

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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STATE ENGINEER



UPPER REESE RIVER VALLEY (HYDROGRAPHIC BASIN 4-056)

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 Upper Reese River Valley, Hydrographic Basin 4-056, 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 **8,912 acres** with a total duty of 35,024.06 acre-feet within Upper Reese River Valley. An estimated **3,907 acres** were irrigated and 15,367 acre-feet were pumped during 2012.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	056, REGION 4
HYDROGRAPHIC BASIN NAME	UPPER REESE RIVER VALLEY
COUNTIES	LANDER, NYE
MAJOR COMMUNITIES	AUSTIN
DESIGNATED BASIN	NO
DENIALS BASED UPON WATER AVAILABILITY	NO
ESTIMATED IRRIGATION PUMPAGE 2012 (ACRE-FEET)	15,367*
STATE ENGINEER'S ORDERS	

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 35,024.06 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 Upper Reese River Valley Hydrographic Basin 4-056, for the year 2012.

DESCRIPTION OF THE STUDY AREA

The Upper Reese River Valley Hydrographic Basin is located in central Nevada (Figure 1). Upper Reese River Valley occupies approximately 1,138 square miles in Lander and Nye Counties. The adjacent hydrographic basins are Ione Valley (10-135), Smith Creek (10-134), and Antelope Valley (4-057) to the west, Middle Reese River Valley (4-058) and Carico Lake Valley (4-055) to the north, Grass Valley (10-138) and Big Smoky Valley (10-137) to the east and south.

Upper Reese River Valley Hydrographic Basin is bounded to the west by the Shoshone Mountains and Ravenswood Mountain and to the east by the Toiyabe Mountains. The Upper Reese River Hydrographic Basin is north-south trending and the main valley floor is approximately 10 miles wide by 85 miles long. Basin elevations range from approximately 5,350 feet above mean sea level on the valley floor to approximately 10,900 feet above mean sea level in the surrounding mountains. Irrigation occurs primarily in the central part of the basin (Figure 2).

FIGURE 1. LOCATION MAP OF UPPER REESE RIVER VALLEY BASIN 4-056

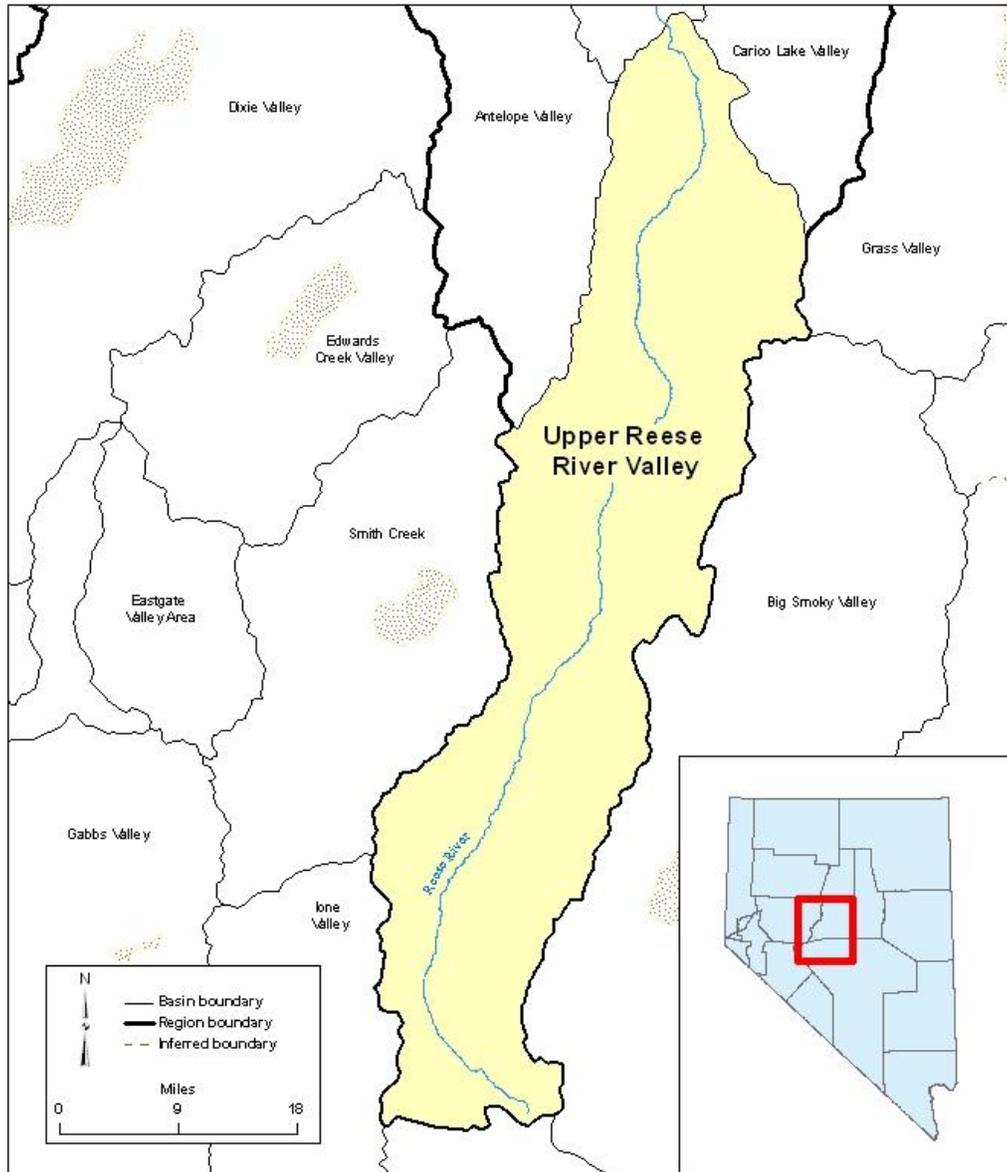
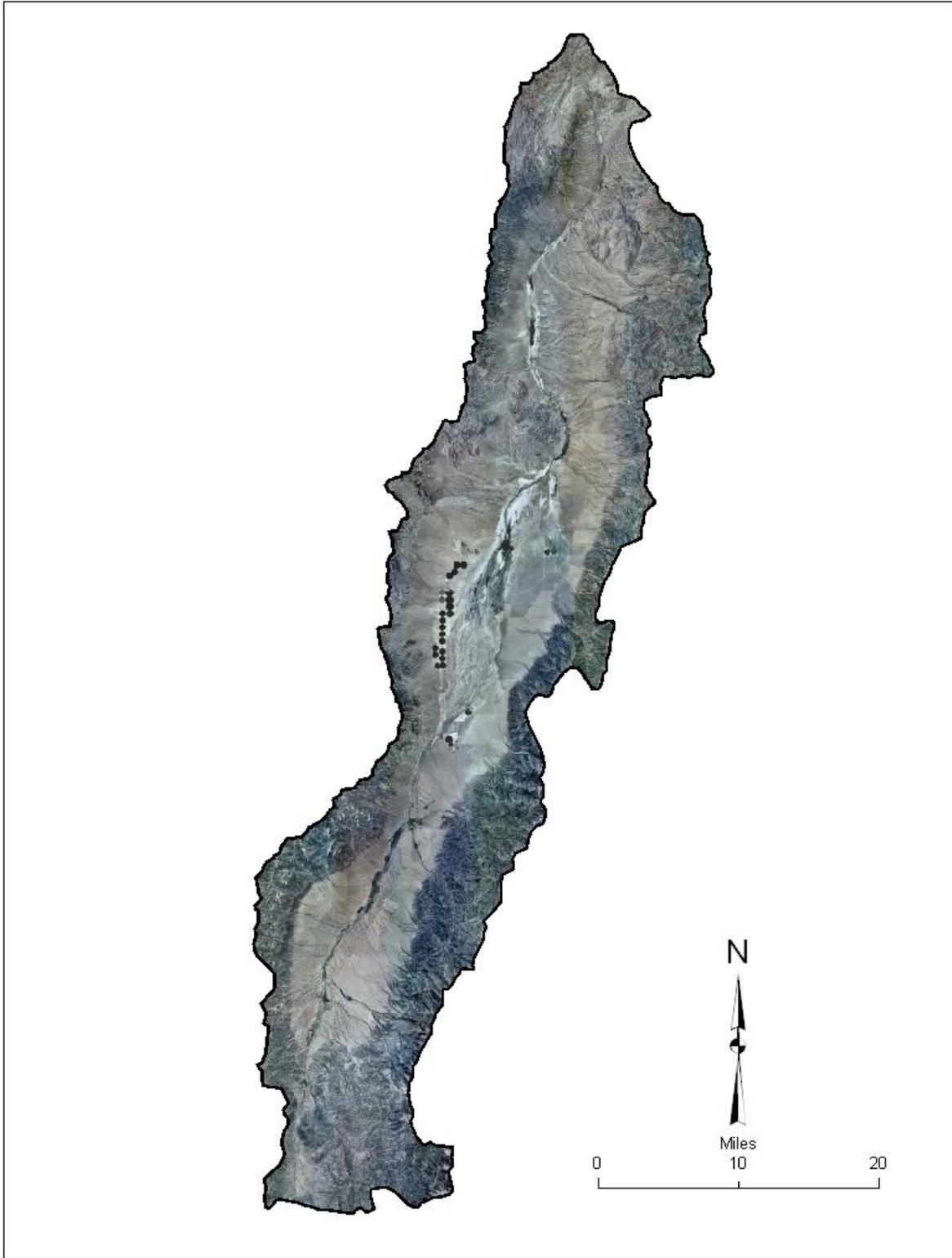


FIGURE 2. MAP OF UPPER REESE RIVER VALLEY IRRIGATED ACREAGE



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:

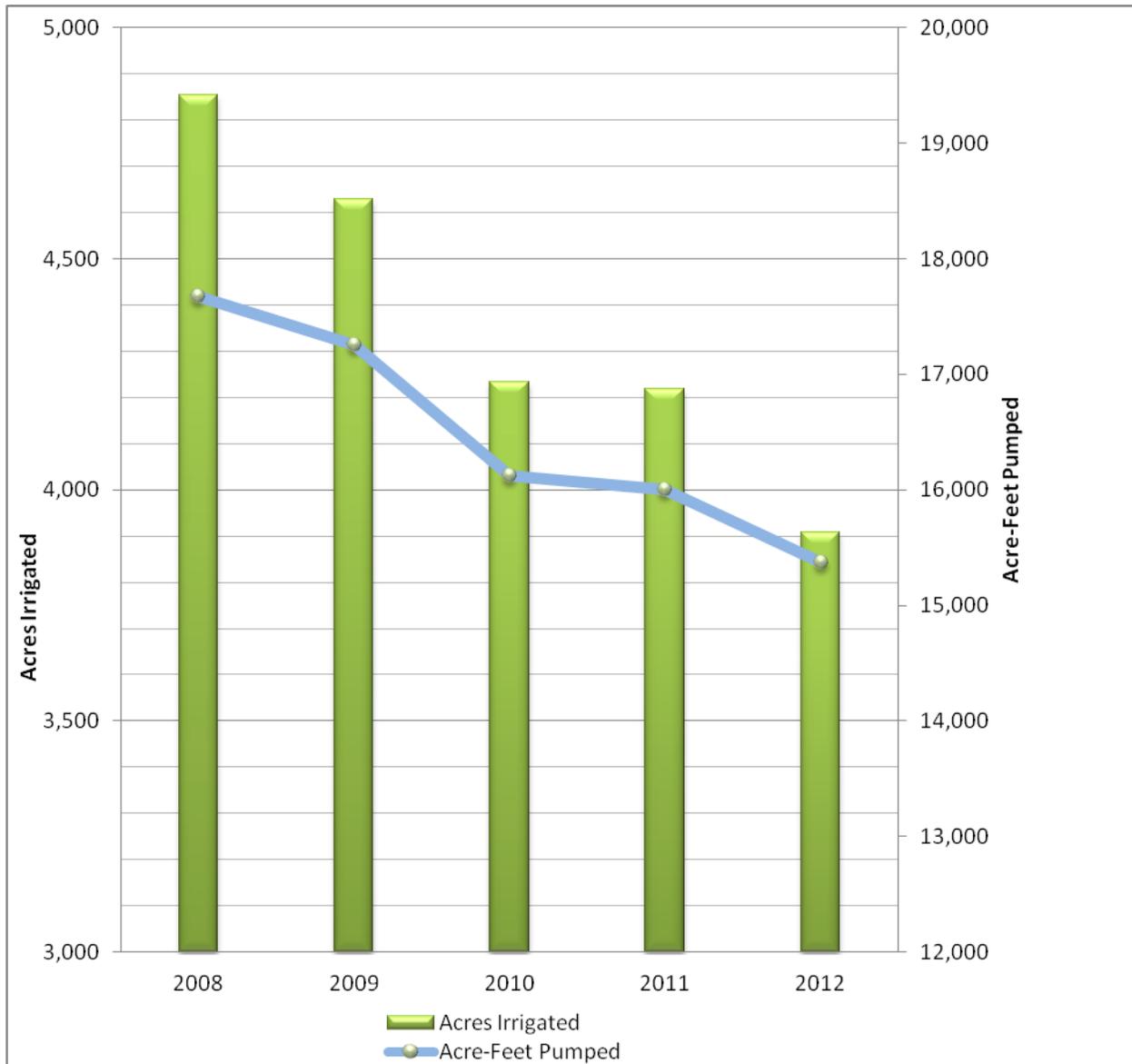
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

APPENDIX A

UPPER REESE RIVER VALLEY HISTORICAL CROP INVENTORY

UPPER REESE RIVER VALLEY HISTORICAL CROP INVENTORY

Year	2008	2009	2010	2011	2012
Acres Irrigated	4,854	4,628	4,234	4,219	3,907
Acre-Feet Pumped	17,675	17,249	16,123	16,000	15,367



APPENDIX B

UPPER 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.

Crop Inventory and Groundwater Pumpage Inventory from Irrigation - Upper Reese River Valley, Basin 056, 2012																						
App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Units	Co	Owner of Record	Crop Y/N	Type	Irr By	Irr Ac	Pumpage (acre-feet)
71961		12/1/2004	PER	UG	SW	SE	27	13N	40E	IRR			580	2320	AFA	NY	CANTRELLE RANCH	Y	Meadow hay & alfalfa	1 pivot +	126	504.0
																					126	504.0
61093		4/5/1995	PER	UG	SE	NE	25	14N	40E	IRR			517.93	2071.72	AFA	NY	CANTRELLE RANCH	Y	Meadow hay & alfalfa	flood	517.93	2071.7
																					517.93	2071.7
30493	10393	8/10/1976	CER	UG	NE	SE	15	15N	41E	IRR			91.16	347.6	AFS	LA	CAMPBELL, ROBERT & JULIE	Y	grain	wheel lines	20	80.0
																					20	80.0
13673	4310	4/9/1951	CER	UG	SE	SW	8	16N	42E	IRR			141.6	425	AFA	LA	BTAZ NEVADA LLC	N	no crop	1 pivot	0	0.0
																					0	0.0
23476	8809	11/4/1966	CER	UG	SE	SE	19	16N	42E	IRR			175.01	606.8	AFS	LA	REICHERT, THOMAS L. & BEVERLY J.	Y	alfalfa	1 pivot	126	504.0
																					126	504.0
30741	10544	10/12/1976	CER	UG	NW	NE	30	16N	42E	IRR			431.76	814.66	AFS	LA	REICHERT, BEVERLY	Y	alfalfa	2x3Tpivot+WL	105	420.0
																					105	420.0
22499	8040	3/19/1965	CER	UG	NW	SE	1	17N	41E	IRR			158	632	AFA	LA	LEE AND DIANE HUTCHENS FAMILY TRUST	Y	pasture grass	1 pivot	126	252.0
																					126	252.0
22500	8113	3/19/1965	CER	UG	SW	NE	1	17N	41E	IRR			79	316	AFA	LA	ANDREOLA FARMS, INC	N	no crop	no irr equip	0	0.0
																					0	0.0
72904		12/29/1993	PER	UG	NW	SW	1	17N	41E	IRD	Y	24538, 72905, 72906	60	240	AFA	LA	ANDREOLA FARMS, INC	Y	grain & alfalfa	pivot in SW	60	240.0
72905		12/29/1993	PER	UG	NW	SW	1	17N	41E	IRD	Y	24538, 72904, 72906	70	280	AFA	LA	ANDREOLA FARMS, INC	Y	alfalfa	pivot in SW	70	280.0
72906		12/29/1993	PER	UG	SW	NW	1	17N	41E	IRD	Y	24538, 72904, 72905	130	520	AFA	LA	ANDREOLA FARMS, INC	N	no crop	pivot in SW	0	0.0
24538	8155	6/20/1968	CER	UG	SW	NW	1	17N	41E	IRR	Y	72904, 72905, 72906	58.4	208.84	AFS	LA	ANDREOLA FARMS, INC.	N	no crop	pivot in SW	0	0.0
												Supplemental Totals	240	1040	AFA						130.0	520.0
18874	6552	5/25/1960	CER	UG	SW	SE	12	17N	41E	IRR	Y	21280	309.15	1236.63	AFA	LA	LEE AND DIANE HUTCHENS FAMILY TRUST	Y	alfalfa	1 pivot	126	504.0
21280	6244	5/17/1963	CER	UG	NW	NE	12	17N	41E	IRR	Y	18874	200	800	AFA	LA	LEE AND DIANE HUTCHENS FAMILY TRUST	Y	alfalfa	1 pivot	126	504.0
												Supplemental Totals	309.15	1236.63	AFA						252	1008.0
19026	6101	7/18/1960	CER	UG	SW	SW	24	17N	41E	IRR	Y	21563	200	800	AFA	LA	LENOX, JOHN H. JR.	Y	alfalfa	1 pivot	126	504.0
21563	6155	10/3/1963	CER	UG	NW	SE	24	17N	41E	IRR	Y	19026	0	600	AFA	LA	LENOX, JOHN H., JR.	N	no crop	pivot	0	0.0
												Supplemental Totals	200	800	AFA						126	504.0
80809		4/28/2011	CER	UG	SW	SE	13	17N	41E	IRR	Y	80810	281.98	1127.92	AFA	LA	LEE AND DIANE HUTCHENS FAMILY TRUST	Y	alfalfa	1 pivot	126	504.0
80810		4/28/2011	PER	UG	SW	NE	13	17N	41E	IRR	Y	80809	140	560	AFS	LA	LEE AND DIANE HUTCHENS FAMILY TRUST	Y	pasture	1 pivot	126	504.0
												Supplemental Totals	320	1280	AFA						252	1008.0
49221	15249	7/24/1985	CER	UG	NW	SE	24	17N	41E	IRD			125.6	502.4	AFA	LA	LENOX, JOHN H. JR.	N	no crop	pivot	0	0.0
																					0	0.0
22733	6156	8/24/1965	CER	UG	SW	SW	24	17N	41E	IRR			268	1072		LA	LENOX, JOHN H., JR.	Y	alfalfa	1 pivot	126	504.0
																					126	504.0
27068	8241	10/13/1972	CER	UG	SE	NW	25	17N	41E	IRR			87.14	348.56	AFA	LA	LENOX, JOHN H. JR.,	Y	alfalfa	1 5/8 pivots	206	824.0
																					206	824.0
19362	6774	11/25/1960	CER	UG	NW	SW	6	17N	42E	IRR			177.2	708.8	AFA	LA	BTAZ NEVADA LLC	Y	alfalfa	1 pivot	127	508.0
																					127	508.0
21184	6776	4/8/1963	CER	UG	NW	NW	6	17N	42E	IRR			233.34	933.36	AFA	LA	ANDREOLA FARMS INC	Y	alfalfa	1 pivot	130	520.0
																					130	520.0
69456		1/10/2003	PER	UG	SE	SE	34	17N	42E	IRD	Y	69467	400	1600	AFA	LA	BTAZ NEVADA LLC	N	no crop		0	0.0
69457		1/10/2003	PER	UG	SE	SE	4	16N	42E	IRD	Y	69456	400	1600	AFA	LA	BTAZ NEVADA LLC	N	no crop		0	0.0
												Supplemental Totals	400	1600							0	0.0
26114	9507	5/10/1971	CER	UG		LT04	7	17N	42E	IRR	Y	81410	316	1264	AFA	LA	BRADLEY, DONNA JOAN	N	no crop	pivot SW1/4	0	0.0
81410		12/27/2011	PER	UG	NW	NW	7	17N	42E	IRR	Y	26114		800	AFA	LA	BRADLEY, DONNA JOAN	Y	grass	pivot NW1/4	126	504.0
												Supplemental Totals		1264							126	504
25137	8199	6/25/1969	CER	UG	NE	SE	25	18N	41E	IRR			178.13	712.52	AFA	LA	ANDREOLA FARMS, INC.	N	no crop		0	0.0

Crop Inventory and Groundwater Pumpage Inventory from Irrigation - Upper Reese River Valley, Basin 056, 2012																								
App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Units	Co	Owner of Record	Crop Y/N	Type	Irr By	Irr Ac	Pumpage (acre-feet)		
																						0	0.0	
18963	6887	6/23/1960	CER	UG	SW	SE	36	18N	41E	IRR	Y	29182	304.1	1216.4	AFA	LA	JOSEPHINE M. ANDREOLA FAMILY TRUST	Y	alfalfa	1 pivot	126	504.0		
29182	8667	1/31/1975	CER	UG	NE	NW	36	18N	41E	IRR	Y	18963	151.2	604.8	AFA	LA	JOSEPHINE M. ANDREOLA FAMILY TRUST	Y	alfalfa	1 pivot	126	504.0		
												Supplemental Totals	305.9	1223.6	AFA							252	1008.0	
18878	6771	5/26/1960	CER	UG	NW	NW	16	18N	42E	IRR			196	784	AFA	LA	COUCH, GRACE E.	Y	alfalfa	1 pivot	128	512.0		
																						128	512.0	
17955	6524	4/27/1959	CER	UG	NW	NE	17	18N	42E	IRR			153.5	614	AFA	LA	HARDY, MICHAEL A. & SEAN E.	Y	alfalfa	wheel line	20	80.0		
																						20.0	80.0	
24048	8430	8/14/1967	CER	UG	SE	NE	17	18N	43E	IRR			640	1310.07		LA	JOHN HANCOCK MUTUAL LIFE INSURANCE	Y	alfalfa	2 pivots	253	1012.0		
																						253	1012.0	
21548	6403	9/24/1963	CER	UG	SW	SW	17	18N	42E	IRR	Y	22033	177.01	543.08	AFA	LA	ANDREOLA FARMS, INC.	N	no crop		0	0.0		
22033	6404	6/1/1964	CER	UG	SE	SE	18	18N	42E	IRR	Y	21548	177.01	543.08	AFA	LA	ANDREOLA FARMS, INC.	Y	alfalfa	1 pivot	140	560.0		
												Supplemental Totals	177.01	543.08	AFA							140	560.0	
19356	6916	11/23/1960	CER	UG	NE	SW	19	18N	42E	IRR			169	676.01	AFA	LA	ANDREOLA FARMS, INC.	Y	grain	1 pivot	126	504.0		
																						126	504.0	
23782	7375	4/6/1967	CER	UG	NW	NE	19	18N	42E	IRR			146.35	585.42		LA	ANDREOLA FARMS, INC.	Y	alfalfa	1 pivot	134	536.0		
																						134	536.0	
70080		6/23/2003	PER	UG	NW	SE	23	18N	42E	IRD			600	2400		LA	WILLIAM J. GANDOLFO	Y	pasture grass	sec to sfc	0	0.0		
																						0	0.0	
77107		11/23/1960	PER	UG	NW	NW	30	18N	42E	IRD	Y	77108	41.982	167.928		LA	ANDREOLA FARMS INC.	Y	alfalfa	6-T pivot	41.982	167.9		
77108		12/11/1961	PER	UG	NW	NW	30	18N	42E	IRD	Y	77107	59.422	237.688		LA	ANDREOLA FARMS INC.	Y	alfalfa	6-T pivot	59.422	237.7		
												Supplemental Totals	101.404	405.616								101.4	405.6	
17957	6737	4/27/1959	CER	UG	SW	SW	31	18N	42E	IRD	Y	24793	292.45	1169.8	AFA	LA	ANDREOLA FARMS INC	N	no crop in SE31		0	0.0		
24793	8611	12/4/1968	CER	UG	SW	SE	31	18N	42E	IRR	Y	17957	78.05	312.2	AFA	LA	ANDREOLA FARMS INC	Y	alfalfa	pivot	135	540.0		
												Supplemental Totals	292.45	1169.8	AFA							135	540	
22077	7523	1/30/1964	CER	UG	NW	NW	31	18N	42E	IRR			200	800		LA	ROSE, CECIL D.	Y	alfalfa	3/4 piv+WL	111	444.0		
																						111	444	
69454		1/10/2003		UG	SW	NW	33	18N	42E	IRD	Y	81780	468	1872	AFA	LA	BTAZ NEVADA LLC	N	no crop	no well	0	0.0		
81780		1/10/2003		UG	NW	NW	34	18N	42E	IRD	Y	69454	468	1872	AFA	LA	BTAZ NEVADA LLC	N	no crop	no well	0	0.0		
													468	1872	AFA							0	0	
7298	1921	2/5/1925	CER	UG	SW	SW	15	22N	43E	IRR			29.09	89		LA	SILVER CREEK RANCH INC.	Y	meadow hay	flood	11	33.7		
																						11	33.7	
23969	8014	7/3/1967	CER	UG	SE	SE	34	24N	43E	IRR	Y	23970	244	976	AFA	LA	SILVER CREEK RANCH, INC.;	N	pasture	not pumped	0	0.0		
23970	8015	7/3/1967	CER	UG	SE	SE	34	24N	43E	IRR	Y	23969	244	976	AFA	LA	SILVER CREEK RANCH, INC.;	N	pasture	not pumped	0	0.0		
												Supplemental Totals	244	976	AFA							0	0	
																						Totals	3907.3	15367.0