

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

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 Clovers Area, Hydrographic Basin 4-064, 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 **3,421 acres** with a total duty of 13,683 acre-feet within Clovers Area. An estimated **2,789.2 acres** were irrigated and 10,988 acre-feet were pumped during 2012.

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 2012 (ACRE-FEET)	10,988*
STATE ENGINEER'S ORDERS	
<u>NO. 700 – DESIGNATION OF BASIN</u>	APRIL 28, 1965
<u>NO. 839 - PERFERRED USE (PORTION)</u>	MARCH 20, 1984
<u>NO. 1085 - WELL SPACING</u>	JANUARY 21, 1994

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 13,683 ACRE-FEET
DATE: FEBRUARY 2013

NOTE: Committed groundwater resource data are accurate for February 2013. 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 2012.

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 Rock Creek Valley (4-062) to the east, Willow Creek Valley (4-063) to the northeast, Little Humboldt Valley (4-067) to the north, Kelly Creek Area (4-066) to the northwest, Pumpernickel Valley (4-065) to the west, Buffalo Valley (10-131) to the southwest and Lower Reese River Valley (4-059) to the south.

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 south by the Battle Mountains and to the east by Sixmile Hill and the Sheep Creek Range. 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 7,500 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

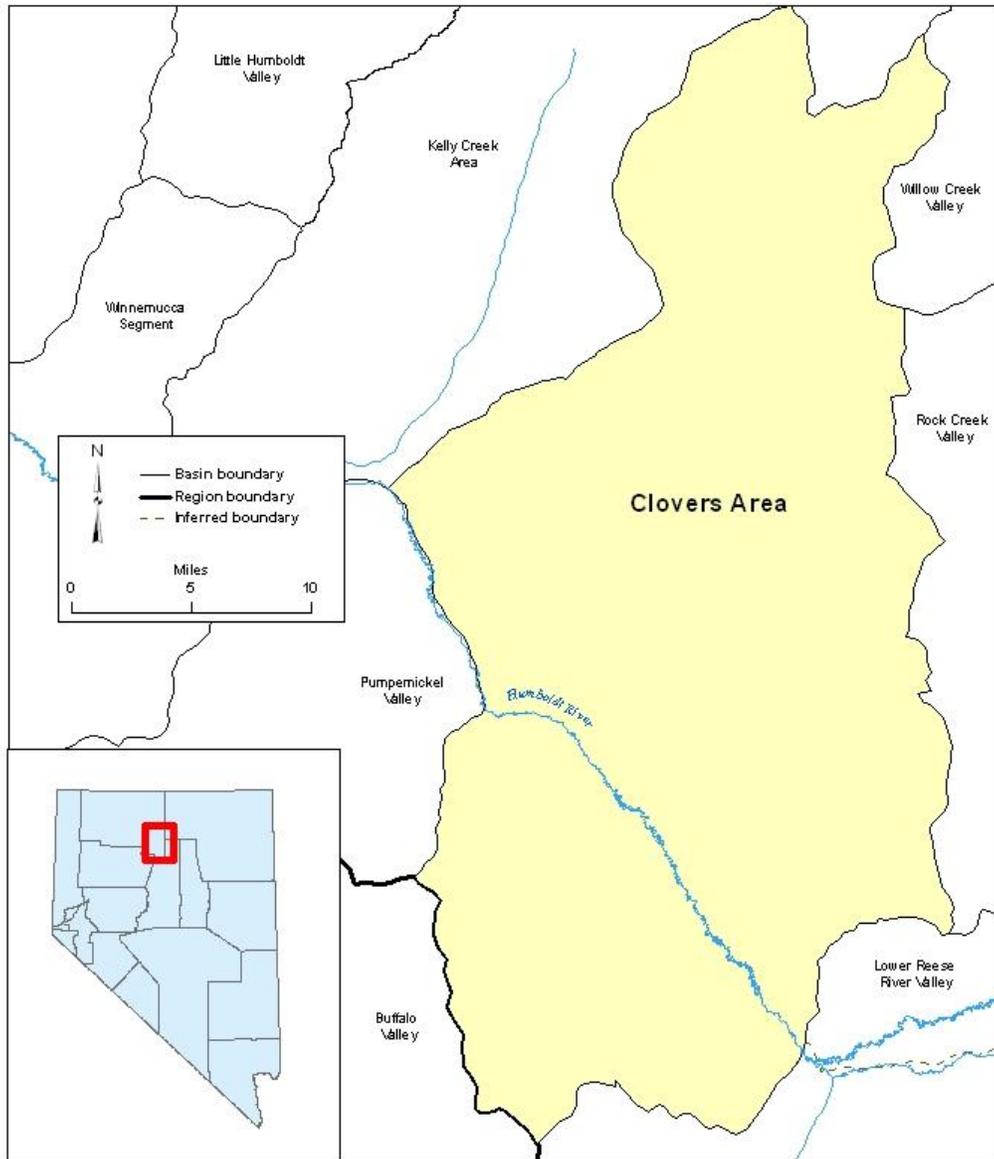
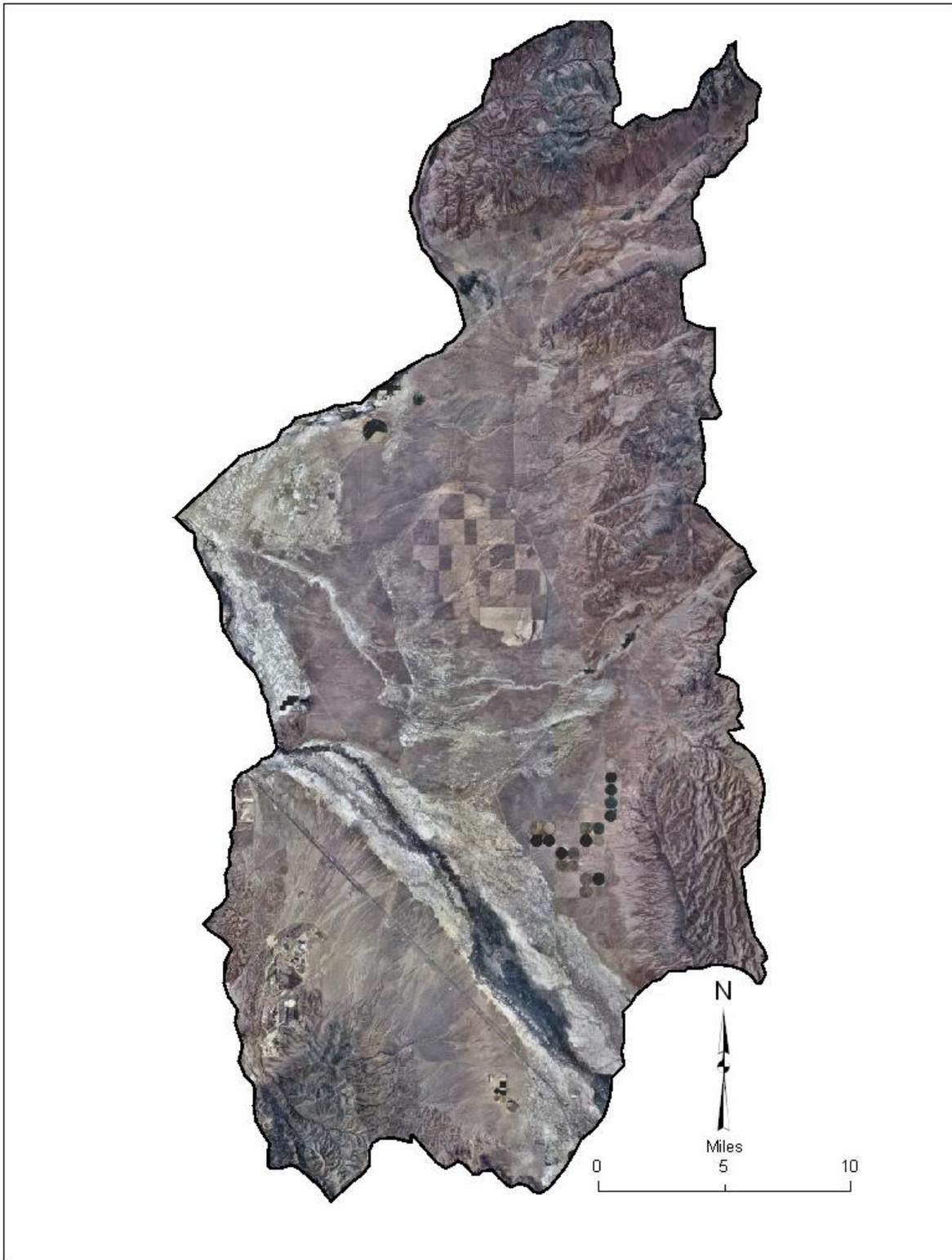


Figure 2: MAP OF CLOVERS AREA IRRIGATED ACREAGE



NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP) 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

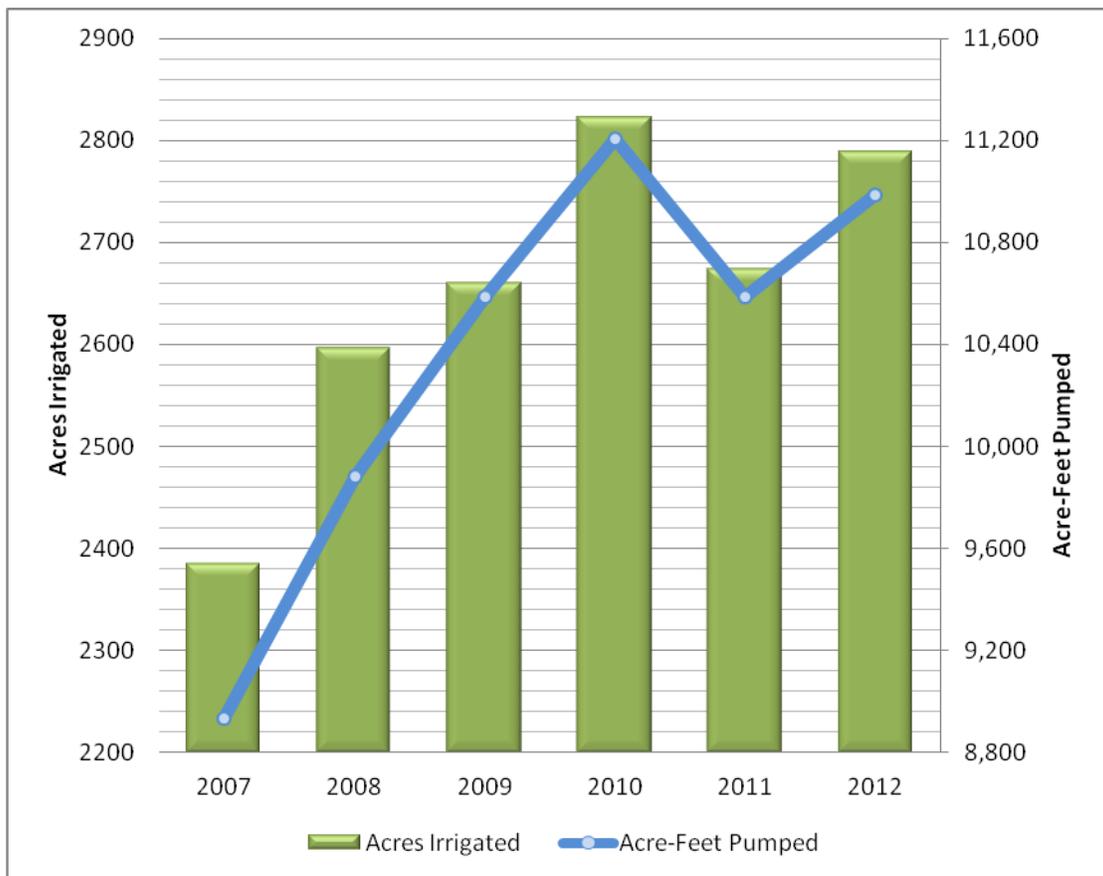
This report estimates the amount of groundwater pumped for irrigation under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated use:

- 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 HISTORICAL CROP INVENTORY

Year	2007	2008	2009	2010	2011	2012
Acres Irrigated	2,385	2,596	2,660	2,822	2,674	2,789
Acre-Feet Pumped	8,931	9,881	10,584	11,204	10,585	10,988



APPENDIX B
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.
SOURCE	States the source of water: underground (UG), stream (STR), or spring (SPR).
STATUS	Indicates the status of an application: Permit (PER), Certificated, or a Claim of Vested Right (VST).
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 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 .
UNITS	The units associated with the duty, expressed as acre-feet annually (AFA) or acre-feet per season (AFS).
COUNTY	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 Y/N	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 ACRES	The estimate of the number of acres irrigated associated with a particular water right.
DUTY USED/ PUMPAGE	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 64 2012

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Tw	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Units	Co	Owner of Record	Crop	Type	Irr By	Irr Ac	Pumpage (acre-feet)
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
64	31145	10399	2/28/1977	CER	UG		LT14	10	32N	44E	IRR	Y	34883	38.23	152.92	AFA	LA	SLAGOWSKI FAMILY TRUST	Y	alfalfa	wheel lines	38.2	152.8
64	34883	10768	1/16/1978	CER	UG		LT14	10	32N	44E	IRR	Y	31145	72.9	291.6	AFA	LA	SLAGOWSKI FAMILY TRUST	Y	alfalfa	wheel lines	31	124.0
													Supplemental Totals	72.9	291.6						69.2	276.8	
64	57450		4/17/1992	PER	UG		LT06	10	32N	44E	IRR			70	278.73	AFA	LA	SLAGOWSKI FAMILY TRUST	Y	alfalfa	2X4-T pivots	62.9	251.6
														62.9							62.9	251.6	
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
														18							18	72.0	
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
														0							0	0.0	
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
														18.62							18.62	74.5	
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
														37.0							37.0	148.0	
64	78713		7/8/2009	PER	UG	SE	SE	10	32N	44E	IRR			10	40	AFA	LA	LYLE EVERETT AND SUZANN D LAMA N		no crop	no irr equip	0	0.0
														0.0							0.0	0.0	
64	78712		7/8/2009	PER	UG	SE	SW	11	32N	44E	IRR			10	40	AFA	LA	ENGELSON, BRIAN H AND SAMME E.	N	no crop	no irr equip	0	0.0
														0.0							0.0	0.0	
64	78709		7/9/2009	PER	UG	SW	NW	14	32N	44E	IRD	Y	78710 78711	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	78709 78711	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	78709 78710	10.93	43.72	AFA	LA	SAMUEL E KING AND JEANNIE KING	Y	alfalfa	pivot + fix set	10.9	43.7
													Supplemental Totals	107.83	431.32						107.83	431.3	
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
														0							0	0.0	
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	Garden	sprinklers	1.83	7.3
														1.83							1.83	7.32	
64	22891	8056	12/16/1965	CER	UG	NW	SW	24	34N	44E	IRD	Y	68486	312.72	970.12	AFA	LA	PARKER, RUSSELL LANE & TAMMY L/Y	Y	alfalfa	pivot	126	504.0
64	68486		2/11/2002	PER	UG	NE	SE	24	34N	44E	IRR	Y	22891	312.72	480.69	AFA	LA	PARKER, TAMMY LAVON & RUSSELL	Y	alfalfa	pivot	126	504.0
													Supplemental Totals	312.72	1250.9						252	1,008.0	
64	22892	8057	12/16/1965	CER	UG	SW	NW	24	34N	44E	IRD	Y	27126	312.72	974.32	AFA	LA	SPPC, IDAHO POWER COMPANY	Y	alfalfa	pivot	126	392.6
64	27126	8163	1/9/1972	CER	UG	SW	NE	24	34N	44E	IRD	Y	22892	312.72	401.6	AFA	LA	SPPC, IDAHO POWER COMPANY	N	no crop	pivot in NE1/4	0	0.0
													Supplemental Totals	243.58	974.32						126	392.6	
64	24879	8729	1/23/1969	CER	UG	SW	SW	4	34N	45E	IRD			144.33	577.32	AFA	LA	SPPC	Y	alfalfa	pivot	126	504.0
														126							126	504.0	
64	77099		6/2/2008	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	31.46	125.84	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y		Alfalfa	2 x 111 acre	111	444.0
64	77466		10/8/2008	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	24.08	96.32	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y		Alfalfa	pivots in W1/2		
64	77467		10/8/2008	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	27.74	110.96	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y		Alfalfa	of Sec 9		
64	76909		4/4/2008	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	22.12	88.48	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y		Alfalfa	"		

Crop and Irrigation Pumpage Inventory - Clovers Area, Basin 64 2012

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted		Units	Co	Owner of Record	Crop	Type	Irr By	Irr Ac	Pumpage (acre-feet)		
														Acres	Duty										
64	80322		12/6/2010	Ppp	UG	SW	SW	9	34N	45E	IRR	Y	all	19.97	79.88	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y	Alfalfa	"	111	444.0			
64	80323		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	33.8	135.2	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y	Alfalfa	"					
64	80324		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	5.07	20.28	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y	Alfalfa	"					
64	80325		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	14.1	56.4	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y	Alfalfa	"					
64	80326		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	28.4725	113.89	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y	Alfalfa	"					
64	80327		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	18.01	72.04	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y	Alfalfa	"					
64	80328		12/6/2010	PER	UG	SW	SW	9	34N	45E	IRR	Y	all	35.89	143.56	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y	Alfalfa	"					
													Supplemental Totals	200.13	800.52								222.0	888.0	
64	27129	8111	11/13/1972	CER	UG	NW	SW	16	34N	45E	IRR	Y	31144 59675 80896	106.12	289.28	AFA	LA	PHILLIPS, BRENDA & ROBERT	Y	alfalfa	3/4 pivot	94	376.0		
64	31144	12058	2/28/1977	CER	UG	SW	NW	16	34N	45E	IRR	Y	27129 59675 80896	160.38	569.48	AFA	LA	ERIK M TAYLOR AND KRISTINE W TA`Y	Y	alfalfa	pivot	126	447.4		
64	59675		1/6/1994	PER	UG	NE	SW	16	34N	45E	IRR	Y	27129 31144 80896	34.7	138.8	AFA	LA	TAYLOR, ERIC AND CHRISTINE	Y	alfalfa	1/4 pivot	32	128.0		
64	80896		6/9/2011	PER	UG	NE	SW	16	34N	45E	IRR	Y	27129 59675 31114	90.33	361.32	AFA	LA	TAYLOR, ERIC AND CHRISTINE	Y	alfalfa	2 piv W/2 Sn16	0	0.0		
													Supplemental Totals	267.4	1069.6								Sec 16	252	951.4
64	21787	5905	2/3/1964	CER	UG	SE	SE	18	32N	45E	IRR			20.04	80.16	AFA	LA	MCCARTY, GEORGIA K.	N	no crop	trailer park	0	0.0		
																							0	0	
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		
																							126	504	
64	69546		2/6/2003	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		
																							126	504.0	
64	21448	7271	8/8/1963	CER	UG	SE	SE	20	34N	45E	IRD	Y	28524	257.66	1030.64	AFA	LA	BROOKS, LESLIE & Mcintosh, barbara	Y	alfalfa	full pivot	93	372.0		
64	28524	8551	7/16/1974	CER	UG	SW	SE	20	34N	45E	IRR	Y	21448	132.37	529.04	AFS	LA	BROOKS, LESLIE H.;MCINTOSH, BARBAR	Y	alfalfa	pivot	126	503.6		
																							219	875.6	
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		
																							128	512.0	
64	25054	7550	4/30/1969	CER	UG	SW	SW	30	34N	45E	IRR	Y	35154	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	25054	111.42	343.83	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivots	115	460.0		
													Supplemental Totals	238.42	953.68								234	936.0	
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	grass hay	pivot	128	512.0		
																							128	512.0	
64	22878	8093	12/3/1965	CER	UG	NE	SE	32	34N	45E	IRD	Y	27183 34672	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	22878 34672	251.36	1005.44	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	128	512.0		
64	34672	9455	12/11/1977	CER	UG	SE	SE	32	34N	45E	IRR	Y	22878 27183	251.36	1005.44	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	124	496.0		
													Supplemental Totals	251.36	1005.4								262	1,048.0	
64	28980	9198	11/26/1974	CER	UG	NE	SW	32	34N	45E	IRR	Y	28981 34862	131.62	526.48	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	142.8	571.2		
64	28981	9361	11/26/1974	CER	UG	NE	NW	32	34N	45E	IRR	Y	28980 34862	214.05	856.23	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	pivot	130	520.0		
64	34862	9360	1/10/1978	CER	UG	NE	NW	32	34N	45E	IRR	Y	28980 28981	305.72	1079.32	AFA	LA	TAYLOR, ERIK M AND KRISTINE W	Y	alfalfa	2 pivots W1/2	0	0.0		
													Supplemental Totals	305.72	1222.88								272.8	1,091.2	
													Totals	3,421.21	13,683.37								Totals:	2,789.2	10,988.3