

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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LAKE VALLEY (HYDROGRAPHIC BASIN 10-183)

CROP INVENTORY

2012

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ABSTRACT

This inventory represents the status and usage of all permitted and certificated groundwater rights for irrigation purposes located within the Lake Valley, Hydrographic Basin 10-183, for the year 2012. **Only those groundwater rights associated with irrigation purposes are represented in this report.** For a listing and summary of all other manners of use within the basin, please refer to the [Nevada Division of Water Resources Hydrographic Basin Summary](#).

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 continuing basis.

For the year 2012, the permitted and certificated groundwater rights for irrigation purposes totaled **3,894 acres** with a total duty of 15,936 acre-feet within Lake Valley. This 15,936 acre-feet of permitted and certificated groundwater rights includes 11,300 acre-feet which were changed to municipal use in Coyote Springs Valley in 2011. State Engineer simultaneously approved permits for the full 11,300 acre-feet to be used for irrigation in Lake Valley until the interbasin transfer project is completed. An estimated **4,747 acres** were irrigated and 19,000 acre-feet were pumped during 2012.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	183, REGION 10
HYDROGRAPHIC BASIN NAME	LAKE VALLEY
COUNTY	LINCOLN AND WHITE PINE
MAJOR COMMUNITIES	CALIENTE AND PIOCHE
BASIN DESIGNATION	DESIGNATED
DENIALS BASED UPON WATER AVAILABILITY	2474 , IRR DEN, 6/8/1979 2535 , IRR DEN, 4/17/1980 2716 , IRR IRD DEN, 9/10/1981 5922 , IRR MUN DEN, 1/9/2009
ESTIMATED IRRIGATION PUMPAGE 2012 (ACRE-FEET)	19,000*
STATE ENGINEER'S ORDERS	
NO. 726 – DESIGNATION OF BASIN	JUNE 11, 1979

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 15,936 ACRE-FEET
DATE: JANUARY 2015

NOTE: Committed groundwater resource data are accurate for January 2015. 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. Be advised this report acknowledges that other manner of uses may be present in the basin; however, only those groundwater rights associated with irrigation purposes are represented in this report.

* Acreage represented in this report may have surface water rights appurtenant. This report acknowledges those acres with surface water rights but is not intended to quantify, nor present any definitive use of those surface water rights. The data represent only the pumping of groundwater and the acreage to which it is applied.

PURPOSE AND SCOPE

The purpose of this report is to inventory all of the groundwater resources allocated to irrigation as described by the Office of the State Engineer, Nevada Division of Water Resources, and to estimate the amount of groundwater pumped for irrigation purposes within the Lake Valley Hydrographic Basin 10-183, for the year 2012.

DESCRIPTION OF THE STUDY AREA

The Lake Valley Hydrographic Basin is located in eastern Nevada (Figure 1). Lake Valley occupies approximately 557 square miles in Lincoln and White Pine Counties. The adjacent hydrographic basins are Steptoe Valley (10-179) to the north, Spring Valley (10-184) to the northeast, Hamlin Valley (11-196) to the east, Spring Valley (13-201) to the southeast, Patterson Valley (13-202) to the south, and Dry Lake Valley (10-181) and Cave Valley (10-180) to the west.

Lake Valley is bounded by the Schell Creek Range on the west, the Fairview Range to the southwest, the Wilson Creek Range to the southeast and the Fortification Range to the east. Lake Valley is approximately 15 miles wide by 40 miles long with basin elevations ranging from approximately 5,920 feet above mean sea level on the valley floor to approximately 10,990 feet above mean sea level at the peak of Mount Grafton. Irrigation is primarily located in the southern portion of the basin (Figure 2).

FIGURE 1. MAP OF LAKE VALLEY HYDROGRAPHIC BASIN 10-183

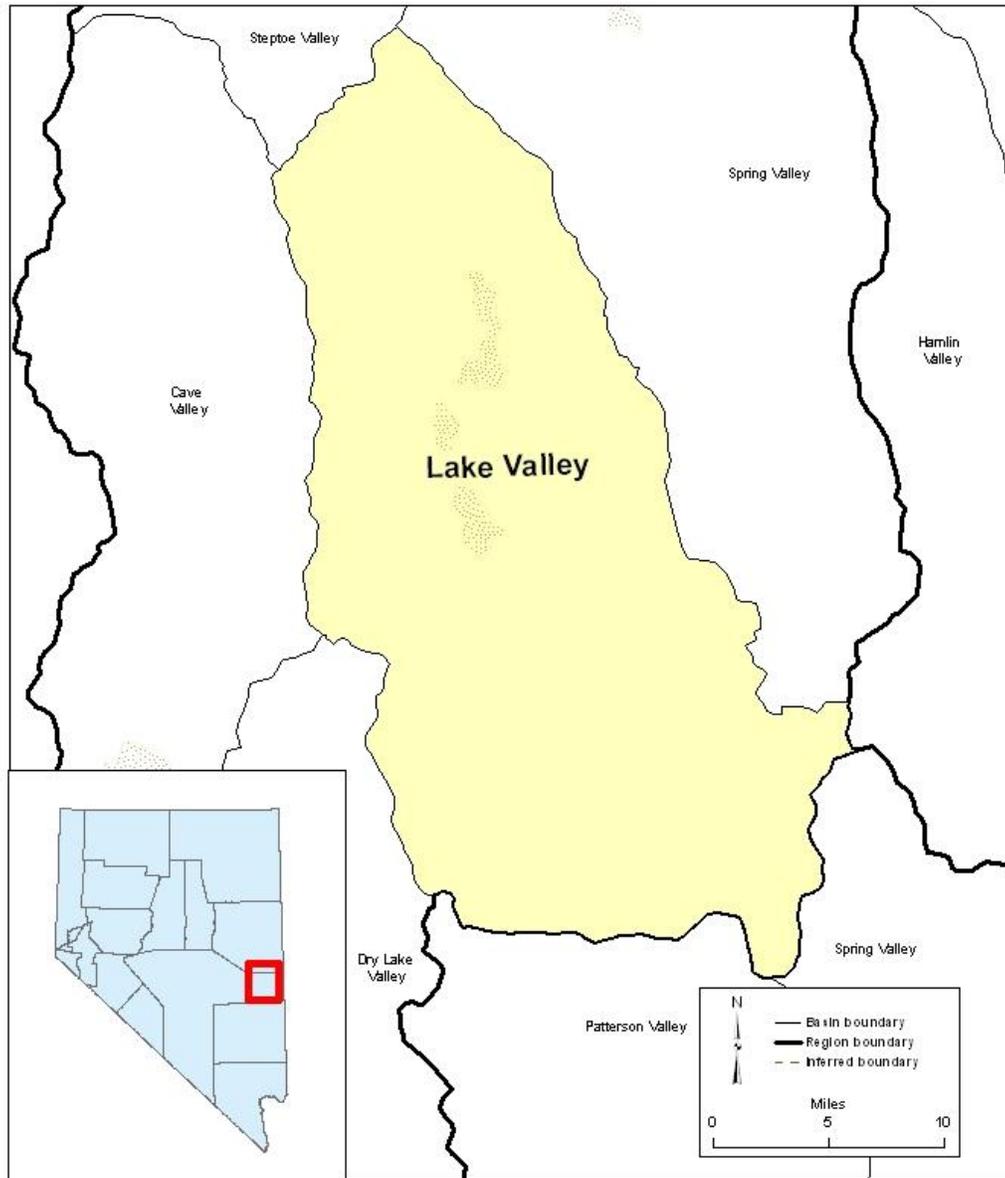
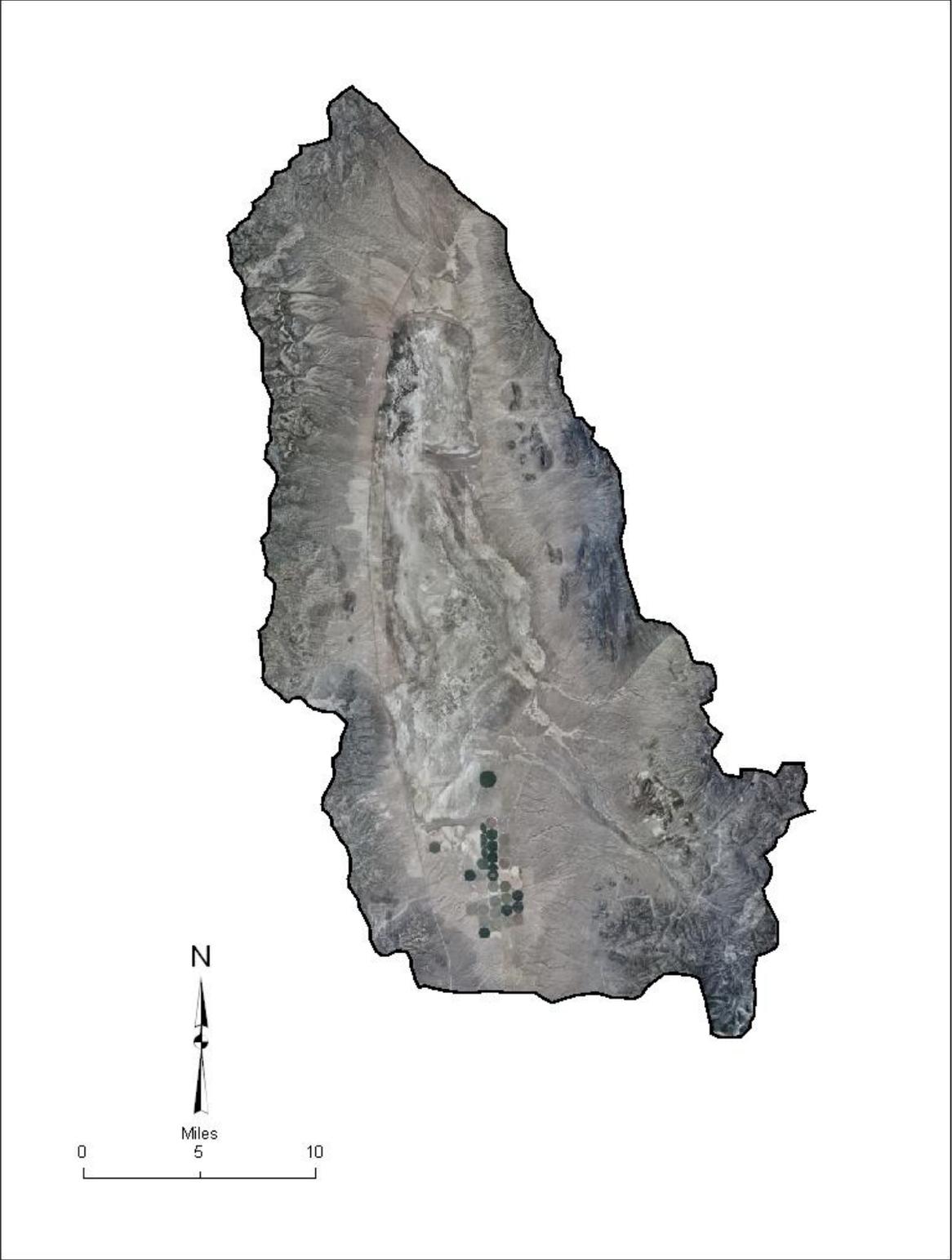


FIGURE 2. LOCATION MAP OF LAKE VALLEY IRRIGATED ACREAGE



NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP) 2010

METHODS TO ESTIMATE IRRIGATED ACREAGE

This report estimates the number of acres irrigated by the groundwater pumped under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated acreage:

- Field inspection of the place of use was conducted to estimate the number of acres under cultivation.
- In cases where field inspection of the place of use is not practical, aerial and/or satellite imagery are analyzed to determine acreages.

METHODS TO ESTIMATE PUMPAGE

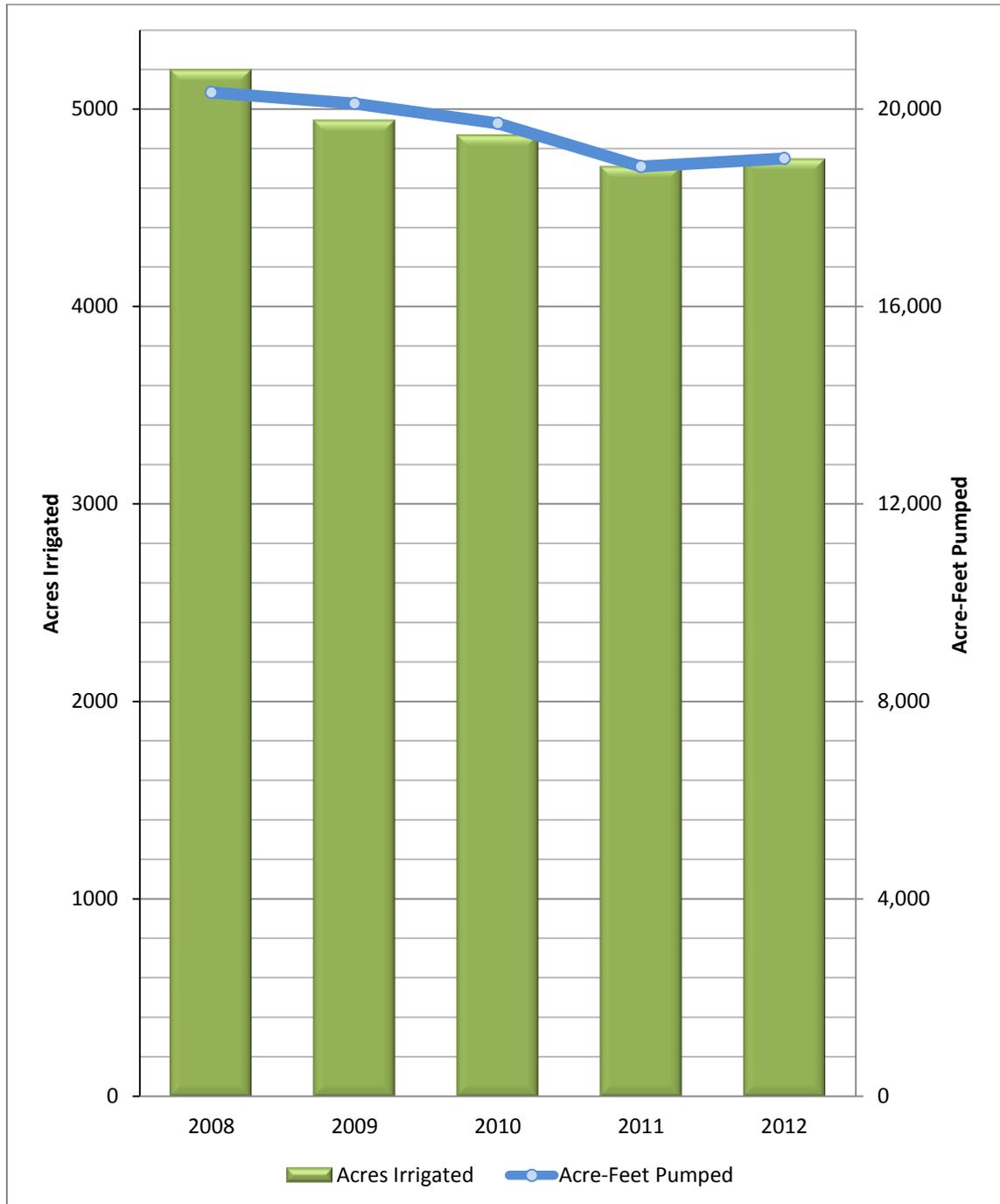
This report estimates the amount of groundwater pumped under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated use:

- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated or permitted duty rate associated with that acreage.
- If there were no acres under cultivation, zero pumpage was recorded.

APPENDIX A
LAKE VALLEY HISTORICAL CROP INVENTORY

LAKE VALLEY HISTORICAL CROP INVENTORY

Year	2008	2009	2010	2011	2012
Acres Irrigated	5,197	4,942	4,868	4,709	4,747
Acre-Feet Pumped	20,337	20,113	19,712	18,836	19,000



APPENDIX B
2012 LAKE VALLEY CROP INVENTORY

EXPLANATION OF COLUMN HEADINGS

App	The file number of the Application to Appropriate/Change Water or the Claim of Vested of Right.
Cert	The certificate number that was issued under the Application to Appropriate/Change Water.
File Date	The date when the Application to Appropriate/Change Water or the Claim of Vested Right was filed in the Office of the State Engineer.
Status	Indicates the status of an application: Permit (PER), Certificated, or a Claim of Vested Right (VST).
Source	States the source of water: underground (UG), stream (STR), or spring (SPR).
Qtr	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.
Type (Permit)	Indicates the Permit type: Irrigation (IRR), or Irrigation-Desert Land Entry (IRD).
Sup	Indicates whether the groundwater right is part of a group of groundwater rights used to irrigate all or a portion of the same acreage (supplemental). A “Y” in this column signifies the groundwater right is supplemental.
Sup Permit No	The application number(s) of the water right(s) that are supplemental.
Permitted Acres	The number of acres defined by the permit or certificate that are eligible to be irrigated.
Duty	The amount of water in acre-feet 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 total combined duty may be listed at the end of the supplemental group in bold .
Co	The County in which the point of diversion is located.
Owner of Record	The owner of the water right as recorded in the records of the State Engineer. A water right may have more than one owner of record. Only the first, alphabetically, is listed in this table.
Crop	Indicates whether or not a crop was in production during the water year. A “Y” in this column signifies a crop was in production while a “N” signifies no crop was in production.

Type (Crop)	The common name description of the plants under cultivation (e.g. alfalfa).
Irr Method	The method by which the water is applied to the crop and ground (e.g. pivot).
Irr Acres	The estimate of the number of acres irrigated associated with a particular water right.
Pumpage Acre-Feet	The estimate of the amount of water pumped under a particular water right, expressed in acre-feet. One acre-foot equals 325,851 gallons.

Crop and Groundwater Pumpage Inventory from Irrigation, Lake Valley, Basin 183, 2012																					
App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Co	Owner of Record	Crop	Type	Irr Method	Irr Acres	Pumpage Acre-Feet
79109		12/28/2009	PER	UG	SE	NW	2	05N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	126	504.0
																				126	504
79108		12/28/2009	PER	UG	NW	SW	2	05N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unkown	Pivot	115	460.0
																				115	460
59115	15921	8/10/1993	CER	UG	NW	SE	2	05N	66E	IRR	Y	63116 63339	116	325.8	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	126	504.0
63116	15922	5/15/1997	CER	UG	NW	SE	2	05N	66E	IRD	Y	59115 63339	82.77	154.2	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	0	0.0
63339	15923	8/15/1997	CER	UG	NW	SE	2	05N	66E	IRR	Y	59115 63116	82.77	25.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	0	0.0
												Supplemental Totals	126.26	505.0						126	504.0
79120		12/28/2009	PER	UG		LT06	2	05N	66E	IRR			127.08	508.3	LI	TUFFY RANCH PROPERTIES, LLC	Y	unkown	Pivot	120	480.0
												Supplemental Totals	127.08	508.3						120	480.0
79110		12/28/2009	PER	UG	SE	NE	3	05N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	121	484.0
																				121	484
79107		12/28/2009	PER	UG	SE	SE	3	05N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unkown	pivot	120	480.0
																				120	480
59109	15912	8/10/1993	CER	UG	NE	SW	3	05N	66E	IRR	Y	60014 63334	125.75	319.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	120	480.0
60014	15913	4/26/1994	CER	UG	NE	SW	3	05N	66E	IRR	Y	59109 63334	125.75	161.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	0	0.0
63334	15914	8/15/1997	CER	UG	NE	SW	3	05N	66E	IRR	Y	59109 60014	125.75	23.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	0	0.0
												Supplemental Totals	125.75	503.0						120	480.0
79121		12/28/2009	PER	UG	NE	SE	4	05N	66E	IRR			125.98	480.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unkown	Pivot	126	504.0
												Supplemental Totals	125.98	480.0						126	504.0
79117		12/28/2009	PER	UG	SE	NE	10	05N	66E	IRR			126.35	505.4	LI	TUFFY RANCH PROPERTIES, LLC	Y	unkown	Pivot	123	492.0
																				123	492
79118		12/28/2009	PER	UG	NE	NW	10	05N	66E	IRR	Y		125.17	500.7	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	120	480.0
																				120	480
79131		12/28/2009	PER	UG	NE	SW	10	05N	66E	IRR			125.84	503.1	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	125	500.0
																				125	500.0
79129		12/28/2009	PER	UG	SE	SE	10	05N	66E	IRD			76.03	304.1	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	73	292.0
												Supplemental Totals	76.03	304.1						73	292.0
79119		12/28/2009	PER	UG	NW	NW	11	05N	66E	IRR			125.8	503.2	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	Pivot	123	492.0
												Supplemental Totals	125.81	503.2						123.0	492.0
63114	15927	5/15/1997	CER	UG	NW	NE	11	05N	66E	IRD	Y	63118 79130	126.16	203.9	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	pivot	0.0	0.0
63118	15928	5/15/1997	CER	UG	NW	NE	11	05N	66E	IRD	Y	63114 79130	126.16	102.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	pivot	0	0.0
79130		12/28/2009	PER	UG	NW	NE	11	05N	66E	IRD		63114 63118	126.16	198.8	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	full pivot	128	512.0
												Supplemental Totals	126.16	504.6						128.0	512.0
72278		2/28/2005	PER	UG	SE	NW	10	06N	66E	IRR	Y	72279	285.3	605.5	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	one 16-T pivot	280	1120.0
72279		2/28/2005	PER	UG	SE	NW	10	06N	66E	IRR	Y	72278	285.3	656.8	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown	one 16-T pivot	0	0.0
												Supplemental Totals	285.3	1262.3						280	1120.0
79115		12/28/2009	PER	UG	SE	NW	22	06N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown		127	508.0
																				127	508
79116		12/28/2009	PER	UG	NE	NW	22	06N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	unknown		124	496.0
																				124	496
79127		12/28/2009	PER	UG	SW	SE	22	06N	66E	IRR			125.84	480.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	Alfalfa	Pivot	123	492.0

Crop and Groundwater Pumpage Inventory from Irrigation, Lake Valley, Basin 183, 2012																															
App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Co	Owner of Record	Crop	Type	Irr Method	Irr Acres	Pumpage Acre-Feet										
Supplemental Totals													125.84	480.0																123	492.0
75468		2/23/1961	PER	UG	NW	SW	22	06N	66E	IRD	Y	75469 75526	235.38	219.7	LI	TUFFY RANCH PROPERTIES, LLC	Y	potatoes	north partial piv	60	240.0										
75469		9/2/1965	PER	UG	NW	SW	22	06N	66E	IRD	Y	75468 75526	235.38	401.8	LI	TUFFY RANCH PROPERTIES, LLC	Y	potatoes	middle part piv	80	320.0										
75526		2/23/1961	PER	UG	NW	SW	22	06N	66E	IRR	Y	75468 75469	235.38	320.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	Alfalfa	S. + 1/4 pivots	67	268.0										
Supplemental Totals													235.38	941.5																207	828
79114		12/28/2009	PER	UG	SE	SE	27	06N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa		124	496.0										
																				124	496										
79126		12/28/2009	PER	UG	NE	SW	27	06N	66E	IRR			125.317	501.3	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa + corn	Pivot	118	472.0										
																				118	472										
79128		12/28/2009	PER	UG	SW	NE	27	06N	66E	IRR			125.04	500.2	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	Pivot	123	492.0										
Supplemental Totals													125.04	500.2															123	492	
79637				UG	SE	NW	27	06N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	potatoes	Pivot	126	504.0										
																				126	504										
74090		4/3/2006	PER	UG	SW	SE	28	06N	66E	IRR	Y	74091 74555	117.62	231.4	LI	TUFFY RANCH PROPERTIES	Y	potatoes	Pivot	123	492.0										
74091		4/3/2006	PER	UG	SW	SW	28	06N	66E	IRR	Y	77090 74555	117.62	93.4	LI	TUFFY RANCH PROPERTIES, LLC	Y	potatoes	Pivot	0	0.0										
74555		7/24/2006	PER	UG	SW	SE	28	06N	66E	IRR	Y	74090 74091	117.62	145.6	LI	TUFFY RANCH PROPERTIES, LLC	Y	potatoes	Pivot	0	0.0										
Supplemental Totals													117.62	470.5															123	492	
79106		12/28/2009	PER	UG	SE	NW	29	06N	66E	IRR			200	800.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	Alfalfa	10T pivot	200	800.0										
																				200	800.0										
79105		12/28/2009	PER	UG	NW	NW	29	06N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	Alfalfa	pivot	122	488.0										
																				122	488										
79104		12/28/2009	PER	UG	NW	NE	30	06N	66E	IRR			126	505.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	119	476.0										
																				119	476										
79125		12/28/2009	PER	UG	NE	NW	33	06N	66E	IRR			125.86	503.4	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	120	480.0										
Supplemental Totals													125.86	503.4															120.0	480.0	
59123	15900	8/10/1993	CER	UG	NE	NE	33	06N	66E	IRR	Y	60016 63338	126.05	226.4	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	123	226.4										
60016	15901	4/26/1994	CER	UG	NE	NE	33	06N	66E	IRR	Y	59123 63338	126.05	253.6	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	0	253.6										
63338	15902	8/15/1997	CER	UG	NE	NE	33	06N	66E	IRR	Y	60016 59123	126.05	24.2	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	0	24.2										
Supplemental Totals													126.05	504.2															123.0	504.2	
79112		12/28/2009	PER	UG	SE	SW	34	06N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	117	468.0										
																				117	468										
79113		12/28/2009	PER	UG	NE	NW	34	06N	66E	IRR			189	756.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	178	712.0										
																				178	712										
79111		12/28/2009	PER	UG	NE	SE	34	06N	66E	IRR			126	504.0	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	122	488.0										
																				122	488										
79124		12/28/2009	CER	UG	SW	NE	34	06N	66E	IRR			125.361	501.4	LI	TUFFY RANCH PROPERTIES, LLC	Y	potatoes	pivot	120	480.0										
																				120	480										
79123		12/28/2009	PER	UG	NW	NW	35	06N	66E	IRD			84.92	339.7	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	full pivot	124	496.0										
																				124.0	496.0										
79122		12/28/2009	PER	UG	NW	SW	35	06N	66E	IRD			126.22	478.7	LI	TUFFY RANCH PROPERTIES, LLC	Y	alfalfa	pivot	121	484.0										
Supplemental Totals													126.22	478.7															121.0	484.0	

Crop and Groundwater Pumpage Inventory from Irrigation, Lake Valley, Basin 183, 2012																						
App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	TwN	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Co	Owner of Record	Crop	Type	Irr Method	Irr Acres	Pumpage Acre-Feet	
15771	4806	8/16/1954	CER	UG	SW	SE	1	09N	65E	IRR			140.953	563.8	LI	TUFFY RANCH PROPERTIES, LLC	Y	pasture	flood irrigation	140	560.0	
																			POD is a ditch	140.0	560.0	
15772	4831	8/16/1954	CER	UG	SW	NE	36	10N	65E	IRR			41.988	143.8	WP	TUFFY RANCH PROPERTIES, LLC	N	no crop	well not pumped	0	0.0	
																				0.0	0.0	
15773	4807	8/16/1954	CER	UG	NW	SE	36	10N	65E	IRR			1.985	7.2	WP	GEYSER RANCH LIMITED PARTNE	N	no crop	well not pumped	0	0.0	
																				0.0	0.0	
																				Totals:	4,747.0	19,000.2