

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

JASON KING, P.E.
STATE ENGINEER



LOWER REESE RIVER VALLEY (HYDROGRAPHIC BASIN 4-059)

CROP INVENTORY

2012

By:
P. Luke Opperman, P.E.
Richard M. Perry
Kirk Owsley

Table of Contents

ABSTRACT	1
HYDROGRAPHIC BASIN SUMMARY	2
PURPOSE AND SCOPE	3
DESCRIPTION OF THE STUDY AREA	3
FIGURE 1. LOCATION MAP OF LOWER REESE RIVER VALLEY, BASIN 4-059	4
FIGURE 2. MAP OF LOWER REESE RIVER VALLEY IRRIGATED ACREAGE	5
METHODS TO ESTIMATE IRRIGATED ACREAGE	6
METHODS TO ESTIMATE PUMPAGE	6
APPENDIX A	7
LOWER REESE RIVER VALLEY HISTORICAL CROP INVENTORY	8
APPENDIX B	9
EXPLANATION OF COLUMN HEADINGS	10
LOWER REESE RIVER VALLEY CROP INVENTORY	12

ABSTRACT

This inventory represents the status and usage of all permitted and certificated groundwater rights for irrigation purposes located within Lower Reese River Valley, Hydrographic Basin 4-059, 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 **3,827 acres** with a total duty of 15,765.7 acre-feet within Lower Reese River Valley. An estimated **3,359 acres** were irrigated and 12,303 acre-feet were pumped during 2012.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	059, REGION 4
HYDROGRAPHIC BASIN NAME	LOWER REESE RIVER VALLEY
COUNTIES	LANDER
MAJOR COMMUNITIES	BATTLE MOUNTAIN
DESIGNATED BASIN	YES
DENIALS BASED UPON WATER AVAILABILITY	YES
ESTIMATED IRRIGATION PUMPAGE 2012 (ACRE-FEET)	12,303*
STATE ENGINEER'S ORDERS	
<u>NO.739-DESIGNATION OF BASIN (REMAINING PORTION)</u>	March 27, 1980
<u>NO.839-DESIGNATION OF BASIN (PERFERRED USE)</u>	March 20, 1984

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 15,764.7 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 Lower Reese River Valley Hydrographic Basin 4-059, for the year 2012.

DESCRIPTION OF THE STUDY AREA

The Lower Reese River Valley Hydrographic Basin is located in north central Nevada (Figure 1). Lower Reese River Valley occupies approximately 588 square miles in Lander County. The adjacent hydrographic basins are Buffalo Valley (10-131) to the west, Clovers Area (4-064) and Bolder Flat (4-061) to the north, Whirlwind Valley (4-060), Crescent Valley (4-054) and Carico Lake Valley (4-055) to the east, and Middle Reese River (4-058) to the south.

Lower Reese River Valley Hydrographic Basin is bounded to the north by the Humboldt River. This basin is also bounded by the Fish Creek Mountains to the southwest and the Shoshone Mountains to the east. The Lower Reese River Valley is approximately 20 miles wide by 30 miles long with basin elevations ranging from approximately 4,500 feet above mean sea level on the valley floor to approximately 9,000 feet above mean sea level in the surrounding mountains. Irrigation occurs primarily in the southwest part of the basin (Figure 2).

FIGURE 1. LOCATION MAP OF LOWER REESE RIVER VALLEY, BASIN 4-059

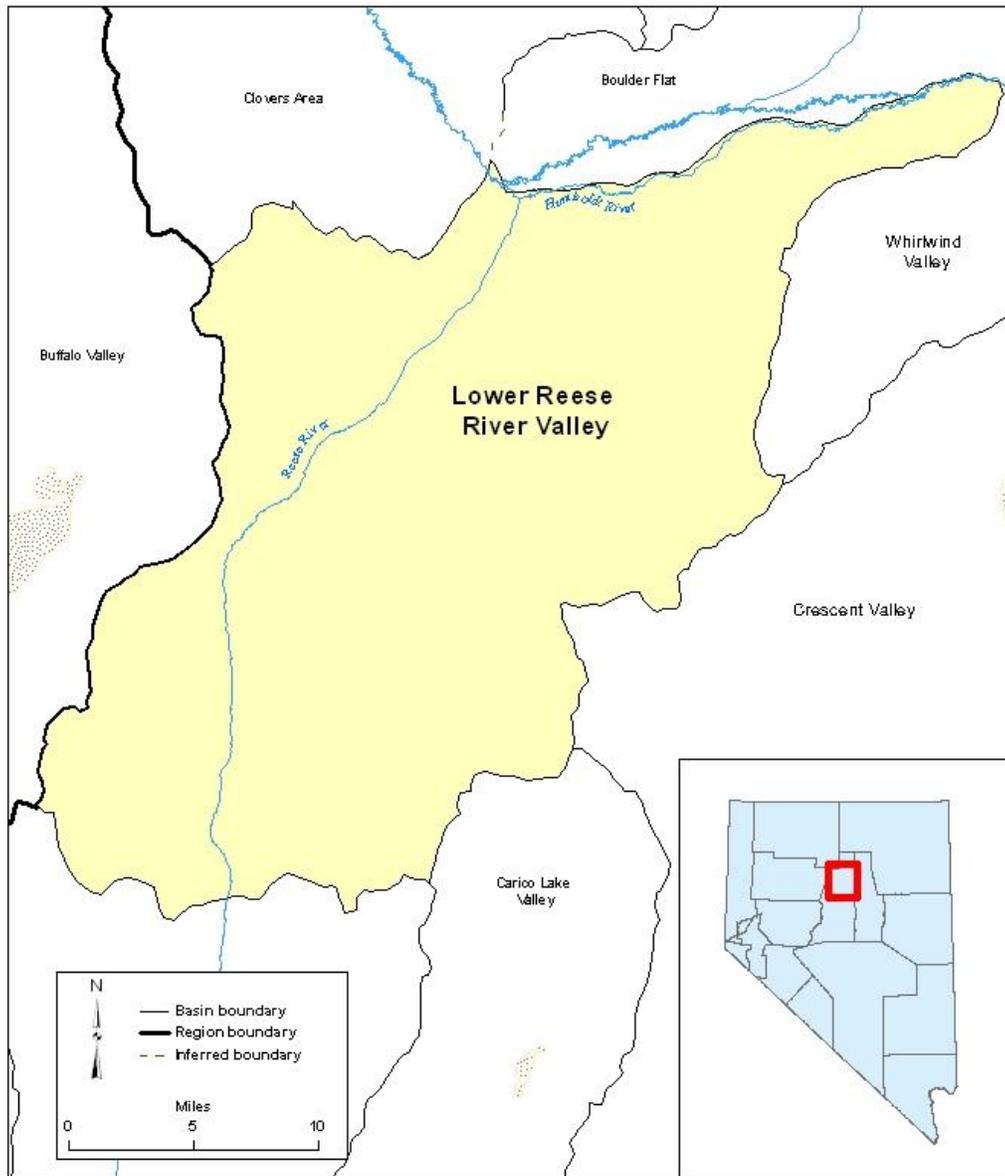
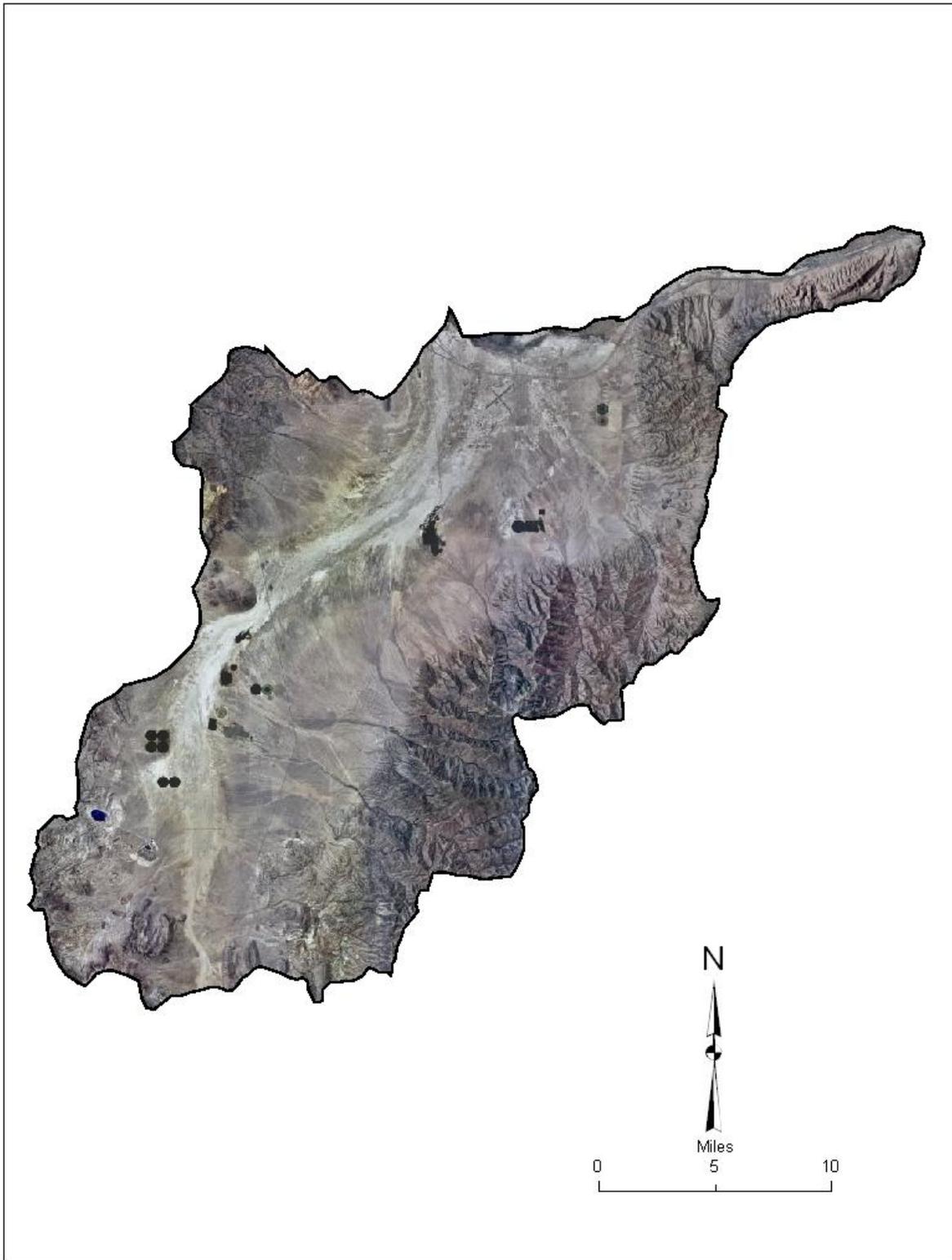


FIGURE 2. MAP OF LOWER REESE RIVER VALLEY IRRIGATED ACREAGE



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:

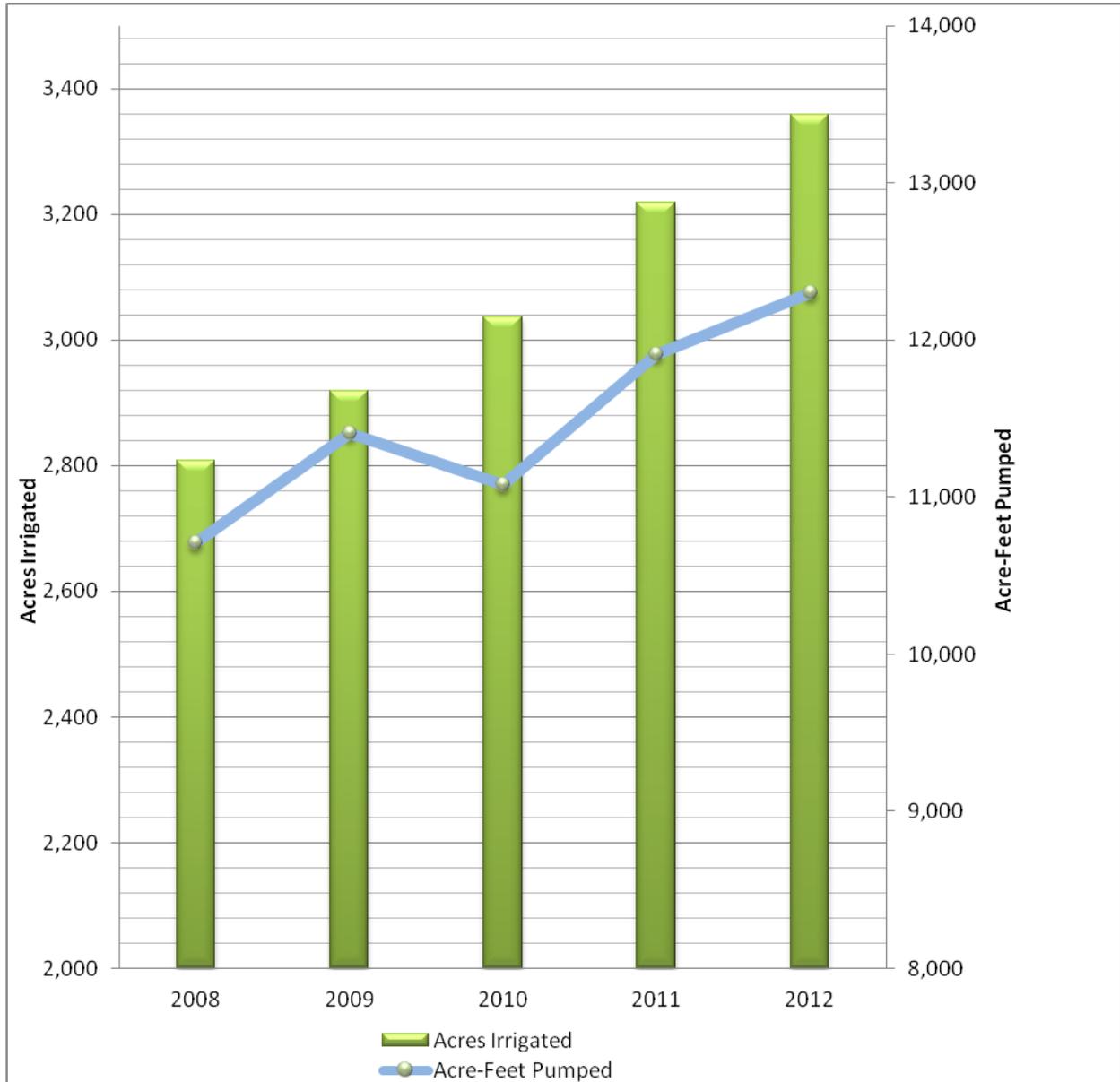
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

APPENDIX A

LOWER REESE RIVER VALLEY HISTORICAL CROP INVENTORY

LOWER REESE RIVER VALLEY HISTORICAL CROP INVENTORY

Year	2008	2009	2010	2011	2012
Acres Irrigated	2,808	2,918	3,037	3,218	3,359
Acre-Feet Pumped	10,706	11,403	11,076	11,910	12,303



APPENDIX B

LOWER REESE RIVER VALLEY 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	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.

2012 Lower Reese River Valley Crop Inventory, Basin 059

App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No		Permitted Acres	Duty	Owner of Record	Crop	Type	Irr By	Irr Ac	Pumpage (acre-feet)	
35215	11624	3/24/1978	CER	UG	SE	NE	11	29N	43E	IRR		20146 20147 33139 80507	129.12	516.48	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		126	504.0	
20146	7470	11/3/1961	CER	UG	NW	NE	14	29N	43E	IRR	Y	20147 33139 35215 80507	398	655.47	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa & hay	wheel lines		100	164.7	
20147	7471	11/3/1961	CER	UG	NE	NE	13	29N	43E	IRR	Y	20146 33139 35215 80507	492.5	1545.8	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa & hay	flood, wheel lines		173	543.0	
33139	12372	8/12/1977	CER	UG	SE	NE	13	29N	43E	IRR	Y	20146 20147 35215 80507	398.1	1592.4	FILIPPINI, HENRY JR.	Y	alfalfa	pivot		126	504.0	
80507		1/28/2011	PER	UG	SE	SW	12	29N	43E	IRR	Y	20146 20147 35215 33139	222.42	830.34	HANK & MARIAN FILIPPINI FAMILY TR			pivot		126	470.4	
Supplemental Totals													971.75	3887							651	2186.1
25039	8350	4/22/1969	CER	UG	SW	SW	16	29N	43E	IRR			153.4	613.6	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	1 pivot		126	504.0	
																					126	504.0
77789		1/14/2009	PER	UG	NW	NW	16	29N	43E	IRR	Y	74392 74393 74924 77790	46.69	186.7	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		0	186.7	
77790		2/2/2009	PER	UG	SW	SW	16	29N	43E	IRR	Y	74392 74393 77789 74924	32.66	77.4	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		0	0.0	
74924		10/18/2006	PER	UG	NW	NW	16	29N	43E	IRR	Y	74392 74393 77789 77790	66.04	264.14	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		0	85.3	
74392		6/16/2006	PER	UG	NW	NW	16	29N	43E	IRR	Y	74393 74924 77789 77790	68.96	137.93	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		0	0.0	
74393		6/16/2006	PER	UG	NW	NW	16	29N	43E	IRR	Y	74392 74924 77789 77790	68.96	137.93	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		126	252.0	
Supplemental Totals													135	540							126	524.0
48899	11909	3/8/1985	CER	UG	NW	NW	16	29N	43E	IRR			127.08	508.32	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		126	504.0	
																					126	504.0
77970		2/2/2009	PER	UG	SW	SW	16	29N	43E	IRR	Y	77971 77972	53.32	213.26	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		0	0.0	
77971		2/2/2009	PER	UG	SW	SW	16	29N	43E	IRR	Y	77970 77972	53.32	213.26	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		0	0.0	
77972		2/2/2009	PER	UG	SW	SW	16	29N	43E	IRR	Y	77970 77971	81.68	326.74	HANK & MARIAN FILIPPINI FAMILY TR	Y	alfalfa	pivot		126	504.0	
Supplemental Totals													135	540							126	504
57580	14792	5/1/1992	CER	UG	SW	NW	28	29N	43E	IRR	Y	57581	251.04	502.07	HANK & MARIAN FILIPPINI FAMILY TR	Y	past grass	pivot		125.5	502.0	
57581	14793	5/1/1992	CER	UG	SW	NW	28	29N	43E	IRR	Y	57580	251.04	502.07	HANK & MARIAN FILIPPINI FAMILY TR	Y	past grass	pivot		125.5	502.0	
Supplemental Totals													251.04	1004.1							251	1,004.0
78616		6/1/2009	PER	UG	NW	SW	36	30N	43E	IRD	Y	78614 78615 V01563	0	451	FILIPPINI, DANIEL E. & EDDYANN U.	Y	alfalfa	full pivot + 1/4 piv		164.3	607.9	
78614		6/1/2009	PER	UG		LT2	6	29N	44E	IRR	Y	78615 78616 V01563	0	1220.8	FILIPPINI, DANIEL E. & EDDYANN U.	Y	alfalfa	2 pivots		236.4	874.7	
78615		6/1/2009	PER	UG		LT01	6	29N	44E	IRR	Y	78614 78616 V01563	0	1440	FILIPPINI, DANIEL E. & EDDYANN U.	Y	alfalfa	1 full piv+1 3-T piv		170	629.0	
Supplemental Totals													510.5	1891							570.7	2,111.6
23448	7698	10/18/1966	CER	UG	SE	SE	24	30N	43E	IRR			89.37	357.48	FILIPPINI, DANIEL AND EDDYANN	Y	alfalfa & past	flood		89.37	357.5	
																					89.37	357.5
19091	6262	8/2/1960	CER	UG	SW	NW	4	30N	45E	IRR		19091 25834 78213 V01252	265.5	425.72	JULIAN TOMERA RANCHES, INC.	Y	alfalfa & hay	flood, wheel lines		120	192.4	
25834	7751	10/14/1970	CER	UG	SE	NE	5	30N	45E	IRR		1380 and 6977 partially	240	508	JULIAN TOMERA RANCHES, INC.	Y	alfalfa & hay	flood, wheel lines		40	84.7	
78213		3/30/2009	PER	UG	SW	NW	4	30N	45E	IRR		supplemental to each other	265.5	636.28	JULIAN TOMERA RANCHES, INC.	Y	alfalfa & hay	flood, wheel lines		125	299.6	
80889		6/30/2011	PER	UG	SE	NE	5	30N	45E	IRR		19091 25834 78213	240	452	JULIAN TOMERA RANCHES, INC.	Y	alfalfa & hay	flood, wheel lines		0	0.0	
Supplemental Totals													285.25	1141							285	576.6
V05817		10/22/1992	VST	UG	NE	SW	18	30N	45E	IRR			0	400	JULIAN TOMERA RANCHES, INC.	Y	pasture	not pumped, sfc		0	0.0	
																					0	0.0
V05818		10/22/1992	VST	UG	SE	SW	18	30N	45E	IRR			0	400	JULIAN TOMERA RANCHES, INC.	Y	pasture	not pumped, sfc		0	0.0	

2012 Lower Reese River Valley Crop Inventory, Basin 059

App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Owner of Record	Crop	Type	Irr By	Irr Ac	Pumpage (acre-feet)		
																			0	0.0		
28668	9548	9/11/1974	CER	UG	SW	SW	9	31N	45E	IRR			18.02	72.08	BEEBE, THOMAS R.	Y	pasture+dom	fix set sprinklers	4	16.0		
																			4	16		
78249		4/13/2009	PER	UG	LOT	0	6	31N	45E	IRR			420	533.56	JULIAN TOMERA RANCHES,BATTLE M	Y	alfalfa		0	0.0		
78252		4/13/2009	PER	UG	NE	SE	36	31N	45E	IRR			420	184.04	JULIAN TOMERA RANCHES,BATTLE M	Y	alfalfa	w. line & flood	70	280.0		
78253		4/13/2009	PER	UG	SW	NW	31	31N	45E	IRR			420	239.88	JULIAN TOMERA RANCHES,BATTLE M	Y	alfalfa	pivot	167	668.0		
78254		4/13/2009	PER	UG	SW	NE	36	31N	45E	IRR			420	560	JULIAN TOMERA RANCHES,BATTLE M	Y	alfalfa	flood	183	732.0		
													Supplemental Totals	420	1517.5				420	1680.0		
45558	11018	4/20/1982	CER	UG	NE	SE	4	31N	46E	IRR	Y	45560	126.66	506.64	BENGOA, SONNY C. & MARY C.	Y	alfalfa	pivot	126	504.0		
45560	11020	4/20/1982	CER	UG	NE	SE	4	31N	46E	IRR	Y	45558	126.66	506.64	BENGOA, SONNY C. & MARY C.	Y	alfalfa	pivot	0	0.0		
													Supplemental Totals	126.66	506.64				126	504.0		
45559	11019	4/20/1982	CER	UG	SE	NE	4	31N	46E	IRR	Y	45561	126.66	506.64	BENGOA, SONNY C. & MARY C.	Y	grain	pivot	126	504.0		
45561	11021	4/20/1982	CER	UG	SE	NE	4	31N	46E	IRR	Y	45559	126.66	506.64	BENGOA, SONNY C. & MARY C.	Y	grain	pivot	0	0.0		
													Supplemental Totals	126.66	506.64				126	504.0		
45092	10577	12/1/1981	CER	UG		LT04	30	31N	46E	IRR			74.5	298	MITCHEL, MICHAEL C.	Y	alfalfa	wheel lines	74.5	298.0		
																			74.5	298.0		
25246	7589	8/27/1969	CER	UG		LT02	31	31N	46E	IRR			3.03	12.12	JULIAN TOMERA RANCHES, INC.	Y	alfalfa	w.lines & flood	3	12.0		
																			3	12.0		
26483	8741	1/18/1972	CER	UG	NE	SE	17	32N	45E	IRR	Y	Humboldt Proof 00173	33.94	135.76	WELCH, ADAM W.	Y	meadow hay	from SFC right	0	0.0		
																			well not pumped	0	0.0	
30633	10119	9/10/1976	CER	UG	NW	SE	30	32N	45E	IRR			137.2	548.8	NEGRO, BART E., DONALD R.	Y	alf+grain	pivot	126	504.0		
																				126	504.0	
30634	10120	9/10/1976	CER	UG	SW	SW	30	32N	45E	IRR			128.5	514	NEGRO, BART E., DONALD R.	Y	alfalfa	pivot	128.5	514.0		
																				128.5	514.0	
V05778		9/8/1992	VST	UG	SW	NW	16	32N	45E	IRR		Proofs 164,165,164	100	400	JULIAN TOMERA RANCHES, INC.	Y	pasture	not pumped, sfc	0	0.0		
																				0.0	0.0	
																				totals:	3,359.1	12,303.8