vested right (vested claims) groundwater rights located within Lemmon Valley – Western Part (Hydrographic Basin 7-092A), and Lemmon Valley – Eastern Part (Hydrographic Basin 7-092B), for water year 2015 (October 1, 2014 through September 30, 2015). Also included for summary purposes are graphs and data associated with this use.

The data presented are valid for the time period of this report and may vary from previously published figures as water rights within the basin are subject to administrative action, such as certification, cancellation, forfeiture or withdrawal on a continual basis.

For water year 2015, the permitted, certificated and claims of vested right groundwater rights in Lemmon Valley totaled **2,809 acre-feet**. Of this total, 1,258 acre-feet were for Lemmon Valley – Western Part and 1,551 acre-feet were for Lemmon Valley – Eastern Part. An estimated **2,709 acre-feet** were pumped in Lemmon Valley during the water year; 1,287 was in Lemmon Valley – Western Part and 1,422 in Lemmon Valley – Eastern Part. These figures include the pumpage of exempt domestic wells. Exempt domestic wells are defined by Nevada Revised Statute 534.013 and do not require a permit issued by the State Engineer. An estimated total of **1,868 acre-feet** were pumped from exempt domestic wells in Lemmon Valley, 631 acre-feet in Lemmon Valley – Western Part and 1,237 acre-feet in Lemmon Valley – Eastern Part.

In Lemmon Valley – Western Part, quasi-municipal is the largest manner of use. For water year 2015, appropriations for quasi-municipal totaled 807 acre-feet. Pumpage for the 2015 water year for quasi-municipal was an estimated 619 acre-feet. The next largest category of use in Lemmon Valley – Western Part was municipal, with groundwater rights totaling 261 acre-feet and with no estimated pumpage during the water year.

In Lemmon Valley – Eastern Part, quasi-municipal is the largest manner of use. For water year 2015, appropriations for quasi-municipal totaled 1,505 acre-feet. Pumpage for the 2015 water year for quasi-municipal was an estimated 140 acre-feet. The next largest category of use in Lemmon Valley – Eastern Part was commercial, with groundwater rights totaling 28 acre-feet and estimated pumpage of 31 acre-feet.

HYDROGRAPHIC BASIN SUMMARIES

HYDROGRAPHIC BASIN NUMBER	092A, REGION 7
HYDROGRAPHIC BASIN NAME	LEMMON VALLEY –WESTERN PART
COUNTIES	WASHOE
MAJOR COMMUNITIES	ANDERSON, STEAD
DESIGNATED	YES
DENIALS BASED UPON WATER AVAILABILITY	USES DENIED INCLUDE COM, IND, IRR, MUN, AND QM
GROUNDWATER LEVEL MEASUREMENTS	NDWR & USGS
PUMPAGE INVENTORY, ACRE-FEET IN 2015	1,287 ¹
STATE ENGINEER’S ORDERS	
<u>NO. 388 – NOTICE OF MORATORIUM</u>	DATE: MAY 18, 1971
<u>NO. 391 – DESIGNATION</u>	DATE: JULY 14, 1971
<u>NO. 1100 – DOMESTIC WELL CREDIT</u>	DATE: JULY 5, 1994
<u>NO. 1180 – DOMESTIC WELL CREDIT</u>	DATE: MAY 17, 2006

COMMITTED GROUNDWATER RESOURCE: 1,258 ACRE-FEET
 DATE: DECEMBER 2015

COMMERCIAL.....13	ENVIRONMENTAL.....123	INDUSTRIAL.....2
IRRIGATION.....6	MUNICIPAL.....261	QUASI-MUNICIPAL....806
RECREATION.....46	OTHER.....1	

NOTE: Committed groundwater resource data are accurate for December 2015. Manner of use category totals vary over time, as rights are not necessarily static. Rights may be subject to change applications, certification, withdrawals, forfeiture and cancellations; each of these circumstances could impact the duty, diversion rate and acreage associated with a given right. The value associated with each manner of use category does not include those portions that have been relinquished in support of domestic wells. A total of approximately 51 acre-feet have been relinquished in the basin.

¹ Includes pumpage by exempt domestic wells, as defined by NRS 534.013. The domestic use estimate is based upon a count of the total domestic wells in the basin multiplied by one acre-foot per annum. The number of domestic wells in the basin was estimated by a query of the Nevada Division of Water Resources Well Log Database and is approximately 631.

HYDROGRAPHIC BASIN SUMMARIES (continued)

HYDROGRAPHIC BASIN NUMBER	092B, REGION 7
HYDROGRAPHIC BASIN NAME	LEMMON VALLEY –EASTERN PART
COUNTIES	WASHOE
MAJOR COMMUNITIES	GOLDEN VALLEY
DESIGNATED	YES
DENIALS BASED UPON WATER AVAILABILITY	USES DENIED INCLUDE COM, IRR, MM, AND QM
GROUNDWATER LEVEL MEASUREMENTS	NDWR & USGS
PUMPAGE INVENTORY, ACRE-FEET IN 2015	1,422 ²
STATE ENGINEER’S ORDERS	
<u>NO. 388 – NOTICE OF MORATORIUM</u>	DATE: MAY 18, 1971
<u>NO. 391 – DESIGNATION</u>	DATE: JULY 14, 1971
<u>NO. 1100 – DOMESTIC WELL CREDIT</u>	DATE: JULY 5, 1994
<u>NO. 1180 – DOMESTIC WELL CREDIT</u>	DATE: MAY 17, 2006

COMMITTED GROUNDWATER RESOURCE: 1,552 ACRE-FEET DATE: DECEMBER 2015

COMMERCIAL.....28	INDUSTRIAL.....2	IRRIGATION.....2
MUNICIPAL.....3	QUASI-MUNICIPAL.....1,505	RECREATION.....12

NOTE: Committed groundwater resource data are accurate for December 2015. Manner of use category totals vary over time, as rights are not necessarily static. Rights may be subject to change applications, certification, withdrawals, forfeiture and cancellations; each of these circumstances could impact the duty, diversion rate and acreage associated with a given right. The value associated with each manner of use category does not include those portions that have been relinquished in support of domestic wells. A total of approximately 8 acre-feet have been relinquished in the basin.

² Includes pumpage by exempt domestic wells, as defined by NRS 534.013. The domestic use estimate is based upon a count of the total domestic wells in the basin multiplied by one acre-foot per annum. The number of domestic wells in the basin was estimated by a query of the Nevada Division of Water Resources Well Log Database and is approximately 1,237.

PURPOSE AND SCOPE

The purpose of this report is to inventory all of the groundwater resources allocated and described by the Office of the State Engineer, Nevada Division of Water Resources (NDWR), and to estimate the amount of groundwater pumped within Lemmon Valley - Western Part (7-092A) and Lemmon Valley - Eastern Part (7-092B), for the time period beginning October 1, 2014, and ending September 30, 2015 (hereafter referred to as water year 2015). Data are presented in this report for both hydrographic basins. This report estimates the amount of groundwater pumped under the permits and certificates issued by the State Engineer, claims of vested right, as well as the amount pumped by exempt domestic wells within each basin.

DESCRIPTION OF THE STUDY AREA

Lemmon Valley is a topographically closed basin located in west central Nevada, about 8 miles northwest of Reno, in Washoe County. Lemmon Valley consists of two adjacent hydrographic basins, Lemmon Valley - Western Part and Lemmon Valley – Eastern Part.³ The total area of Lemmon Valley is about 93 square miles. Lemmon Valley – Western Part covers approximately 53 square miles and Lemmon Valley – Eastern Part covers approximately 40 square miles. Adjacent hydrographic basins are Red Rock Valley (7-099) and Bedell Flat (7-094) to the north; Antelope Valley (7-093), Warm Springs Valley (6-084), Spanish Springs Valley (6-085), and Sun Valley (6-086) to the east; Truckee Meadows (6-087) and Truckee Canyon Segment (6-091) to the south; and Long Valley (7-100A) and Cold Springs Valley (7-100) to the west (see Figure 1). The exterior boundary of Lemmon Valley is as described by Designation [Order 391](#), issued by the Nevada State Engineer on July 14, 1971.

Lemmon Valley is bounded on the north by Freds Mountain and Hungry Mountain; on the east by Hungry Ridge; on the south by Peavine Peak; and on the west by the Granite Hills. Elevations in the basins range from more than 8,200 feet above mean sea level to less than 5,000 feet.

The two hydrographic basins that comprise Lemmon Valley represent two separate ground-water reservoirs. In each basin, ground-water resources exist in both fractured consolidated rocks in the uplands adjacent to and at depth beneath valley fill, and in valley-fill alluvium that partly fills the structural depression underlying Lemmon Valley. The valley-fill alluvium represents the more productive and most important aquifers in both hydrographic basins, due to its overall transmissivity, permeability and extent.

GROUNDWATER LEVELS

Depths to groundwater in Lemmon Valley have been measured by, or reported to, the NDWR since the early 1980's, and consistently since the early 2000's. The following list contains active site names and links to their corresponding data (refer to Figures 2a and 2b for monitoring well locations):

Lemmon Valley – Western Part (7-092A):

[092A N20 E18 02DDDD1](#)

[092A N20 E18 02DDDD2](#)

[092A N21 E18 23AADD1](#)

³ U.S. Geological Survey Water Resources Bulletin No. 42.

<u>092A N21 E18 25CBBA1</u>	<u>092A N21 E18 36ADDD1</u>	<u>092A N21 E19 18BCBA1</u>
<u>092A N21 E19 20BDCD1</u>	<u>092A N21 E19 20DBDA1</u>	<u>092A N21 E19 30CACC1</u>

Lemmon Valley – Eastern Part (7-092B):

<u>092B N20 E19 03DCAD1</u>	<u>092B N20 E19 03DDAD1</u>	<u>092B N20 E19 03DDCD1</u>
<u>092B N20 E19 03DDDC1</u>	<u>092B N20 E19 05DAAD1</u>	<u>092B N20 E19 10AAAA1</u>
<u>092B N20 E19 10AAAB1</u>	<u>092B N20 E19 10AAAC1</u>	<u>092B N20 E19 10AAAD1</u>
<u>092B N20 E19 10AABC1</u>	<u>092B N20 E19 10AADA1</u>	<u>092B N20 E19 10ADBD1</u>
<u>092B N20 E19 10ADCC1</u>	<u>092B N20 E19 10ADDA1</u>	<u>092B N20 E19 10ADDD1</u>
<u>092B N20 E19 10BCAD1</u>	<u>092B N20 E19 10BCDB1</u>	<u>092B N20 E19 10BDBA1</u>
<u>092B N20 E19 10BDBD1</u>	<u>092B N20 E19 10DABA1</u>	<u>092B N20 E19 10DCAA1</u>
<u>092B N20 E19 10DCAB1</u>	<u>092B N20 E19 10DCAB2</u>	<u>092B N20 E19 10DDBD1</u>
<u>092B N20 E19 11ABAA1</u>	<u>092B N20 E19 11ABAB1</u>	<u>092B N20 E19 11ABAD1</u>
<u>092B N20 E19 11ABBC1</u>	<u>092B N20 E19 11ABDA1</u>	<u>092B N20 E19 11ABDD1</u>
<u>092B N20 E19 11ACAA1</u>	<u>092B N20 E19 11ACAD1</u>	<u>092B N20 E19 11ACBA1</u>
<u>092B N20 E19 11ACCB1</u>	<u>092B N20 E19 11ACCC1</u>	<u>092B N20 E19 11ACDD1</u>
<u>092B N20 E19 11ADBC1</u>	<u>092B N20 E19 11ADDD1</u>	<u>092B N20 E19 11BCAA1</u>
<u>092B N20 E19 11CAAC1</u>	<u>092B N20 E19 11CACCC1</u>	<u>092B N20 E19 11CADC1</u>
<u>092B N20 E19 11CBCB1</u>	<u>092B N20 E19 11CBDB1</u>	<u>092B N20 E19 11CDA1</u>
<u>092B N20 E19 11DACC1</u>	<u>092B N20 E19 11DBAA1</u>	<u>092B N20 E19 11DBAB1</u>
<u>092B N20 E19 11DBBD1</u>	<u>092B N20 E19 11DBDA1</u>	<u>092B N20 E19 11DBDD1</u>
<u>092B N20 E19 11DBDD2</u>	<u>092B N20 E19 11DBDD3</u>	<u>092B N20 E19 11DCBB1</u>
<u>092B N20 E19 11DCCA1</u>	<u>092B N20 E19 11DCDD1</u>	<u>092B N20 E19 14AAAC1</u>
<u>092B N20 E19 14AABB1</u>	<u>092B N20 E19 14ABDC1</u>	<u>092B N21 E19 22DBAA1</u>
<u>092B N21 E19 23AAAC1</u>	<u>092B N21 E19 24BADD1</u>	<u>092B N21 E19 26CCDB1</u>
<u>092B N21 E19 28BADA</u>	<u>092B N21 E19 28CBCC1</u>	<u>092B N21 E19 29DACB1</u>

The water level data and hydrograph for each site are available from the Water Level Data page of the NDWR website (<http://water.nv.gov/data/waterlevel/>). Data retrievals are organized by hydrographic area.

Additional water level data have been collected by the U.S. Geological Survey, and are available through their website (<http://nevada.usgs.gov>).

IMPORTED WATER

During 2015, the Truckee Meadows Water Authority (TMWA) was the major water purveyor in Lemmon Valley. TMWA used both groundwater diverted from within Lemmon Valley as well as surface water imported from the Truckee River to serve customers in Lemmon Valley – Western Part (Basin 092A) and in Lemmon Valley – Eastern Part (Basin 092B).

Since 1944, surface water from the Truckee River has been imported from the Truckee Meadows (Hydrographic Basin 6-087) through a pipeline to serve the former Stead Air Force Base. In the 1960’s importation of Truckee River water into Lemmon Valley was expanded to serve the area of Raleigh Heights in the southern part of the Lemmon Valley – Eastern Part.³

Currently, TMWA continues to import Truckee River water into Lemmon Valley each year, a portion of which serves their customers directly, with the remainder being stored in the groundwater aquifer in Lemmon Valley – Western Part. TMWA reported that 1,975 acre-feet of Truckee River water was sent to Lemmon Valley (Basins 092A and 092B) during 2015, of which 399 acre-feet was injected by TMWA for aquifer storage, and the remaining 1,576 acre-feet was served to customers in Lemmon Valley (Bill Hauck, Truckee Meadows Water Authority, written communication).

The North Valleys Water Importation Project delivers water pumped from wells located at Fish Springs Ranch in Honey Lake Valley, via a 30 mile pipeline to the North Valleys, including Lemmon Valley. Although the State Engineer has authorized water right permits for the inter-basin transfer of up to 13,000 acre-feet annually,⁴ a Water Banking Trust Agreement executed in 2006, limits the initial amount of water to be delivered to 8,000 acre-feet. A reported 958 acre-feet of water was pumped and delivered to Lemmon Valley (Eastern and Western Parts) during 2015.

RECHARGE, STORAGE AND RECOVERY PROGRAMS

TMWA operates an aquifer storage and recovery (ASR) program in Lemmon Valley – Western Part (Basin 092A). This project is associated with Nevada State Engineer’s Recharge Permit R-15. The recharge permit was issued on November 19, 2008, and allows for the recharge of up to 1,000 acre-feet annually of Truckee River surface water imported to Lemmon Valley from Truckee Meadows (Hydrographic Basin 6-087). Permit R-15 also provides for four injection/recovery wells in the system located near the former Stead Air Force Base. A reported 399 acre-feet of water was injected into, and 526 acre-feet of water was pumped from three of TMWA’s four ASR injection/recovery wells in 2015.

During 2015, WCDWR also operated an ASR program in Lemmon Valley. This project is authorized under Recharge Permit R-9, issued by the Nevada State Engineer on August 22, 2004. The program is operated for the benefit of domestic well water users located within the Golden Valley area of Lemmon Valley – Eastern Part (Basin 092B). Permit R-9 allows for the recharge of 106.4 acre-feet annually of Truckee River surface water into four injection wells located in Golden Valley, and recovery of stored water by domestic wells in the basin. The Truckee River surface water injected for this ASR project was purchased by WCDWR from TMWA. A reported 71 acre-feet of water was injected and represents a portion of the 1,576 acre-feet of water reported to have been served to TMWA customers in Lemmon Valley in 2015.

In total, a reported 470 acre-feet of imported Truckee River surface water was stored in groundwater aquifers and 526 acre-feet of groundwater was pumped by TMWA from aquifers during 2015, as part of aquifer storage and recovery programs in Lemmon Valley.

EFFLUENT

The City of Reno operates a wastewater treatment plant in Lemmon Valley – Eastern Part (Basin 092B), south of the Reno/Stead Airport, near Swan Lake. The Reno Stead Water Reclamation

⁴ State Engineer’s Ruling 3787, March 1, 1991.

Facility is located in the Section 32, T.21N., R.19E., adjacent to the basin boundary with Lemmon Valley – Western Part, and treats wastewater received primarily from residential properties, along with some commercial and industrial properties. The plant has a treatment capacity up to 2.0 million gallons per day with planned improvements to accommodate up to 4.0 million gallons per day. Treated effluent is pumped from the treatment plant to various locations for reuse within Lemmon Valley.⁵

Reuse of effluent from the Reno Stead Water Reclamation Facility is authorized by the Nevada State Engineer under Permit 4541S05, and by the Nevada Division of Environmental Protection under Permit NS2008500. Permitted use of the treated effluent includes irrigation of Sierra Sage Golf Course, North Valleys Sports Complex, and Mayors Park. On-site reuse of effluent at the Reno Stead Water Reclamation Facility is also permitted for landscape irrigation and for an on-site effluent truck fill station for construction water. Delivery of effluent is also permitted to nearby Swan Lake to support wildlife habitat under an agreement with the U.S. Bureau of Land Management. During 2015, a total of 1,464 acre-feet of effluent was delivered for reuse, all within Lemmon Valley (Joseph Coudriet, City of Reno Public Works Department, written communication).

Washoe County also operates a smaller capacity wastewater treatment plant in Lemmon Valley – Eastern Part. The Lemmon Valley Wastewater Reclamation Facility operates at approximately 300,000 gallons per day and effluent reuse from this facility does not occur. Several times per year, polished effluent is discharged to Lemmon Lake Playa (Swan Lake) where it rapidly evaporates.⁶

METHODS TO ESTIMATE PUMPAGE

One of the purposes of this report is to estimate the amount of groundwater pumped under vested claims, permits and certificates issued by the State Engineer, as well as the amount pumped by the exempt domestic wells in the valley. The following methods were used to arrive at the estimated use:

- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where water right owners were obliged to provide the Office of the State Engineer with monthly pumping totals as a condition of their permits, these reports were verified with occasional meter readings taken by NDWR staff and used as the amount pumped.
- Where meters were not present, previous data were not available, and the manner of use was not irrigation, pumpage was estimated as the annual duty associated with the certificate or permit, if the use was as described in the certificate or permit. If the water was not used as described in the certificate, permit or claim, a value was estimated based upon the circumstances of the actual use for the subject year.
- Exempt domestic wells do not require a permit issued by the State Engineer (Nevada Revised Statutes [NRS] 534.180). These domestic wells may be drilled and utilized

⁵ Nevada Division of Environmental Protection Fact Sheet, City of Reno Public Works Department, Reno Stead Water Reclamation Facility, Permit Number NV0020168.

⁶ Nevada Division of Environmental Protection Fact Sheet, Washoe County Department of Water Resources, Lemmon Valley Wastewater Reclamation Facility, Permit NEV2008507

where water service from a purveyor is not available. NRS 534.013 defines this category of domestic use as follows: “*Domestic use or domestic purposes extends to culinary and household purposes directly related to a single family dwelling, including, without limitation, the watering of a family garden and lawn and the watering of livestock and any other domestic animals or household pets.*” The number of exempt domestic wells in the basin was determined by a query of the NDWR Well Log Database. By statute, domestic wells are allowed to pump up to two acre-feet annually; however, the amount of water pumped annually by exempt domestic wells is estimated to be one acre-foot per well.

PUMPAGE BY MANNER OF USE

Note that all data herein are estimates and subject to revision.

The total estimated groundwater pumpage for the water year 2015 was 2,709 acre-feet. The annual duties of permitted, certificated and claims of vested groundwater rights within Lemmon Valley – Western Part and Lemmon Valley – Eastern Part Hydrographic Basins total approximately 2,809 acre-feet. This value does not include those portions of rights that have been relinquished in support of domestic wells. The permitted and pumped totals for water year 2015, categorized by manner of use, are as follows:

A. Commercial (COM)

Appropriations for commercial purposes totaled 41 acre-feet, with estimated pumpage of 33 acre-feet.

B. Domestic (DOM)

There were no appropriations for domestic purposes in the basin. Records of the State Engineer indicate approximately 1,868 domestic wells existed in the basin during the water year. The amount of water pumped for domestic use as described under NRS 534.013 is estimated at 1,868 acre-feet. Total domestic use is estimated at 1,868 acre-feet.

C. Environmental (ENV)

Appropriations for environmental purposes totaled 123 acre-feet, with estimated pumpage of 0 acre-feet.

D. Industrial (IND)

Appropriations for industrial purposes totaled 3 acre-feet, with estimated pumpage of 5 acre-feet.

E. Irrigation (IRR)

Appropriations for irrigation purposes in the basin totaled 8 acre-feet, with estimated pumpage of 7 acre-feet.

F. Municipal (MUN)

Appropriations for municipal purposes totaled 264 acre-feet, with estimated pumpage of less than 1 acre-foot.

G. Quasi-Municipal (QM)

Appropriations for quasi-municipal purposes totaled 2,312 acre-feet, with estimated pumpage of 759 acre-feet.

H. Recreation (REC)

Appropriations for recreational purposes totaled 58 acre-feet, with estimated pumpage of 36 acre-feet.

TABLES

Table 1. Lemmon Valley historical pumpage (acre-feet) by water year.

	2011	2012	2013	2014	2015
COM	30	30	29	14	33
ENV	93	92	88	85	0
IND	1	2	2	4	5
IRR	3	7	7	7	7
MUN	0	54	0	0	0
QM	909	1,094	771	1,103	759
REC	69	63	64	70	36
DOM*	1,868	1,868	1,868	1,868	1,868
TOTALS	2,973	3,210	2,831	3,151	2,708

*Exempt domestic well (NRS 534.13) use estimate

FIGURES

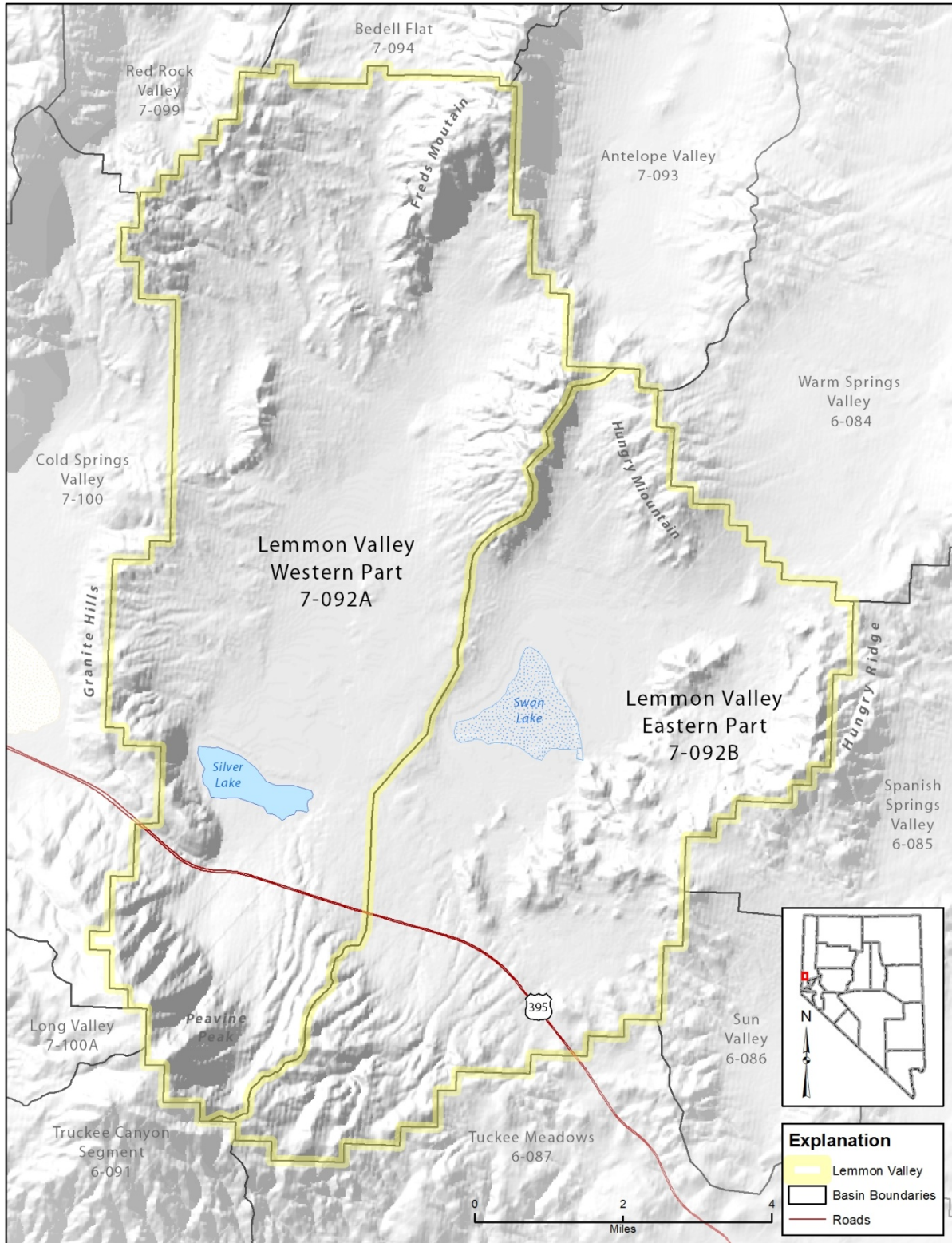


Figure 1. Physiographic map of Lemmon Valley – Western Part (Hydrographic Basin 7-092A) and Lemmon Valley - Eastern Part (Hydrographic Basin 7-092B).

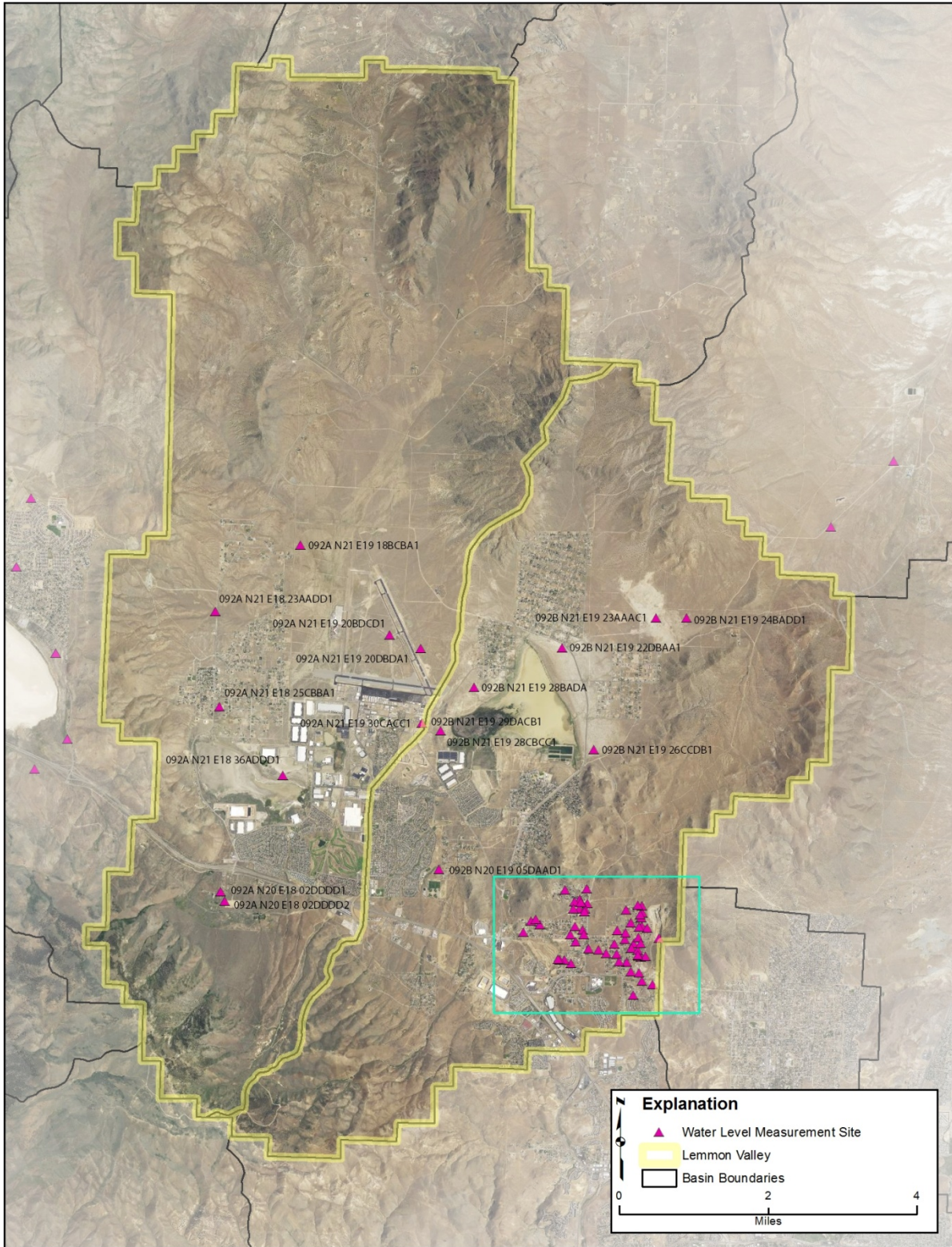


Figure 2a. Map showing Lemmon Valley – Western Part (Hydrographic Basin 7-092A) and Lemmon Valley - Eastern Part (Hydrographic Basin 7-092B) groundwater level monitoring network.

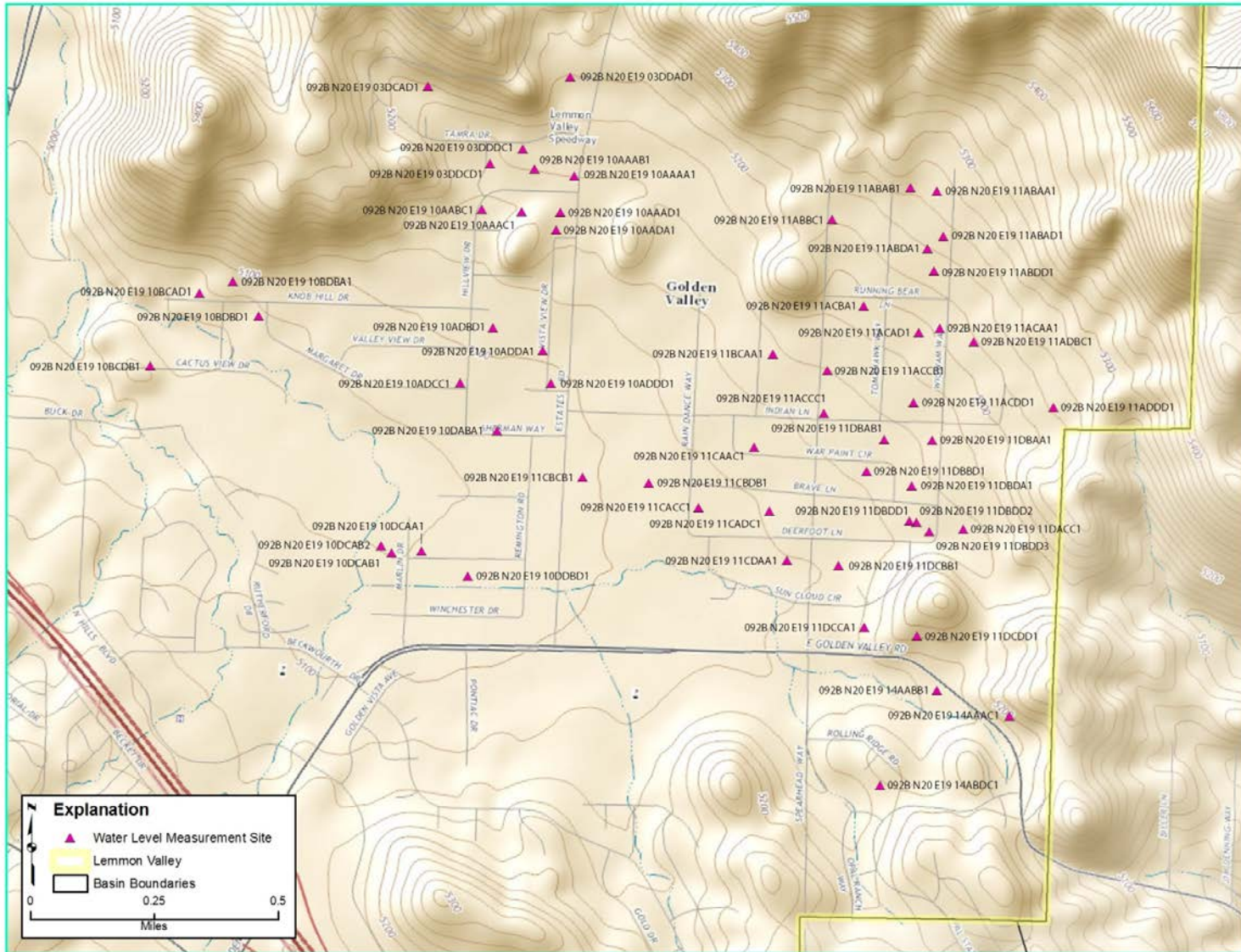


Figure 2b. Inset map 2b shows southeastern Lemmon Valley – Eastern Part (Hydrographic Basin 7-092B) groundwater level monitoring network in detail.

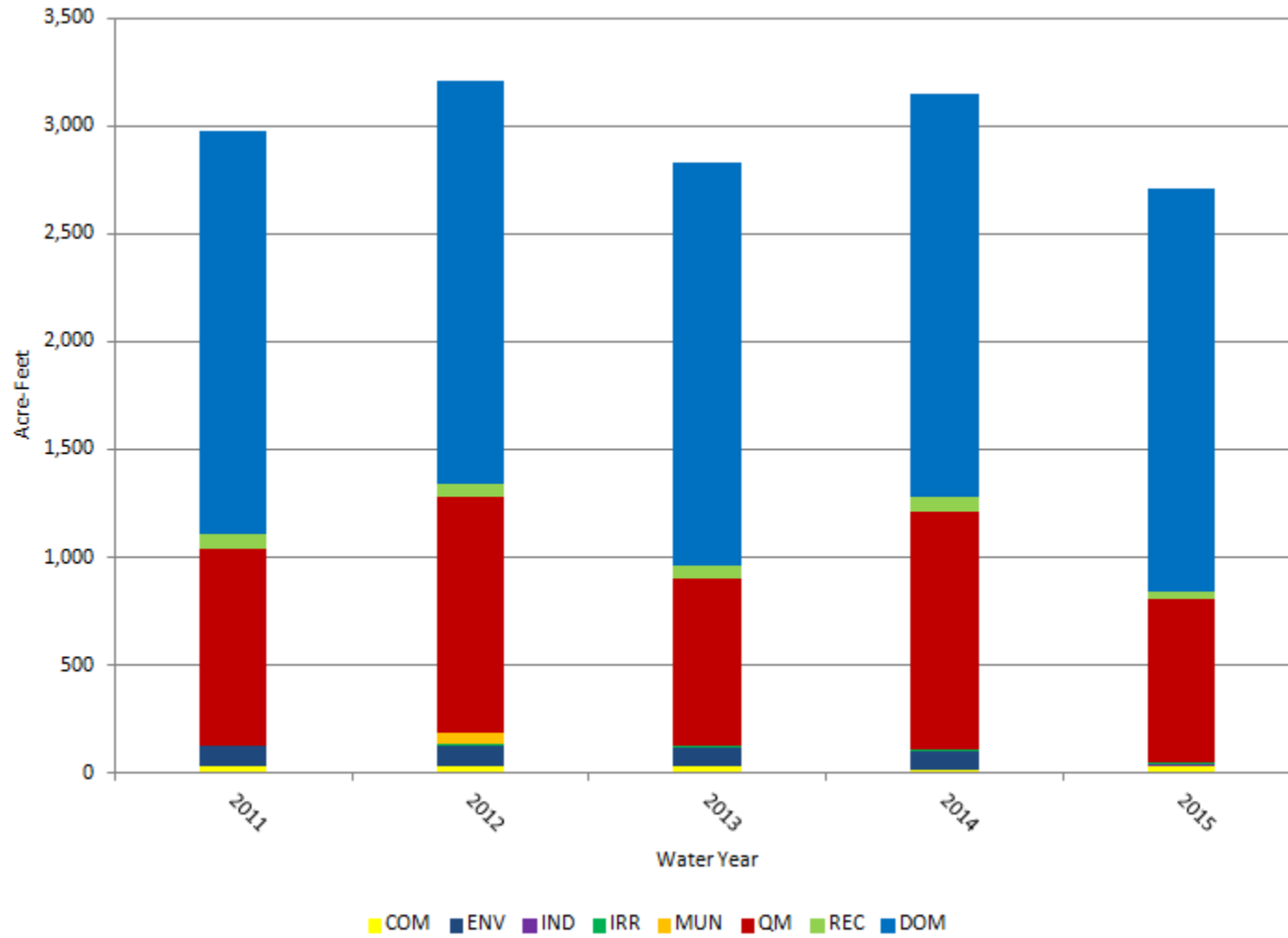


Figure 3. Graph comparing Lemmon Valley historical pumpage by manner of use.

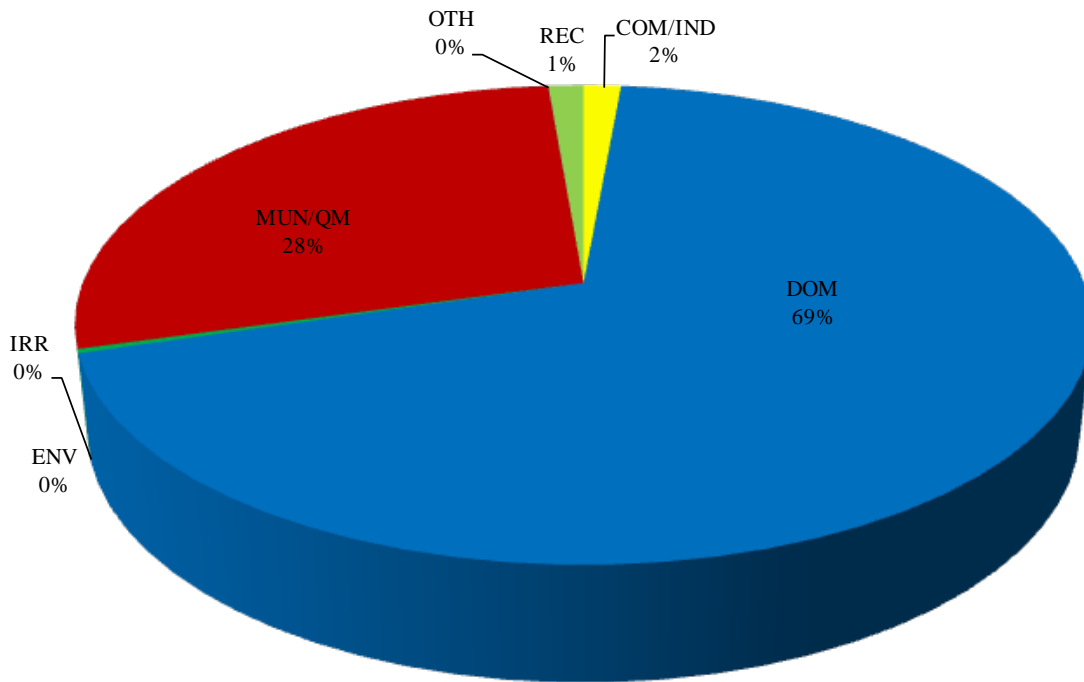


Figure 4. Percentage of 2015 groundwater pumpage for water year 2015 by manner of use.

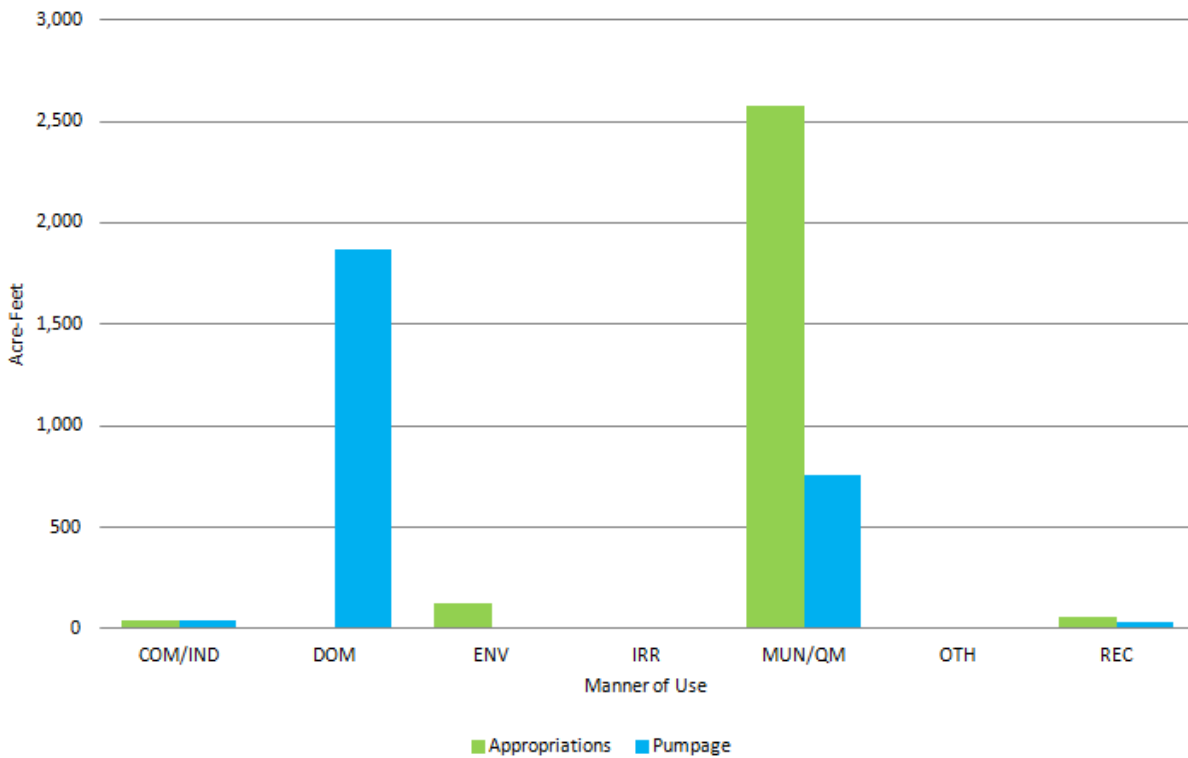


Figure 5. Groundwater appropriations versus pumpage for water year 2015.

**APPENDIX A. LEMMON VALLEY 2015 GROUNDWATER PUMPAGE BY
APPLICATION NUMBER.**

**EXPLANATION OF COLUMN HEADINGS FOR GROUNDWATER PUMPAGE
BY APPLICATION NUMBER**

BASIN	The hydrographic basin number.										
APP NO	The file number of the Application to Appropriate/Change Water.										
STATUS	Indicates the status of an application: Permit (PER), Certificated (CER), and Claim of Vested Right (VST). If an application has been Certificated, the certificate number will be listed.										
MOU	The manner of use of the appropriated water.										
	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">COM- Commercial</td> <td style="width: 50%;">MUN- Municipal</td> </tr> <tr> <td>DOM- Domestic</td> <td>OTH –Other</td> </tr> <tr> <td>ENV- Environmental</td> <td>QM- Quasi-Municipal</td> </tr> <tr> <td>IND- Industrial</td> <td>REC- Recreational</td> </tr> <tr> <td>IRR- Irrigation</td> <td></td> </tr> </table>	COM- Commercial	MUN- Municipal	DOM- Domestic	OTH –Other	ENV- Environmental	QM- Quasi-Municipal	IND- Industrial	REC- Recreational	IRR- Irrigation	
COM- Commercial	MUN- Municipal										
DOM- Domestic	OTH –Other										
ENV- Environmental	QM- Quasi-Municipal										
IND- Industrial	REC- Recreational										
IRR- Irrigation											
SITE NAME	An identifier assigned to each well, based on its geographic location.										
OWNER OF RECORD	The owner of the water right as recorded in the files of the State Engineer. A water right may have more than one owner of record.										
QQ	The quarter quarter of the section in which the point of diversion is located.										
QTR	The quarter of the section in which the point of diversion is located.										
SEC	The section in which the point of diversion is located.										
TWN	The township in which the point of diversion is located.										
RNG	The range in which the point of diversion is located.										
PER ACRES	The number of acres that are permitted to be irrigated.										
DUTY (AF)	The number of acre-feet of water that the permittee may pump. One acre-foot equals 325,851 gallons.										
SUP GROUP	Reference number of the footnote that lists the permits in a supplemental group and the group's total combined duty. Where more than one permit is appurtenant to the same place of use, the permits are considered supplemental. Permits may be either completely or partially supplemental.										
SUPP ADJ	The amount of water that may be pumped in a given year, or season, as defined by the permit certificate, or claim of vested right. If there is a supplemental group, the amount of water listed is the total combined duty of the supplemental group.										
DUTY USED (AF)	The number of acre-feet of water used during the calendar year, in acre-feet, as determined by review of records and/or field investigation.										
METHOD	The method used to estimate Pumpage, or duty used, for the water year. A – Assumed the permitted, certificated or claimed duty. M – Meter reading on a totalizing meter. R – Reported pumpage.										

BASIN	APP NO	STATUS	MOU	SITE NAME	OWNER OF RECORD	QQ	QTR	SEC	TWN	RNG	PER ACRES	DUTY (AFA)	SUPP GROUP	SUPP ADJ (AFA)	DUTY USED (AFA)	METHOD
092A	25884	11300	REC	092A N21 E19 31CCCC1	WASHOE COUNTY	SW	SW	31	21N	19E		35.5		35.5	12.32	R
092A	29078	9063	QM	092A N20 E18 01DCBC1	HOLCOMB, GROVE R.	SW	SE	1	20N	18E		0.246		0.246	2.058	M
092A	34219	14293	QM	092A N21 E19 30BDCA1	TMWA	SE	NW	30	21N	19E		108.03	1	631	108.03	R
092A	34220	14290	QM	092A N21 E19 30BDCA1	TMWA	SE	NW	30	21N	19E		142.99	1		142.99	R
092A	34221	14640	QM	092A N21 E19 30BDCA1	TMWA	SE	NW	30	21N	19E		230.86	1		11.64	R
092A	34762	15389	QM	092A N21 E18 23DDAC1	SILVER KNOLLS MUTUAL WATER COMPANY	SE	SE	23	21N	18E		43.48	8	71.667	40.8	R
092A	35497	14291	QM	092A N21 E19 19BDBB1	TMWA	SE	NW	19	21N	19E		108.03	1		108.03	R
092A	35498	14292	QM	092A N21 E19 19BDBB1	TMWA	SE	NW	19	21N	19E		142.99	1		126.95	R
092A	45325	11141	IND	092A N21 E19 19ACBA1	MILITARY DEPARTMENT-NEVADA	SW	NE	19	21N	19E		1.228		1.228	4.01	M
092A	48385	15734	COM	092A N20 E18 01CB 1	BACON, CAROL E.; BACON, JACK L.; HIGHLAND SERVICE CORP.; JACKSON FOOD STORES; PRUITT, PATRICIA G.	NW	SW	1	20N	18E		1.92	2	8.77	0	M
092A	48449	14623	REC	092A N21 E18 23DDAC1	WASHOE COUNTY	SE	SE	23	21N	18E		10.465		10.465	11.184	R
092A	48621	15032	QM	092A N20 E19 07ADBB1	CHARLES SARGENT IRRIGATION, INC.	SE	NE	7	20N	19E		1		1	0	M
092A	48901	14984	QM	092A N20 E18 12DCBD1	PETER ECHEVERRIA FAMILY LTD PRTRNSHP	SW	SE	12	20N	18E		28.77	3	75	14.814	M
092A	48902	14985	QM	092A N20 E18 12DDBD1	PETER ECHEVERRIA FAMILY LTD PRTRNSHP	SE	SE	12	20N	18E		46.23	3		33.99	M
092A	51763	PER	QM	092A N21 E18 25CBBA1	GRANITE HILLS BAPTIST CHURCH, WASHOE COUNTY	NW	SW	25	21N	18E		1.12		1.12	0.91	M
092A	51945	14123	IRR	092A N21 E18 26ACB 1	HASTINGS, MICHAEL R.; ZIMMERMAN, MAXINE R.	SW	NE	26	21N	18E	0.28	0.69	16	1.12	0.58	M
092A	52011	14124	IRR	092A N21 E18 26ACB 1	HASTINGS, MICHAEL R.; ZIMMERMAN, MAXINE R.	SW	NE	26	21N	18E	0.28	0.34	16		0	M
092A	52012	14125	IRR	092A N21 E18 26ACB 1	HASTINGS, MICHAEL R.; ZIMMERMAN, MAXINE R.	SW	NE	26	21N	18E	0.28	0.34	16		0	M
092A	52431	13888	QM	092A N20 E19 07ADDB1	RICHARD EARL SPOONER FAMILY TRUST DATED 9/30/1998	SE	NE	7	20N	19E		0.54	4	2	0.371	M
092A	52432	13889	QM	092A N20 E19 07ADDB1	RICHARD EARL SPOONER FAMILY TRUST DATED 9/30/1998	SE	NE	7	20N	19E		0.06	4		0	M
092A	52433	13890	QM	092A N20 E19 07ADDB1	RICHARD EARL SPOONER FAMILY TRUST DATED 9/30/1998	SE	NE	7	20N	19E		1.09	4		0	M
092A	52434	13891	QM	092A N20 E19 07ADDB1	RICHARD EARL SPOONER FAMILY TRUST DATED 9/30/1998	SE	NE	7	20N	19E		0.13	4		0	M
092A	52435	13892	QM	092A N20 E19 07ADDB1	RICHARD EARL SPOONER FAMILY TRUST DATED 9/30/1998	SE	NE	7	20N	19E		0.06	4		0	M
092A	52436	13893	QM	092A N20 E19 07ADDB1	RICHARD EARL SPOONER FAMILY TRUST DATED 9/30/1998	SE	NE	7	20N	19E		0.54	4		0	M
092A	55338	14178	QM	092A N21 E19 30BDCA1	HVR COMPANY	SE	NW	30	21N	19E		0.67	5	22.6757	0.67	R
092A	55339	14179	QM	092A N21 E19 30BDCA1	HVR COMPANY	SE	NW	30	21N	19E		0.67	5		0.67	R
092A	55340	14180	QM	092A N21 E19 30BDCA1	HVR COMPANY	SE	NW	30	21N	19E		0.67	5		0.67	R
092A	55341	14181	QM	092A N21 E19 30BDCA1	HVR COMPANY	SE	NW	30	21N	19E		0.67	5		0.67	R
092A	55342	14182	QM	092A N21 E19 30BDCA1	HVR COMPANY	SE	NW	30	21N	19E		0.67	5		0.67	R
092A	55343	14183	QM	092A N21 E19 30BDCA1	HVR COMPANY	SE	NW	30	21N	19E		0.67	5		0.67	R
092A	55344	14184	QM	092A N21 E19 30BDCA1	HVR COMPANY	SE	NW	30	21N	19E		5.41	5		5.41	R
092A	55345	14185	QM	092A N21 E19 19BDBB1	HVR COMPANY	SE	NW	19	21N	19E		5.41	5		5.41	R
092A	55346	14186	QM	092A N21 E19 19BDBB1	HVR COMPANY	SE	NW	19	21N	19E		13.47	5		13.47	R
092A	55584E	PER	ENV	092A N21 E19 31DBAA1	BWC - WEST INC.	NW	SE	31	21N	19E		3		3	0	R
092A	55585E	PER	ENV	092A N21 E19 31ACDD1	BWC - WEST INC.	SW	NE	31	21N	19E		21		21	0	R
092A	56283E	PER	ENV	092A N21 E19 30BDA1	DERMODY PROPERTIES, INC.	NW	SE	30	21N	19E		32.592		32.592	0	R
092A	56410E	PER	ENV	092A N21 E19 30DCAA1	DERMODY PROPERTIES, INC.	SW	SE	30	21N	19E		32.592		32.592	0	R
092A	58925	14922	IND	092A N20 E19 07ACAA1	WASHOE COUNTY	SW	NE	7	20N	19E		0.45		0.45	0.45	A
092A	60144	15011	QM	092A N21 E18 11DDBC1	DOUGLASS, DAN	SE	SE	11	21N	18E		0.44	6	1.76	0.69	M
092A	60145	15012	QM	092A N21 E18 11DDBC1	DOUGLASS, DAN	SE	SE	11	21N	18E		0.44	6		0	M
092A	60146	15013	QM	092A N21 E18 11DDBC1	DOUGLASS, DAN	SE	SE	11	21N	18E		0.88	6		0	M
092A	62212	15735	COM	092A N20 E18 01CB 1	JACKSON FOOD STORES	NW	SW	1	20N	18E		1.08	2		0	M
092A	63053	PER	OTH	092A N21 E18 23DAAA1	TRUCKEE MEADOWS FIRE P.D. STA # 21	NE	SE	23	21N	18E		0.5		0.5	0.43	M
092A	63856	17937	COM	092A N20 E18 01CDBC1	LAURIE S. LAGUNA	SE	SW	1	20N	18E		0.4319	7	1.102	0.4319	M
092A	63857	17938	COM	092A N20 E18 01CDBC1	LAURIE S. LAGUNA	SE	SW	1	20N	18E		0.67	7		0.8911	M
092A	64232	15455	QM	092A N21 E18 23DDAC1	SILVER KNOLLS MUTUAL WATER COMPANY	SE	SE	23	21N	18E		21.74	8		0	R
092A	64233	16484	QM	092A N21 E18 23DDCC1	SILVER KNOLLS MUTUAL WATER COMPANY	SE	SE	23	21N	18E		21.74	8		0	R
092A	64984	16229	COM	092A N20 E18 01BC 1	JACKSON'S FOOD STORES, INC.; LANDBANK DEVELOPMENT CO., LLC	SW	NW	1	20N	18E		3	2		0	M
092A	64985	16230	COM	092A N20 E18 01BC 1	BACON, CAROL E.; BACON, JACK L.; HIGHLAND SERVICE CORP.; PRUITT, PATRICIA G.	SW	NW	1	20N	18E		2.77	2		0	M

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092A	66958	PER	MUN	092A N21 E19 30BDCA1	HOFMANN, MARY H.; RED ROCK ROAD, LLC.; TRUCKEE MEADOWS WATER AUTHORITY	SE	NW	30	21N	19E	4.75	9	4.75	0	R	
092A	66959	PER	MUN	092A N21 E19 19BDBB1	HOFMANN, MARY H.; RED ROCK ROAD, LLC.	SE	NW	19	21N	19E	4.75	9		0	R	
092A	71194	PER	MUN	092A N21 E19 18CACC1	LENNAR RENO, LLC; TMWA; WASHOE COUNTY	NE	SW	18	21N	19E	160.24	10	160.24	0	R	
092A	71195	PER	MUN	092A N21 E19 18CACC1	LENNAR RENO, LLC; TMWA; WASHOE COUNTY	NE	SW	18	21N	19E	160.24	10		0	R	
092A	71221	PER	MUN	092A N21 E19 18CACC1	HAMILTON PROPERTIES, INC.	NE	SW	18	21N	19E	22.98	11	22.98	0	R	
092A	71222	PER	MUN	092A N21 E19 18CACC1	HAMILTON PROPERTIES, INC.	NE	SW	18	21N	19E	22.98	11		0	R	
092A	71334	PER	MUN	092A N21 E19 18CACC1	BARKER COLEMAN DEVELOPMENT, LLC; LENNAR RENO, LLC	NE	SW	18	21N	19E	65	12	65	0	R	
092A	71335	PER	MUN	092A N21 E19 18CACC1	BARKER COLEMAN DEVELOPMENT, LLC; LENNAR RENO, LLC	NE	SW	18	21N	19E	65	12		0	R	
092A	71560	17715	COM	092A N20 E19 07ADBA1	SEAL BEACH ASSOCIATES, LLC	SE	NE	7	20N	19E	0.98		0.98	0.98	A	
092A	72015E	PER	ENV	092A N21 E19 29BCBC1	AIRPORT AUTHORITY OF WASHOE COUNTY, LEAR ENTITIES, RENO-CITY	SW	NW	29	21N	19E	2.17		2.17	0	R	
092A	72016E	PER	ENV	092A N21 E19 30ADAD1	AIRPORT AUTHORITY OF WASHOE COUNTY, LEAR ENTITIES, RENO-CITY	SE	NE	30	21N	19E	31.85		31.85	0	R	
092A	73522	PER	IRR	092A N22 E19 19DCDC1	RENEWEST INVESTMENT, LLC	SW	SE	19	22N	19E	5	13	5	5	A	
092A	73523	PER	IRR	092A N22 E19 19DCDC1	RENEWEST INVESTMENT, LLC	SW	SE	19	22N	19E	5	13		0	A	
092A	74864	PER	COM	092A N20 E19 07DABD1	ENVIRONMENTAL MANAGEMENT OF NEVADA, INC.	NE	SE	7	20N	19E	2.02	14	2.02	0	M	
092A	74865	PER	COM	092A N20 E19 07DABD1	ENVIRONMENTAL MANAGEMENT OF NEVADA, INC.	NE	SE	7	20N	19E	2.02	14		0	M	
092A	76633	PER	MUN	092A N21 E19 18CACC1	LANDBANK DEVELOPMENT CO., LLC, A NEVADA LIMITED LIABILITY COMPANY	NE	SW	18	21N	19E	1.3012	15	8	0	R	
092A	76634	PER	MUN	092A N21 E19 18CACC1	LANDBANK DEVELOPMENT CO., LLC, A NEVADA LIMITED LIABILITY COMPANY	NE	SW	18	21N	19E	0.681	15		0	R	
092A	76635	PER	MUN	092A N21 E19 18CACC1	LANDBANK DEVELOPMENT CO., LLC, A NEVADA LIMITED LIABILITY COMPANY	NE	SW	18	21N	19E	1.448	15		0	R	
092A	76636	PER	MUN	092A N21 E19 18CACC1	LANDBANK DEVELOPMENT CO., LLC, A NEVADA LIMITED LIABILITY COMPANY	NE	SW	18	21N	19E	1.36	15		0	R	
092A	76637	PER	MUN	092A N21 E19 18CACC1	LANDBANK DEVELOPMENT CO., LLC, A NEVADA LIMITED LIABILITY COMPANY	NE	SW	18	21N	19E	1.36	15		0	R	
092A	76638	PER	MUN	092A N21 E19 18CACC1	LANDBANK DEVELOPMENT CO., LLC, A NEVADA LIMITED LIABILITY COMPANY	NE	SW	18	21N	19E	2	15		0	R	
092A	V06784	VST	COM	092A N20 E18 12ACBD1	THREE T WATER COMPANY	SE	NW	12	20N	18E	0		0	0	A	
092B	12919	4219	QM	092B N20 E19 16BACD1	JOSEPH J. ADRIAN AND SHARON ADRIAN, JTWROS	NE	NW	16	20N	19E	15.927591		15.927591	2	A	
092B	26672	14003	QM	092B N20 E19 17BBCD1	TMWA	NW	NW	17	20N	19E	100.875	17	138.71428	0	A	
092B	30366	10152	QM	092B N20 E19 09CDCC1	BLACK SPRINGS G.I.D.	SE	SW	9	20N	19E	2.087	18	56.47	2.087	R	
092B	30446	10153	QM	092B N20 E19 16BABA1	BLACK SPRINGS G.I.D.	NE	NW	16	20N	19E	2.086	18		2.086	R	
092B	31252	10141	REC	092B N20 E19 04DDDB1	LDS	SE	SE	4	20N	19E	5.42		5.42	5.42	A	
092B	31737	10142	IND	092B N21 E19 23AAAC1	LEMMON VALLEY LAND CO INC	NE	NE	23	21N	19E	1.228		1.228	0	M	
092B	34012	10157	QM	092B N20 E19 09CDCC1	BLACK SPRINGS G.I.D.	SE	SW	9	20N	19E	38.607	18		29.967	R	
092B	35214	10928	COM	092B N20 E19 15BDCD1	ESTES, BRUCE C.	SE	NW	15	20N	19E	3.468		3.468	0.78	M	
092B	36085	9956	COM	092B N20 E19 08BCAD1	RENO SAHARA, LLC	SW	NW	8	20N	19E	5.598	19		5.6	M	
092B	36086	9957	COM	092B N20 E19 08BCAB1	RENO SAHARA, LLC	SW	NW	8	20N	19E	5.598	19	5.59767	2.703	M	
092B	37166	11911	REC	092B N20 E19 10ADBBD1	WASHOE COUNTY	SE	NE	10	20N	19E	4.941		4.941	4.941	A	
092B	42225	14021	QM	092B N20 E19 09CDA1	BLACK SPRINGS G.I.D.	SE	SW	9	20N	19E	33.021	18		0	R	
092B	47504	14485	QM	092B N20 E19 04DDDB1	LDS	SE	SE	4	20N	19E	4.143		4.143	4.143	A	
092B	50472	15251	COM	092B N20 E19 08CAAD1	WEBB MH PARK, LLC	NE	SW	8	20N	19E	8.409	20	8.408786	10.31	M	
092B	50473	15252	COM	092B N20 E19 08ACCB1	WEBB MH PARK, LLC	SW	NE	8	20N	19E	8.409	20		1.9	M	
092B	50474	15253	COM	092B N20 E19 08CAAC1	WEBB MH PARK, LLC	NE	SW	8	20N	19E	8.409	20		0	M	
092B	51833	13243	IND	092B N20 E19 08ADCC1	WASHOE COUNTY SCHOOL DISTRICT	SE	NE	8	20N	19E	0.522		0.522	0.82	M	
092B	55936	17885	QM	092B N21 E19 27ABAB1	TMWA	NW	NE	27	21N	19E	69.3	21		0	R	
092B	55937	14257	QM	092B N21 E19 34BBAB1	TMWA	NW	NW	34	21N	19E	23.201	21	1287.101465	23.201	R	
092B	55938	14258	QM	092B N20 E19 04DDAC1	TMWA	SE	SE	4	20N	19E	86.666	21		0	R	
092B	55939	15080	QM	092B N21 E19 34BBAB1	TMWA	NW	NW	34	21N	19E	326.408	21		45.63	R	
092B	55940	14259	QM	092B N21 E19 26CBBA1	TMWA	NW	SW	26	21N	19E	170.692	21		4.51	R	
092B	55941	15081	QM	092B N21 E19 22BCDC1	TMWA	SW	NW	22	21N	19E	202.547	21		23.29	R	

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092B	55942	14260	QM	092B N21 E19 27ABAB1	TMWA	NW	NE	27	21N	19E	316.557	²¹			0	R
092B	61150	PER	QM	092B N21 E19 27ABAB1	TMWA	NW	NE	27	21N	19E	11.18	²¹			0	R
092B	61588	17886	MUN	092B N21 E19 33DBBA1	TMWA	NW	SE	33	21N	19E	85.93	²¹		0.03	R	
092B	61590	17887	MUN	092B N21 E19 33DBBA1	TMWA	NW	SE	33	21N	19E	21.48	²¹		0	R	
092B	63791	PER	MUN	092B N21 E19 33DBBA1	TMWA	NW	SE	33	21N	19E	138.714	¹⁷		0	R	
092B	66543	PER	MUN	092B N21 E19 27ABAB1	TMWA	NW	NE	27	21N	19E	12.32	²¹		0	R	
092B	66544	17940	MUN	092B N21 E19 34BBAB1	TMWA	NW	NW	34	21N	19E	9.34	²¹		0	R	
092B	66853	PER	MUN	092B N20 E19 04DDAC1	TMWA	SE	SE	4	20N	19E	3	²¹		0	R	
092B	66956	PER	MUN	092B N20 E19 04DDAC1	TMWA	SE	SE	4	20N	19E	15	²¹		0	R	
092B	66957	PER	MUN	092B N21 E19 33DBBA1	SMITH'S FOOD & DRUG CENTERS, INC	NW	SE	33	21N	19E	11.37	²¹		0	R	
092B	67013	PER	MUN	092B N20 E19 04DDAC1	TMWA	SE	SE	4	20N	19E	20	²¹		0	R	
092B	67014	PER	MUN	92B N21 E19 33DBBA1	TMWA	NW	SE	33	21N	19E	15.165	²¹		0	R	
092B	68060	17353	COM	092B N20 E19 09ADDB1	WASHOE COUNTY,A POLITICAL SUBDIV.	SE	NE	9	20N	19E	0.76	²²	1	0.76	M	
092B	68061	17354	COM	092B N20 E19 09ADDB1	WASHOE COUNTY,A POLITICAL SUBDIV.	SE	NE	9	20N	19E	1	²²		0.13	M	
092B	68089	PER	MUN	092B N21 E19 22BCDC1	TMWA	SW	NW	22	21N	19E	3.397	²¹		0	R	
092B	68090	PER	MUN	092B N21 E19 27ABAB1	TMWA	NW	NE	27	21N	19E	4.48	²¹		0	R	
092B	68716	PER	MUN	092B N21 E19 33DBBA1	TMWA	NW	SE	33	21N	19E	1.172	²¹		0	R	
092B	69061	PER	MUN	092B N21 E19 22BCDC1	TMWA	SW	NW	22	21N	19E	33.512	²¹		0	R	
092B	69062	PER	MUN	092B N21 E19 33DBBA1	TMWA	NW	SE	33	21N	19E	33.451	²¹		0	R	
092B	69355	17729	COM	092B N21 E19 03AACD1	WASHOE COUNTY	NE	NE	3	21N	19E	0.758	²³	1	0.76	M	
092B	69356	17730	COM	092B N21 E19 03AACD1	WASHOE COUNTY	NE	NE	3	21N	19E	1	²³		0.78	M	
092B	69588	PER	MUN	092B N21 E19 27ABAB1	TMWA	NW	NE	27	21N	19E	9.1177	²¹		0	R	
092B	70103	17732	COM	092B N20 E19 08ADCC2	JOHNSON FAMILY TRUST	SE	NE	8	20N	19E	1		1	0.167	M	
092B	71231	PER	MUN	092B N20 E19 04DDAC1	WASHOE COUNTY	SE	SE	4	20N	19E	2	²¹		0	R	
092B	71232	PER	MUN	092B N21 E19 33DBBA1	WASHOE COUNTY	NW	SE	33	21N	19E	1.56	²¹		0	R	
092B	71437	PER	COM	092B N20 E19 08BCDD1	ESTES, GARY K.	SW	NW	8	20N	19E	0.758	²⁴	1	0	M	
092B	71438	PER	COM	092B N20 E19 08BCDD1	ESTES, GARY K.	SW	NW	8	20N	19E	1	²⁴		0	M	
092B	71928	PER	QM	092B N20 E19 09CDA1	WASHOE COUNTY	SE	SW	9	20N	19E	2	¹⁸		0	R	
092B	72722	PER	MUN	092B N21 E19 34BBAB1	WASHOE COUNTY	NW	NW	34	21N	19E	13.62	²¹		0	R	
092B	72723	PER	MUN	092B N21 E19 34BBAB1	WASHOE COUNTY	NW	NW	34	21N	19E	16.23	²¹		0	R	
092B	72724	PER	MUN	092B N21 E19 34BBAB1	WASHOE COUNTY	NW	NW	34	21N	19E	2.07	²¹		0	R	
092B	73636	PER	MUN	092B N21 E19 33DBBA1	WASHOE COUNTY	NW	SE	33	21N	19E	9.115	²¹		0	R	
092B	73637	PER	MUN	092B N21 E19 33DBBA1	WASHOE COUNTY	NW	SE	33	21N	19E	15	²¹		0	R	
092B	73638	PER	MUN	092B N21 E19 34BBAB1	WASHOE COUNTY	NW	NW	34	21N	19E	11.37	²¹		0	R	
092B	73639	PER	MUN	092B N21 E19 34BBAB1	WASHOE COUNTY	NW	NW	34	21N	19E	4.174	²¹		0	R	
092B	73988	19125	QM	092B N20 E19 08ACBB1	NORTH VALLEY PROPERTIES LLC	SW	NE	8	20N	19E	0.5	²⁵	0.5	0.21	M	
092B	73989	19126	QM	092B N20 E19 08ACBB1	NORTH VALLEY PROPERTIES LLC	SW	NE	8	20N	19E	0.387	²⁵		0	M	
092B	78244	PER	MUN	092B N21 E19 27ABAB1	TMWA	NW	NE	27	21N	19E	2.488	²⁶	2.488	0	R	
092B	78245	PER	MUN	092B N21 E19 34BBAB1	WASHOE COUNTY	NW	NW	34	21N	19E	1.923	²⁶		0	R	
092B	82331	PER	REC	092B N21 E19 23BCD1	WASHOE COUNTY	NW	SE	23	21N	19E	1.427		1.427	1.85	R	
092B	V04092	PER	COM	092B N20 E19 08CBCD1	HINKEL, DON; LAMAY, JAMES R. JR.	NW	SW	8	20N	19E	6.721		6.721	6.72	A	
092B	V08912	PER	IRR	092B N20 E19 16BADC1	BUCK, ROSEMARIE L.; BUCK, STEPHEN E.; HARDISTY, LINDA M.; HARDISTY, MICHAEL L.; TOBELER, JEAN S.; TOBELER, W.J.	NE	NW	16	20N	19E	0.7	1.88		1.88	1.88	A
092B	V08960	PER	QM	092B N20 E19 08DDAC1	FINKLER, GREGG J.	SE	SE	8	20N	19E	2.6		2.6	2.6	A	

FOOTNOTES

¹ PERMITS 34219, 34220, 34221, 35497 & 35498 HAVE A TOTAL COMBINED DUTY OF 631.0 AFA.

² PERMITS 48385, 62212, 64984 & 64985 HAVE A TOTAL COMBINED DUTY OF 8.77 AFA.

BASIN	APP NO	STATUS	MOU	SITE NAME	OWNER OF RECORD	QQ	QTR	SEC	TWN	RNG	PER ACRES	DUTY (AFA)	SUPP GROUP	SUPP ADJ (AFA)	DUTY USED (AFA)	METHOD
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³ PERMITS 48901 & 48902 HAVE A TOTAL COMBINED DUTY OF 75 AFA.

⁴ PERMITS 52431, 52432, 52433, 52434, 52435 & 52436 HAVE A TOTAL COMBINED DUTY OF 2.0 AFA.

⁵ PERMITS 55338, 55339, 55340, 55341, 55342, 55343, 55344, 55345 & 55346 HAVE A TOTAL COMBINED DUTY OF 22.6757 AFA.

⁶ PERMITS 60144, 60145 & 60146 HAVE A TOTAL COMBINED DUTY OF 1.76 AFA (3.78 AFA INCLUDING DOMESTIC USE)

⁷ PERMITS 63856 & 63857 HAVE A TOTAL COMBINED DUTY OF 1.102 AFA.

⁸ PERMITS 34762, 64232 & 64233 HAVE A TOTAL COMBINED DUTY OF 71.667 AFA.

⁹ PERMITS 66958 & 66959 HAVE A TOTAL COMBINED DUTY OF 4.75 AFA.

¹⁰ PERMITS 71194 & 71195 HAVE A TOTAL COMBINED DUTY OF 160.24 AFA.

¹¹ PERMITS 71221 & 71222 HAVE A TOTAL COMBINED DUTY OF 22.98 AFA.

¹² PERMITS 71334 & 71335 HAVE A TOTAL COMBINED DUTY OF 65.00 AFA.

¹³ PERMITS 73522 & 73523 HAVE A TOTAL COMBINED DUTY OF 5.0 AFA.

¹⁴ PERMITS 74864 & 74865 HAVE A TOTAL COMBINED DUTY OF 2.02 AFA.

¹⁵ PERMITS 76633, 76634, 76635, 76636, 76637 & 76638 HAVE A TOTAL COMBINED DUTY OF 8.0 AFA.

¹⁶ PERMITS 51945, 52011 & 52012 HAVE A TOTAL COMBINED DUTY OF 1.12 AFA.

¹⁷ PERMITS 26672 & 63791 HAVE A TOTAL COMBINED DUTY OF 138.71428 AFA.

¹⁸ PERMITS 30366, 30446, 34012, 42225 & 71928 HAVE A TOTAL COMBINED DUTY OF 56.47 AFA.

¹⁹ PERMITS 36085 & 36086 HAVE A TOTAL COMBINED DUTY OF 5.5977 AFA.

²⁰ PERMITS 50472, 50473 & 50474 HAVE A TOTAL COMBINED DUTY OF 8.408786 AFA.

²¹ PERMITS 55936, 55937, 55938, 55939, 55940, 55941, 55942, 59601, 61150, 61588, 61590, 66543, 66544, 66853, 66956, 66957, 67013, 67014, 68089, 68090, 68716, 69061, 69062, 69588, 71231, 71232, 72722, 72723, 72724, 73636, 73637, 73638 & 73639 HAVE A TOTAL COMBINED DUTY OF 1,287.101465 AFA.

²² PERMITS 68060 & 668061 HAVE A TOTAL COMBINED DUTY OF 1.0 AFA.

²³ PERMITS 69355 & 69356 HAVE A TOTAL COMBINED DUTY OF 1.0 AFA.

²⁴ PERMITS 71437 & 71438 HAVE A TOTAL COMBINED DUTY OF 1.0 AFA.

²⁵ PERMITS 73988 & 73989 HAVE A TOTAL COMBINED DUTY OF 0.5 AFA.

²⁶ PERMITS

**APPENDIX B. LEMMON VALLEY HISTORICAL PUMPAGE BY POINT OF
DIVERSION.**

SITE NAME	APP NO	MOU	OWNER OF RECORD	DUTY (AFA) 2011	DUTY (AFA) 2012	DUTY (AFA) 2013	DUTY (AFA) 2014	DUTY (AFA) 2015
092A N20 E18 01BC 1	64984, 64985	COM	JACKSON'S FOOD STORES, INC.; LANDBANK DEVELOPMENT CO., LLC	0.00	0.00	0.00	0.00	0.00
092A N20 E18 01CB 1	48385, 62212	COM	BACON, CAROL E.; BACON, JACK L.; HIGHLAND SERVICE CORP.; JACKSON FOOD STORES; PRUITT, PATRICIA G.	1.97	1.09	0.00	0.00	0.00
092A N20 E18 01CDBC1	63856, 63857	COM	Laurie S. LAGUNA	0.02	1.33	1.95	2.17	1.32
092A N20 E18 01DCBC1	29078	QM	HOLCOMB, GROVE R.	0.39	1.65	2.08	2.27	2.06
092A N20 E18 12ACBD1	V06784	COM	THREE T WATER COMPANY	0.00	0.00	0.00	0.00	0.00
092A N20 E18 12DCBD1	48901	QM	PETER ECHEVERRIA FAMILY LTD PRTRNSHP	13.52	10.44	0.96	0.00	14.81
092A N20 E18 12DDBD1	48902	QM	PETER ECHEVERRIA FAMILY LTD PRTRNSHP	23.80	19.84	24.96	30.80	33.99
092A N20 E19 07ACAA1	58925	IND	WASHOE COUNTY	0.16	0.16	0.15	0.24	0.45
092A N20 E19 07ADBA1	71560	COM	SEAL BEACH ASSOCIATES, LLC	0.98	0.98	0.98	0.98	0.98
092A N20 E19 07ADBB1	48621	QM	CHARLES SARGENT IRRIGATION, INC.	0.00	0.00	0.00	0.00	0.00
092A N20 E19 07ADDB1	52431, 52432, 52433, 52434, 52435, 52436	QM	RICHARD EARL SPOONER FAMILY TRUST DATED 9/30/1998	0.39	0.20	0.32	0.35	0.37
092A N20 E19 07DABD1	74864, 74865	COM	ENVIRONMENTAL MANAGEMENT OF NEVADA, INC.	0.00	0.00	0.00	0.00	0.00
092A N21 E18 11DDBC1	60144, 60145, 60146	QM	DOUGLASS, DAN	4.11	1.88	1.66	2.03	0.69
092A N21 E18 23DAAA1	63053	OTH	TRUCKEE MEADOWS FIRE P.D. STA # 21	0.57	0.35	0.26	0.50	0.43
092A N21 E18 23DDAC1	34762, 48449, 64232	QM	SILVER KNOLLS MUTUAL WATER COMPANY; WASHOE COUNTY	71.67	71.67	71.67	71.67	51.98
092A N21 E18 23DDCC1	64233	QM	SILVER KNOLLS MUTUAL WATER COMPANY	0.00	0.00	0.00	0.00	0.00
092A N21 E18 25CBBAA1	51763	QM	GRANITE HILLS BAPTIST CHURCH, WASHOE COUNTY	0.44	1.48	1.03	1.02	0.91
092A N21 E18 26ACB 1	51945, 52011, 52012	IRR	HASTINGS, MICHAEL R.; ZIMMERMAN, MAXINE R.	0.55	0.47	0.36	0.52	0.58
092A N21 E19 18ACCC1	71194, 71195, 71221, 71222, 71334, 71335, 76633, 76634, 76635, 76636, 76637, 76638	MUN	BARKER COLEMAN DEVELOPMENT, LLC; HAMILTON PROPERTIES, INC.; LANDBANK DEVELOPMENT CO., LLC; LENNAR RENO, LLC; TMWA; WASHOE COUNTY	0.00	54.14	0.40	0.25	0.00
092A N21 E19 19ACBA1	45325	IND	MILITARY DEPARTMENT-NEVADA	0.00	1.14	0.79	2.98	4.01
092A N21 E19 19BDBB1	35497, 35498, 55345, 55346, 66959	QM	HOFMANN, MARY H.; HVR COMPANY; RED ROCK ROAD, LLC; TMWA	0.00	254.87	17.95	13.10	253.86
092A N21 E19 29BCBC1	72015E	ENV	AIRPORT AUTHORITY OF WASHOE COUNTY, LEAR ENTITIES, RENO-CITY	0.00	0.00	2.17	1.25	0.00
092A N21 E19 30ADAD1	72016E	ENV	AIRPORT AUTHORITY OF WASHOE COUNTY, LEAR ENTITIES, RENO-CITY	20.16	18.32	20.97	18.38	0.00
092A N21 E19 30BDCA1	34219, 34220, 34221, 55338, 55339, 55340, 55341, 55342, 55343, 55344, 66958	QM	HOFFMANN, MARY H.; HVR COMPANY; RED ROCK ROAD, LLC; TMWA	148.84	9.79	31.70	441.12	272.09
092A N21 E19 30DBDA1	56283E	ENV	DERMODY PROPERTIES, INC.	32.59	35.59	32.59	32.59	0.00
092A N21 E19 30DCAA1	56410E	ENV	DERMODY PROPERTIES, INC.	35.59	35.59	32.59	32.59	0.00
092A N21 E19 31ACDD1	55585E	ENV	BWC - WEST INC.	4.17	2.20	0.00	0.00	0.00
092A N21 E19 31CCCC1	25884	REC	WASHOE COUNTY	35.50	35.50	35.50	35.50	12.32
092A N21 E19 31DBAA1	55584E	ENV	BWC - WEST INC.	0.00	0.00	0.00	0.00	0.00
092A N22 E19 19DCDC1	73522, 73523	IRR	RENOWEST INVESTMENT, LLC	1.06	5.00	5.00	5.00	5.00
092B N20 E19 04DDAC1	55938, 66853, 66956, 67013, 71231	QM	TMWA	0.00	0.00	0.00	0.00	0.00
092B N20 E19 04DDDB1	31252	REC	LDS	18.35	11.71	12.01	14.98	5.42
092B N20 E19 04DDDB1	47504	QM	LDS	2.81	2.18	4.56	2.44	4.14
092B N20 E19 08ACBB1	73988, 73989	QM	NORTH VALLEY PROPERTIES LLC	7.10	6.17	4.79	2.66	0.21
092B N20 E19 08ACCB1	50473	COM	WEBB MH PARK, LLC	0.00	0.00	0.00	0.00	1.90
092B N20 E19 08ADCC1	51833	IND	WASHOE COUNTY SCHOOL DISTRICT	0.92	0.65	0.72	1.02	0.82
092B N20 E19 08ADCC2	70103	COM	JOHNSON FAMILY TRUST	0.48	0.09	0.13	0.17	0.17
092B N20 E19 08BCAB1	36086	COM	RENO SAHARA, LLC	0.00	0.00	0.00	0.00	2.70
092B N20 E19 08BCAD1	36085	COM	RENO SAHARA, LLC	12.44	7.31	5.60	0.00	5.60
092B N20 E19 08BCDD1	71437, 71438	COM	ESTES, GARY K.	0.00	0.00	0.00	0.00	0.00
092B N20 E19 08CAAC1	50474	COM	WEBB MH PARK, LLC	0.60	0.00	9.67	0.00	0.00
092B N20 E19 08CAAD1	50472	COM	WEBB MH PARK, LLC	0.04	8.41	0.00	0.00	10.31
092B N20 E19 08CBCD1	V04092	COM	HINKEL, DON; LAMAY, JAMES R. JR.	6.72	6.72	6.72	6.72	6.72
092B N20 E19 08DDAC1	V08960	QM	FINKLER, GREGG J.	2.60	2.60	2.60	2.60	2.60
092B N20 E19 09ADDB1	68060, 68061	COM	WASHOE COUNTY, A POLITICAL SUBDIV.	1.38	0.86	1.09	1.22	0.89
092B N20 E19 09CDAA1	42225, 71928	QM	BLACK SPRINGS G.L.D.; WASHOE COUNTY	6.14	8.90	0.28	0.00	0.00
092B N20 E19 09DCDC1	30366, 34012	QM	BLACK SPRINGS G.L.D.	63.01	66.60	40.82	35.80	32.05
092B N20 E19 10ADBD1	37166	REC	WASHOE COUNTY	4.94	4.94	4.94	4.94	4.94
092B N20 E19 15BDCD1	35214	COM	ESTES, BRUCE C.	2.97	1.35	1.24	1.03	0.78
092B N20 E19 16BABA1	30446	QM	BLACK SPRINGS G.L.D.	4.94	10.16	1.71	2.09	2.09
092B N20 E19 16BACD1	12919	QM	JOSEPH J. ADRIAN AND SHARON ADRIAN, JTWROS	2.00	2.00	2.00	2.00	2.00
092B N20 E19 16BAD1	V08912	IRR	BUCK, ROSEMARIE L.; BUCK, STEPHEN E.; HARDISTY, LINDA M.; HARDISTY, MICHAEL L.; TOBELER, JEAN S.; TOBELER, W.J.	1.88	1.88	1.88	1.88	1.88
092B N20 E19 17BBCD1	26672	QM	TMWA	0.00	0.00	0.00	0.00	0.00
092B N21 E19 03AACD1	69355, 69356	COM	WASHOE COUNTY	2.15	1.59	1.78	1.43	1.54
092B N21 E19 22BCDC1	55941, 68089, 69061	QM	TMWA	144.91	161.12	141.17	130.49	23.29
092B N21 E19 23AAAC1	31737	IND	LEMMON VALLEY LAND CO INC	0.00	0.00	0.00	0.00	0.00
092B N21 E19 23DBCD1	82331	REC	WASHOE COUNTY	N/A	NA	1.43	0.00	1.85
092B N21 E19 26CBBAA1	55940	QM	TMWA	96.39	88.81	128.92	47.91	4.51
092B N21 E19 27ABAB1	55936, 55942, 66150, 66543, 68090, 69588, 78244	QM	TMWA	68.84	96.18	109.59	131.78	0.00
092B N21 E19 33DBBA1	61588, 61590, 63791, 66957, 67014, 68716, 69062, 71232, 73636, 73637	MUN	TMWA	0.00	0.00	0.00	0.00	0.03
092B N21 E19 34BBAB1	55937, 55939, 66544, 72722, 72723, 72724, 73638, 73639, 78245	QM	TMWA	257.33	288.29	193.09	196.69	68.83

Total: 1,105.42 1,342.20 962.78 1,283.16 841.13