

STATE OF NEVADA  
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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STATE ENGINEER



CLOVERS AREA (HYDROGRAPHIC BASIN 04-064)

CROP INVENTORY

2013

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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 Clovers Area, Hydrographic Basin 4-064, for the year 2013. **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 2013, the permitted and certificated groundwater rights for irrigation purposes totaled **3,419 acres** with a total duty of 13,399 acre-feet within Clovers Area. An estimated **2,743 acres** were irrigated and 10,804 acre-feet were pumped during 2013.

## HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	064, REGION 4
HYDROGRAPHIC BASIN NAME	CLOVERS AREA
COUNTIES	HUMBOLDT, LANDER AND ELKO
MAJOR COMMUNITIES	BATTLE MOUNTIAN
DESIGNATED BASIN	ALL
DENIALS BASED UPON WATER AVAILABILITY	N/A
ESTIMATED IRRIGATION PUMPAGE 2013 (ACRE-FEET)	10,804*
STATE ENGINEER'S ORDERS	
<a href="#"><u>NO. 700 – DESIGNATION OF BASIN</u></a>	APRIL 28, 1965
<a href="#"><u>NO. 839 - PERFERRED USE (PORTION)</u></a>	MARCH 20, 1984
<a href="#"><u>NO. 1085 - WELL SPACING</u></a>	JANUARY 21, 1994

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 13,399 ACRE-FEET  
DATE: FEBRUARY 2014

NOTE: Committed groundwater resource data are accurate for February 2014. 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**

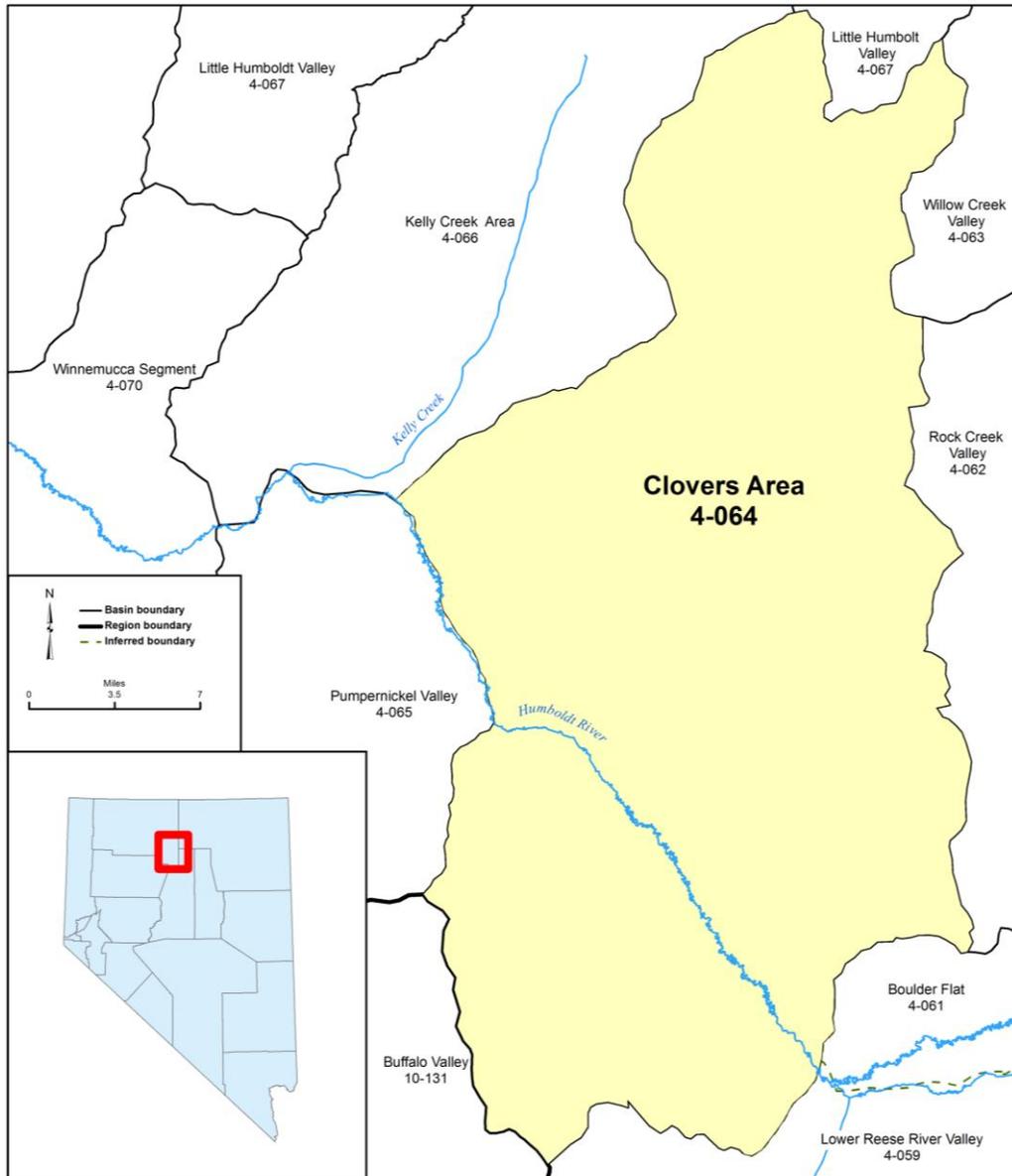
The purpose of this report is to inventory all of the groundwater resources allocated to irrigation and described by the Office of the State Engineer, Nevada Division of Water Resources, and to estimate the amount of groundwater pumped for irrigation purposes within the Clovers Area Hydrographic Basin 4-064, for the year 2013.

## **DESCRIPTION OF THE STUDY AREA**

The Clovers Area Hydrographic Basin is located in north central Nevada (Figure 1). Clovers Area occupies approximately 722 square miles in Humboldt, Lander and Elko Counties. The adjacent hydrographic basins are Little Humboldt Valley (4-067) to the north, Willow Creek Valley (4-063) to the northeast, Rock Creek Valley (4-062) to the east, Boulder Flat (4-061) to the southeast, Lower Reese River Valley (4-059) to the south, Buffalo Valley (10-131) to the southwest, Pumpernickel Valley (4-065) to the west, and Kelly Creek Area (4-066) to the northwest.

Clovers Area is bounded on the west by the Red House Flat, to the north by the Kelly Creek Mountains, Jake Creek Mountain, Owyhee Bluffs and the Snowstorm Mountains, to the east by Sixmile Hill and the Sheep Creek Range and to the south by the Battle Mountains. The valley is approximately 19 miles wide by 47 miles long with basin elevations ranging from approximately 4,400 feet above mean sea level on the valley floor to approximately 8,500 feet above mean sea level in the surrounding mountains. Irrigation occurs primarily in the southern part of the basin (Figure 2).

**Figure 1. LOCATION OF CLOVERS AREA HYDROGRAPHIC BASIN 4-064**



**Figure 2. MAP OF CLOVERS AREA IRRIGATED ACREAGE**



**NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP) 2013**

## **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**

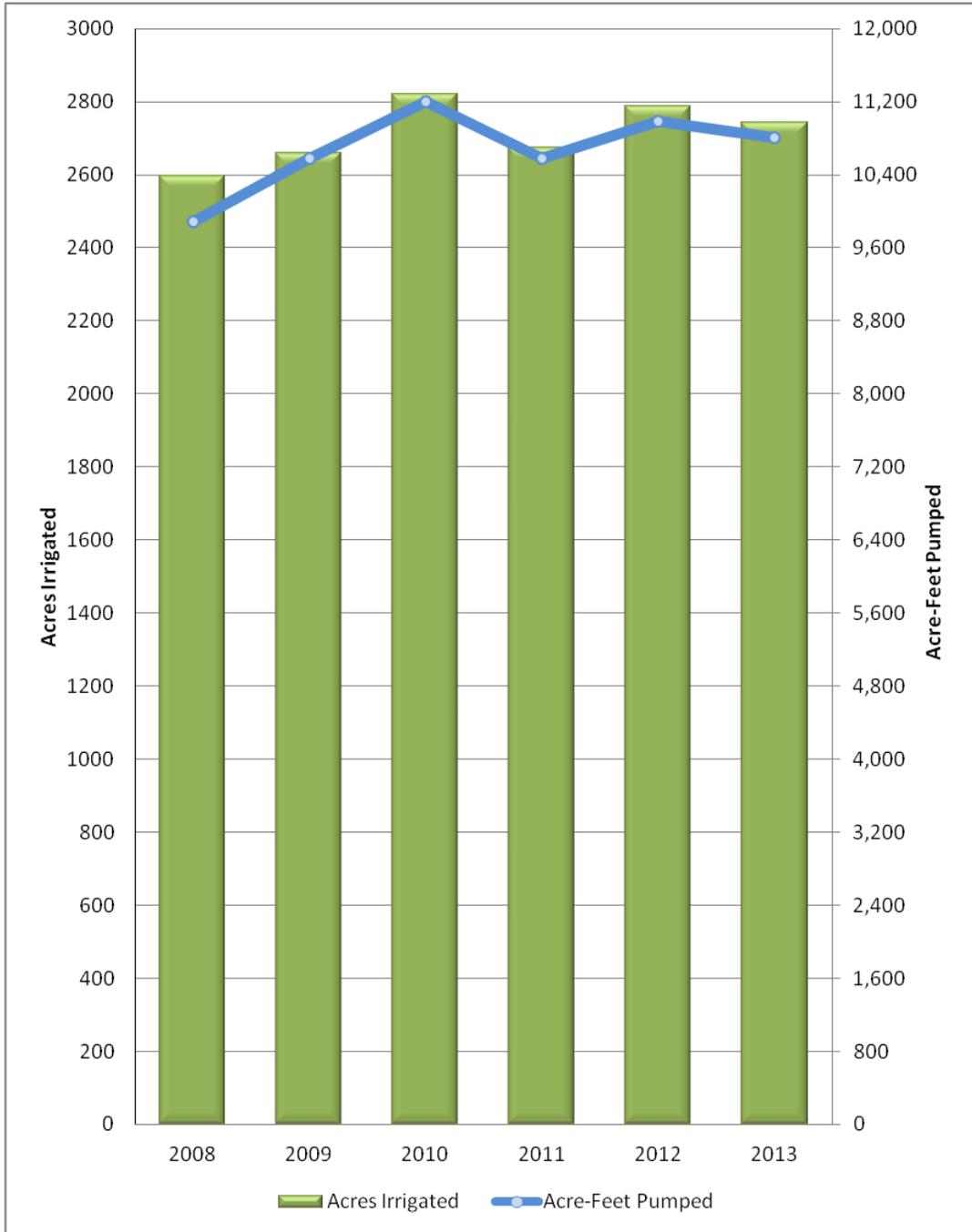
This report estimates the amount of groundwater pumped for irrigation under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated use:

- 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.
- Prior to 2006, only cultivated acreage was recorded; therefore, the acres under cultivation were then multiplied by the duty rate per acreage (4.0 AF/acre).

**APPENDIX A**  
**CLOVERS AREA HISTORICAL CROP INVENTORY**

## CLOVERS AREA HISTORICAL CROP INVENTORY

	2008	2009	2010	2011	2012	2013
Acres Irrigated	2,596	2,660	2,822	2,674	2,789	2,743
Acre-Feet Pumped	9,881	10,584	11,204	10,585	10,988	10,804



**APPENDIX B**

**2013 CLOVERS AREA CROP INVENTORY**

## EXPLANATION OF COLUMN HEADINGS

BASIN	The hydrographic basin in which the water right resides.
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.
PERMITTED ACRES	The number of acres defined by the permit or certificate that are eligible to be irrigated.
DUTY	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 total combined duty may be listed at the end of the supplemental group in <b>bold</b> .
UNITS	The units associated with the duty, expressed as acre-feet annually (AFA) or acre-feet per season (AFS).
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 BY	The method by which the water is applied to the crop and ground (e.g. pivot).
IRR AC	The estimate of the number of acres irrigated associated with a particular water right.
AF PUMPED	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 Irrigation Pumpage Inventory - Clovers Area, Basin 064, 2013																						
Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Permitted Acres	Duty	Units	Co	Owner of Record	Crop	Type	Irr By	Irr Ac	AF Pumped
64	81901		5/16/2012	PER	UG	SW	SW	2	32N	44E	IRR		40	160	AFA	LA	BUFFINGTON, PAUL L.	N	no crop	no irr equip	0	0
																					0	0
64	81287		11/1/2011	PER	UG	NE	NE	10	32N	44E	IRR		14	56	AFA	LA	FOWLER, RITA D AND DENNIS W	N	no crop	ni irr equip	0	0
																					0	0
64	31145	10399	2/28/1977	CER	UG		LT14	10	32N	44E	IRR	Y	38.23	152.92	AFA	LA	SLAGOWSKI FAMILY TRUST	Y	alfalfa	wheel lines	25	100.0
64	34883	10768	1/16/1978	CER	UG		LT14	10	32N	44E	IRR	Y	72.9	291.6	AFA	LA	SLAGOWSKI FAMILY TRUST	N	plowed	1/2 pivot	0	0.0
													<b>Supplemental Totals</b>	<b>72.9</b>	<b>291.6</b>						<b>25</b>	<b>100.0</b>
64	57450		4/17/1992	PER	UG		LT06	10	32N	44E	IRR		70	278.73	AFA	LA	SLAGOWSKI FAMILY TRUST	Y	alfalfa	4-T pivot	31.5	126.0
																					<b>31.5</b>	<b>126.0</b>
64	14278	5075	5/5/1952	CER	UG	SE	NE	10	32N	44E	IRR		20	80	AFA	LA	THOMPSON, ERVIN D.	Y	pasture grass	flood irr.	18	72.0
																					<b>18</b>	<b>72.0</b>
64	19060	5239	7/22/1960	CER	UG	NE	SW	10	32N	44E	IRD		80	320	AFA	LA	GREATHEAD, ELEANOR	N	no crop	no irrig equip	0	0.0
																					<b>0</b>	<b>0.0</b>
64	54888	13845	5/31/1990	CER	UG	SE	NE	10	32N	44E	IRR		18.62	74.48	AFA	LA	THOMPSON, ERVIN	Y	pasture grass	flood irr.	18.62	74.5
																					<b>18.62</b>	<b>74.5</b>
64	76478		11/13/2007	PER	UG		LOT 1	10	32N	44E	IRD		37.44	149.76	AFA	LA	SHAWN AND MINDY GOEMMER	N	no crop	2 wheel lines	37	148.0
																					<b>37.0</b>	<b>148.0</b>
64	78713		7/8/2009	PER	UG	SE	SE	10	32N	44E	IRR		10	40	AFA	LA	LYLE EVERETT AND SUZANN D LAMAIRE TRUST	N	no crop	no irr equip	0	0.0
																					<b>0.0</b>	<b>0.0</b>
64	78712		7/8/2009	PER	UG	SE	SW	11	32N	44E	IRR		10	40	AFA	LA	ENGELSON, BRIAN H AND SAMME E.	Y	grass	sprinklers	0	0.0
																					<b>0.0</b>	<b>0.0</b>
64	78709		7/9/2009	PER	UG	SW	NW	14	32N	44E	IRD	Y	10	40	AFA	LA	SAMUEL E KING AND JEANNIE KING	Y	alfalfa	pivot + fix set	10.0	40.0
64	78710		7/9/2009	PER	UG	SW	NW	14	32N	44E	IRD	Y	86.9	347.6	AFA	LA	SAMUEL E KING AND JEANNIE KING	Y	alfalfa	pivot + fix set	86.9	347.6
64	78711		7/9/2009	PER	UG	SW	NW	14	32N	44E	IRD	Y	10.93	43.72	AFA	LA	SAMUEL E KING AND JEANNIE KING	Y	alfalfa	pivot + fix set	10.9	43.7
													<b>Supplemental Totals</b>	<b>107.83</b>	<b>431.32</b>						<b>107.83</b>	<b>431.3</b>
64	20330	5579	3/5/1962	CER	UG	SW	NE	24	32N	44E	IRD		158.825	635.3	AFA	LA	MICHAEL G. MARVEL AS CO-TRUST	N	no crop	wheel lines	0	0.0
																					<b>0</b>	<b>0.0</b>
64	38646		7/23/1979	PER	UG	SE	SE	24	32N	44E	IRR		1.83	7.32	AFA	LA	SUMIN, RICHARD A & EVELYN KAY	Y	Dom/garden	sprinklers	0.5	2.0
																					<b>0.5</b>	<b>2</b>
64	22891	8056	12/16/1965	CER	UG	NW	SW	24	34N	44E	IRD	Y	258.81	409.8	AFA	LA	PARKER, RUSSELL LANE & TAMMY LAVON	Y	grain	pivot	126	504.0
64	68486		2/11/2002	PER	UG	NE	SE	24	34N	44E	IRR	Y	258.81	480.69	AFA	LA	PARKER, RUSSELL LANE & TAMMY LAVON	Y	alfalfa	pivot	126	504.0
													<b>Supplemental Totals</b>	<b>258.81</b>	<b>1035.84</b>						<b>252</b>	<b>1,008.0</b>
64	22892	8057	12/16/1965	CER	UG	SW	NW	24	34N	44E	IRD	Y	312.72	974.32	AFA	LA	SPPC, IDAHO POWER COMPANY	Y	grain	pivot	126	392.6
																					<b>126</b>	<b>392.6</b>
64	24879	8729	1/23/1969	CER	UG	SW	SW	4	34N	45E	IRD		144.33	577.32	AFA	LA	SPPC	Y	alfalfa+grain	pivot	126	504.0
																					<b>126</b>	<b>504.0</b>
64	77099		6/2/2008	PER	UG	SW	SW	9	34N	45E	IRR	Y	31.46	125.84	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa		107	428.0
64	77466		10/8/2008	PER	UG	SW	SW	9	34N	45E	IRR	Y	24.08	96.32	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	77467		10/8/2008	PER	UG	SW	SW	9	34N	45E	IRR	Y	27.74	110.96	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	76909		4/4/2008	PER	UG	SW	SW	9	34N	45E	IRR	Y	22.12	88.48	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	80322		12/6/2010	Ppp	UG	SW	SW	9	34N	45E	IRR	Y	19.97	79.88	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	80323		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	33.8	135.2	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	80324		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	5.07	20.28	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	80325		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	14.1	56.4	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	80326		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	28.4725	113.89	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	80327		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	18.01	72.04	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
64	80328		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	35.89	143.56	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	Alfalfa			
													<b>Supplemental Totals</b>	<b>200.13</b>	<b>800.52</b>						<b>216.0</b>	<b>864.0</b>

Crop and Irrigation Pumpage Inventory - Clovers Area, Basin 064, 2013																							
Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Permitted Acres	Duty	Units	Co	Owner of Record	Crop	Type	Irr By	Irr Ac	AF Pumped	
64	27129	8111	11/13/1972	CER	UG	NW	SW	16	34N	45E	IRR	Y	106.12	289.28	AFA	LA	PHILLIPS, BRENDA & ROBERT	Y	grain	3/4 pivot	0	0.0	
64	31144	12058	2/28/1977	CER	UG	SW	NW	16	34N	45E	IRR	Y	160.38	569.48	AFA	LA	ERIK M TAYLOR AND KRISTINE W TAYLOR	Y	alfalfa	pivot	126	447.4	
64	59675		1/6/1994	PER	UG	NE	SW	16	34N	45E	IRR	Y	33.35	133.4	AFA	LA	TAYLOR, ERIC AND CHRISTINE	Y	alfalfa+grain	1/4 pivot	34	136.0	
64	80896		6/9/2011	PER	UG	NE	SW	16	34N	45E	IRR	Y	90.33	266.71	AFA	LA	TAYLOR, ERIC AND CHRISTINE	Y	grain	2 piv W2 Sn16	90	360.0	
													<b>Supplemental Totals</b>	<b>266.05</b>	<b>1064.2</b>					<b>Sec 16</b>	<b>250</b>	<b>943.4</b>	
64	21787	5905	2/3/1964	CER	UG	SE	SE	18	32N	45E	IRR		20.04	80.16	AFA	LA	CHUCKAR HILLS M.H.P., LLC	N	no crop	trailer park	0	0.0	
																					<b>0</b>	<b>0</b>	
64	21447	7481	8/8/1963	CER	UG	SE	NE	20	34N	45E	IRD		132.92	531.68	AFA	LA	TAYLOR, ERIK M.	Y	alfalfa	pivot	126	504.0	
																					<b>126</b>	<b>504</b>	
64	81544		2/3/2012	PER	UG	NW	NE	20	34N	45E	IRR		128.54	514.1600037	AFA	LA	TAYLOR, ERIK M. & KRISTINE W.	Y	alfalfa	pivot	126	504.0	
																					<b>126</b>	<b>504.0</b>	
64	21448	7271	8/8/1963	CER	UG	SE	SE	20	34N	45E	IRD	Y	133.08	532.32	AFA	LA	BROOKS, LESLIE & McIntosh, barbara	Y	alfalfa	full pivot	134	536.0	
64	28524	8551	7/16/1974	CER	UG	SW	SE	20	34N	45E	IRR	Y	125.17	500.68	AFS	LA	BROOKS, LESLIE H. MCINTOSH, BARBARA	Y	alfalfa	pivot	126	504.0	
													<b>Supplemental Totals</b>	<b>258.25</b>	<b>1033</b>						<b>260</b>	<b>1,040.0</b>	
64	22834	8055	10/29/1965	CER	UG	NE	SE	30	34N	45E	IRD		133.93	535.76	AFA	LA	TAYLOR, ERIK M. & KRISTINE W.	Y	alfalfa	pivot	128	512.0	
																					<b>128</b>	<b>512.0</b>	
64	25054	7550	4/30/1969	CER	UG	SW	SW	30	34N	45E	IRR	Y	238.42	609.85	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivots	119	476.0	
64	35154	13595	3/17/1978	CER	UG	NE	NW	30	34N	45E	IRR	Y	111.42	343.83	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivots	115	460.0	
													<b>Supplemental Totals</b>	<b>238.42</b>	<b>953.68</b>						<b>234</b>	<b>936.0</b>	
64	28979	9197	11/26/1974	CER	UG	SE	NE	30	34N	45E	IRR		126.37	505.48	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	128	512.0	
																					<b>128</b>	<b>512.0</b>	
64	22878	8093	12/3/1965	CER	UG	NE	SE	32	34N	45E	IRD	Y	81.7	326.8	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	10	40.0	
64	27183	9371	12/14/1972	CER	UG	NE	SE	32	34N	45E	IRR	Y	251.36	1005.44	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa		128	512.0	
64	34672	9455	12/1/1977	CER	UG	SE	SE	32	34N	45E	IRR	Y	251.36	1005.44	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	124	496.0	
													<b>Supplemental Totals</b>	<b>251.36</b>	<b>1005.4</b>						<b>262</b>	<b>1,048.0</b>	
64	28980	9198	11/26/1974	CER	UG	NE	SW	32	34N	45E	IRR	Y	131.62	526.48	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	130	520.0	
64	28981	9361	11/26/1974	CER	UG	NE	NW	32	34N	45E	IRR	Y	214.05	856.23	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	140.5	562.0	
64	34862	9360	1/10/1978	CER	UG	NE	NW	32	34N	45E	IRR	Y	305.72	1079.32	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	2 pivots W1/2	0	0.0	
													<b>Supplemental Totals</b>	<b>305.72</b>	<b>1222.88</b>						<b>270.5</b>	<b>1,082.0</b>	
													<b>Totals:</b>	<b>3,419.0</b>	<b>13,398.9</b>						<b>Totals:</b>	<b>2,743</b>	<b>10,804</b>