

STATE OF NEVADA  
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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UPPER REESE RIVER VALLEY (HYDROGRAPHIC BASIN 4-056)

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 Upper Reese River Valley, Hydrographic Basin 4-056, 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 **8,912 acres** with a total duty of 35,024.06 acre-feet within Upper Reese River Valley. An estimated **4,707 acres** were irrigated and 18,819 acre-feet were pumped during 2013.

## 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 2013 (ACRE-FEET)	18,819*
STATE ENGINEER'S ORDERS	NONE

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 35,024.06 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**

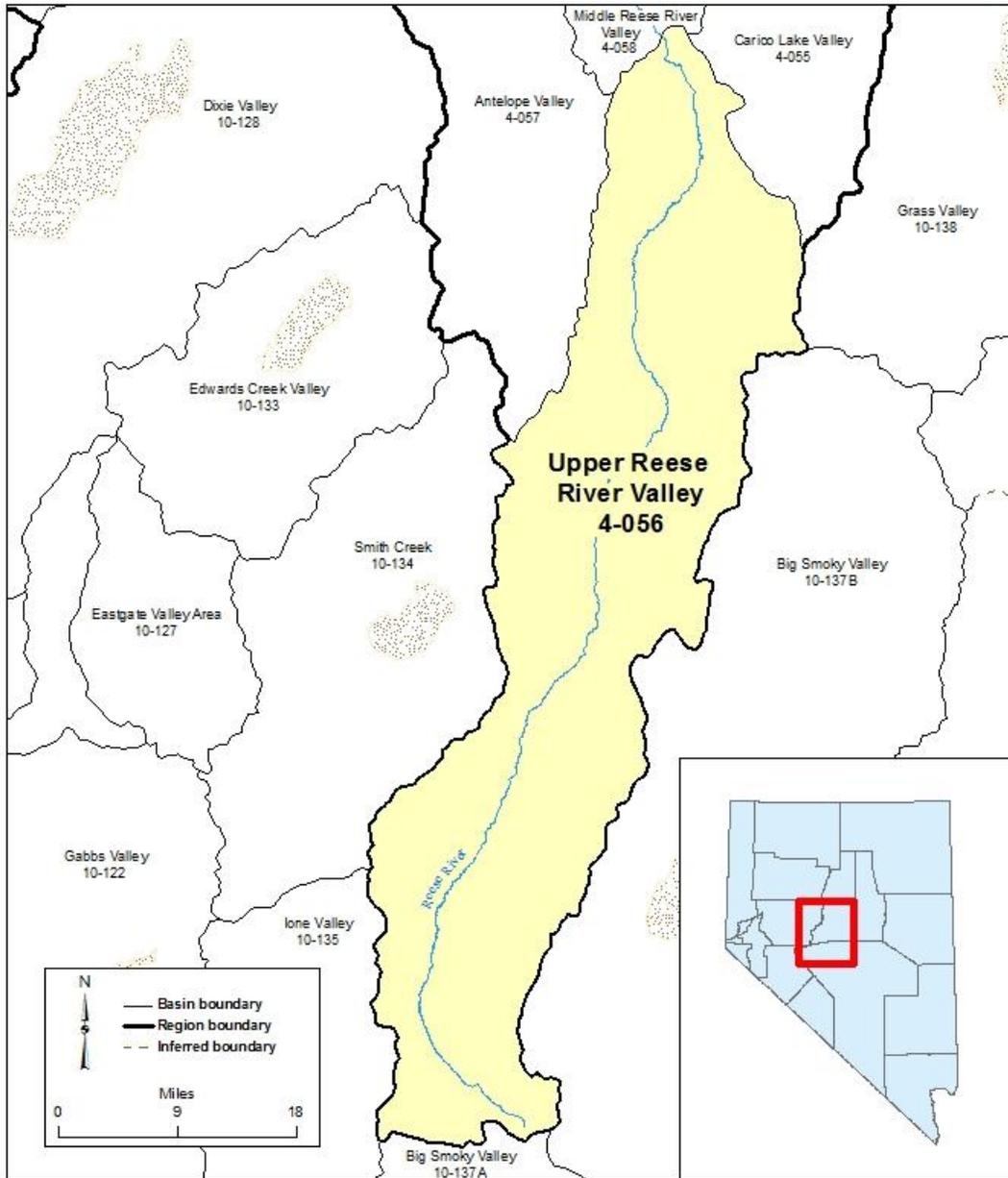
The purpose of this report is to inventory all of the groundwater resources allocated to irrigation and described by the Office of the State Engineer, Nevada Division of Water Resources, and to estimate the amount of groundwater pumped for irrigation purposes within the Upper Reese River Valley Hydrographic Basin 4-056, for the year 2013.

## **DESCRIPTION OF THE STUDY AREA**

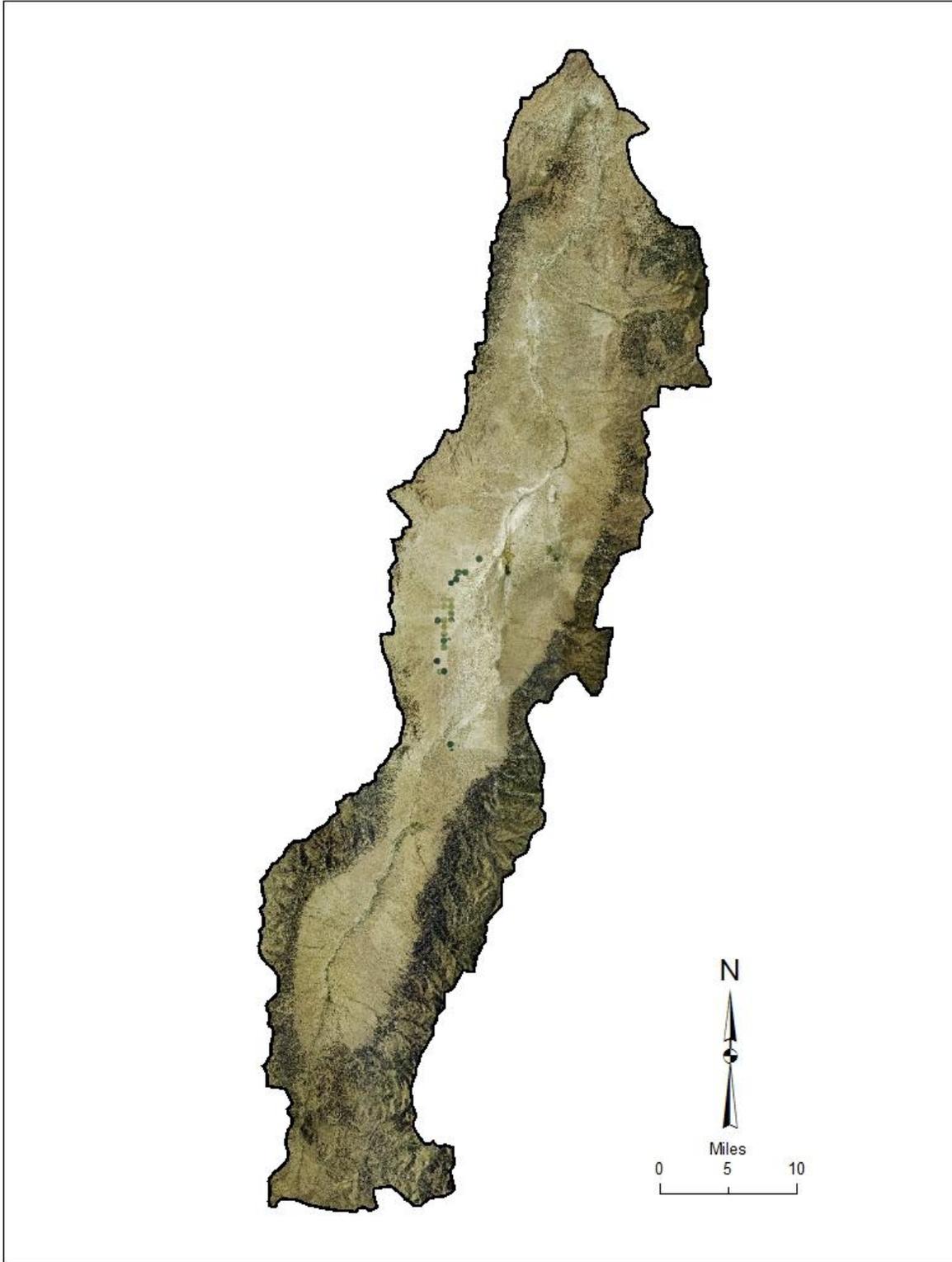
The Upper Reese River Valley Hydrographic Basin is located in central Nevada (Figure 1). Upper Reese River Valley occupies approximately 1,138 square miles in Lander and Nye Counties. The adjacent hydrographic basins are Ione Valley (10-135), Smith Creek (10-134), and Antelope Valley (4-057) to the west, 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) 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 under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated use:

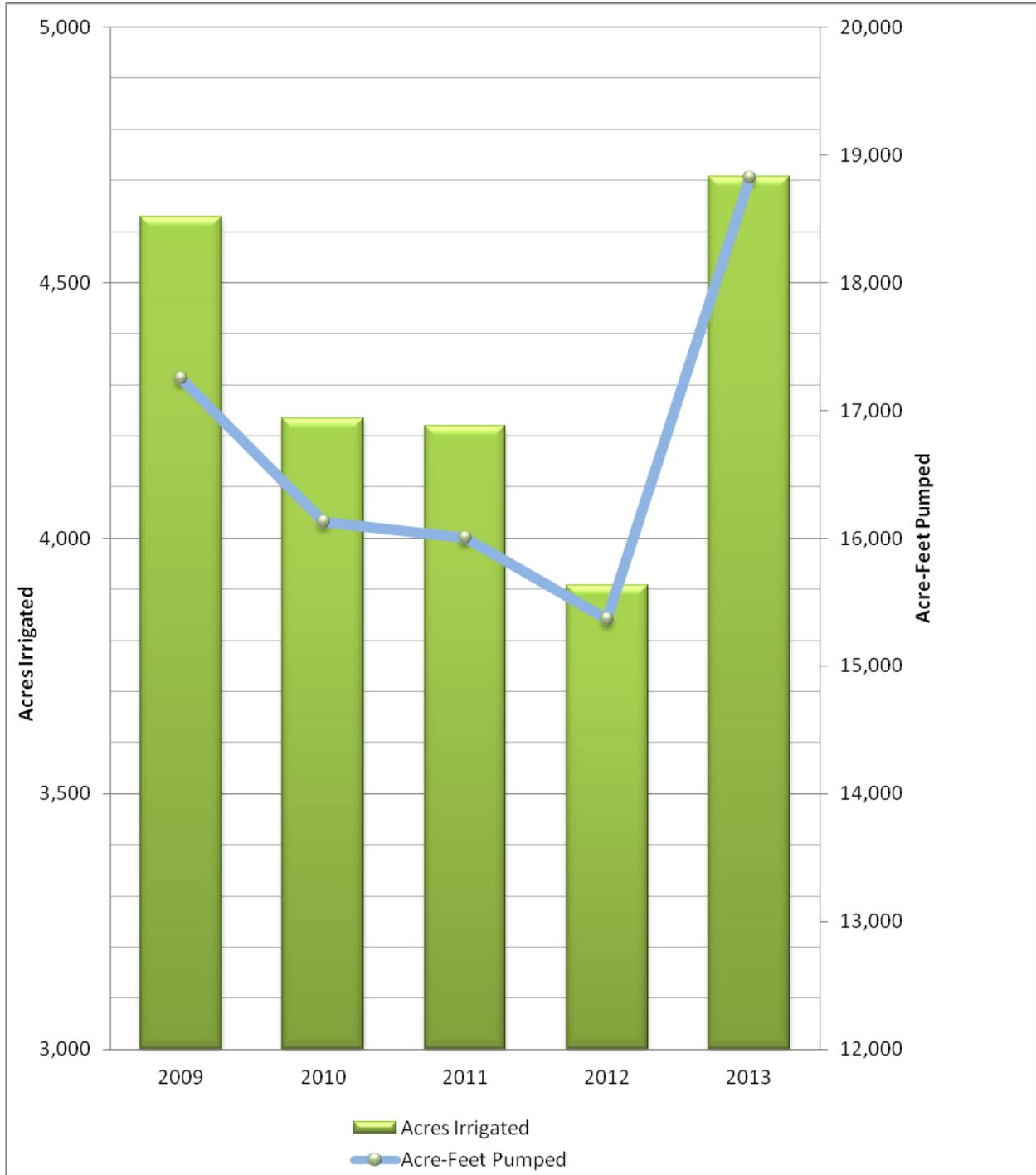
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated 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**

**UPPER REESE RIVER VALLEY HISTORICAL CROP INVENTORY**

## UPPER REESE RIVER VALLEY HISTORICAL CROP INVENTORY

Year	2009	2010	2011	2012	2013
Acres Irrigated	4,628	4,234	4,219	3,907	4,707
Acre-Feet Pumped	17,249	16,123	16,000	15,367	18,819



**APPENDIX B**

**UPPER REESE RIVER VALLEY CROP INVENTORY**

## EXPLANATION OF COLUMN HEADINGS

App No	The file number of the Application to Appropriate/Change Water or the Claim of Vested of Right.
Status	Indicates the status of an application: Permit (PER), Certificated, or a Claim of Vested Right (VST).
QQ	The quarter-quarter of the Section in which the point of diversion is located.
Q	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.
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 to others.
Supplemental Application Number	The application number(s) of the water right(s) that are supplemental to one another.
Permitted Acres	The number of acres defined by the permit or certificate that is eligible to be
Supplementally Adjusted Permitted Acres	The supplementally adjusted, total number of acres that is eligible to be irrigated under a supplemental group of water rights.
Permitted Duty Acre-Feet	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 is listed as a supplementally adjusted duty.
Supplementally Adjusted Duty Acre-Feet	The supplementally adjusted, total combined duty that may be pumped in a given year, or season, for a supplemental group of water rights, expressed in acre-feet. The supplementally adjusted, total combined duty is listed at the end of a supplemental group in <b>bold</b> .
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 Type	Indicates whether or not a crop was in production during the water year. If a crop was in production, the common name description of the plants under cultivation if given (e.g. alfalfa)

Irrigation Method	The method by which the water is applied to the crop and ground (e.g. pivot).
Irrigated Acres	The estimate of the number of acres irrigated associated with a particular water right.
Acre-Feet 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.
Remarks	Description of circumstances pertaining to the well, the acreage, or the use of the water that are not accommodated by the other fields in the table.

**Crop Inventory and Groundwater Pumpage Inventory from Irrigation - Upper Reese River Valley, Basin 056, 2013**

App No	Status	QQ	Q	Sec	Twn	Rng	Sup	Supplemental Application Number	Permitted Acres	Supplementally Adjusted Permitted Acres	Permitted Duty Acre-Feet	Supplementally Adjusted Duty Acre-Feet	Owner of Record	Crop Type	Irrigation Method	Irrigated Acres	Acre-Feet Pumped	Remarks
71961	PER	SW	SE	27	13N	40E			580	580	2320	2320	CANTRELLE RANCH	Grain	1 pivot +	126	504.0	AFA
															<b>Total</b>	<b>126</b>	<b>504.0</b>	<b>AFA</b>
61093	PER	SE	NE	25	14N	40E			517.93	517.93	2071.72	2071.72	CANTRELLE RANCH	Meadow hay & alfalfa	flood	517.93	2071.7	AFA
															<b>Total</b>	<b>517.93</b>	<b>2071.7</b>	<b>AFA</b>
30493	CER	NE	SE	15	15N	41E			91.16	91.16	347.6	347.6	CAMPBELL, ROBERT & JULIE	grain	wheel lines	35	140.0	AFS
															<b>Total</b>	<b>35</b>	<b>140.0</b>	<b>AFS</b>
81944	PER	NW	NE	27	15N	41E			300	300	1083.41	1083.41	CANTRELLE RANCH, LLC			0	0.0	
															<b>Total</b>	<b>0.0</b>	<b>0.0</b>	
13673	CER	SE	SW	8	16N	42E			141.6	141.6	425	425	BTAZ NEVADA LLC	no crop	1 pivot	0	0.0	AFA
															<b>Total</b>	<b>0</b>	<b>0.0</b>	<b>AFA</b>
23476	CER	SE	SE	19	16N	42E			175.01	175.01	606.8	606.8	REICHERT, THOMAS L. & BEVERLY J.	Grass Hay	1 pivot	126	504.0	AFS
															<b>Total</b>	<b>126</b>	<b>504.0</b>	<b>AFS</b>
30741	CER	NW	NE	30	16N	42E			431.76	431.76	814.66	814.66	REICHERT, BEVERLY	alfalfa	2x3Tpivot+WL	105	420.0	AFS
															<b>Total</b>	<b>105</b>	<b>420.0</b>	<b>AFS</b>
22499	CER	NW	SE	1	17N	41E			158	158	632	632	LEE AND DIANE HUTCHENS FAMILY TRUST	Alfalfa	1 pivot	126	504.0	AFA
															<b>Total</b>	<b>126</b>	<b>504.0</b>	<b>AFA</b>
22500	CER	SW	NE	1	17N	41E			79	79	316	316	ANDREOLA FARMS, INC	no crop	no irr equip	0	0.0	AFA
															<b>Total</b>	<b>0</b>	<b>0.0</b>	<b>AFA</b>
72904	PER	NW	SW	1	17N	41E	Y	24538, 72905, 72906	60	240	240	1040	ANDREOLA FARMS, INC	alfalfa	pivot in SW	60	240.0	AFA
72905	PER	NW	SW	1	17N	41E	Y	24538, 72904, 72906	70	280	280		ANDREOLA FARMS, INC	alfalfa	pivot in SW	70	280.0	AFA
72906	PER	SW	NW	1	17N	41E	Y	24538, 72904, 72905	130	520	520		ANDREOLA FARMS, INC	no crop	pivot in NW	0	0.0	AFA
24538	CER	SW	NW	1	17N	41E	Y	72904, 72905, 72906	58.4	208.84	208.84		ANDREOLA FARMS, INC.	no crop	pivot in NW	0	0.0	AFS
															<b>Total</b>	<b>130.0</b>	<b>520.0</b>	<b>AFA</b>
18874	CER	SW	SE	12	17N	41E	Y	21280	309.15	309.15	1236.63	1236.63	LEE AND DIANE HUTCHENS FAMILY TRUST	alfalfa	1 pivot	126	504.0	AFA
21280	CER	NW	NE	12	17N	41E	Y	18874	200		800		LEE AND DIANE HUTCHENS FAMILY TRUST	alfalfa	1 pivot	126	504.0	AFA
															<b>Total</b>	<b>252</b>	<b>1008.0</b>	<b>AFA</b>
19026	CER	SW	SW	24	17N	41E	Y	21563	200	360	800	1240	LENOX, JOHN H. JR.	alfalfa	1 pivot	126	504.0	AFA
21563	CER	NW	SE	24	17N	41E	Y	19026	160		640		LENOX, JOHN H., JR.	alfalfa	pivot	126	504.0	AFA
															<b>Total</b>	<b>252</b>	<b>1008.0</b>	<b>AFA</b>
80809	CER	SW	SE	13	17N	41E	Y	80810	281.98	320	1127.92	1280	LEE AND DIANE HUTCHENS FAMILY TRUST	alfalfa	1 pivot	126	504.0	AFA
80810	PER	SW	NE	13	17N	41E	Y	80809	140		560		LEE AND DIANE HUTCHENS FAMILY TRUST	pasture	1 pivot +3T	158	632.0	AFS
															<b>Total</b>	<b>284</b>	<b>1136.0</b>	<b>AFA</b>
49221	CER	NW	SE	24	17N	41E			125.6	125.6	502.4	502.4	LENOX, JOHN H. JR.	Grain	pivot	126	504.0	AFA
															<b>Total</b>	<b>126</b>	<b>504.0</b>	<b>AFA</b>
22733	CER	SW	SW	24	17N	41E			268	268	1072	1072	LENOX, JOHN H., JR.	Grain	1 pivot	126	504.0	AFA
															<b>Total</b>	<b>126</b>	<b>504.0</b>	<b>AFA</b>
27068	CER	SE	NW	25	17N	41E			87.14	87.14	348.56	348.56	LENOX, JOHN H. JR.,	alfalfa	1 5/8 pivots	206	824.0	AFA
															<b>Total</b>	<b>206</b>	<b>824.0</b>	<b>AFA</b>
19362	CER	NW	SW	6	17N	42E			177.2	177.2	708.8	708.8	BTAZ NEVADA LLC	alfalfa + oats	1 pivot	127	508.0	AFA
															<b>Total</b>	<b>127</b>	<b>508.0</b>	<b>AFA</b>
21184	CER	NW	NW	6	17N	42E			233.34	233.34	933.36	933.36	ANDREOLA FARMS INC	alfalfa	1 pivot	130	520.0	AFA
															<b>Total</b>	<b>130</b>	<b>520.0</b>	<b>AFA</b>
69456	PER	SE	SE	34	17N	42E	Y	69467	400	400	1600	1600	BTAZ NEVADA LLC	no crop		0	0.0	AFA
69457	PER	SE	SE	4	16N	42E	Y	69456	400		1600		BTAZ NEVADA LLC	no crop		0	0.0	AFA
															<b>Total</b>	<b>0</b>	<b>0.0</b>	<b>AFA</b>
26114	CER		LT04	7	17N	42E	Y	81410	316	316	1264	1264	BRADLEY, DONNA JOAN	no crop	no irr equip	0	0.0	AFA
81410	PER	NW	NW	7	17N	42E	Y	26114			800		BRADLEY, DONNA JOAN	starter crop	pivot NW1/4	126	504.0	AFA

Crop Inventory and Groundwater Pumpage Inventory from Irrigation - Upper Reese River Valley, Basin 056, 2013																				
App No	Status	QQ	Q	Sec	Twn	Rng	Sup	Supplemental Application Number	Permitted Acres	Supplementally Adjusted Permitted Acres	Permitted Duty Acre-Feet	Supplementally Adjusted Duty Acre-Feet	Owner of Record	Crop Type	Irrigation Method	Irrigated Acres	Acre-Feet Pumped	Remarks		
																<b>Total</b>	<b>126</b>	<b>504</b>	<b>AFA</b>	
25137	CER	NE	SE	25	18N	41E			178.13	<b>178.13</b>	712.52	<b>712.52</b>	ANDREOLA FARMS, INC.	no crop		0	0.0	AFS		
																<b>Total</b>	<b>0</b>	<b>0.0</b>	<b>AFS</b>	
18963	CER	SW	SE	36	18N	41E	Y	29182	304.1	<b>305.9</b>	1216.4	<b>1223.6</b>	JOSEPHINE M. ANDREOLA FAMILY TRUST	alfalfa	1 pivot	126	504.0	AFA		
29182	CER	NE	NW	36	18N	41E	Y	18963	151.2		604.8		JOSEPHINE M. ANDREOLA FAMILY TRUST	alfalfa	1 pivot	126	504.0	AFA		
																<b>Total</b>	<b>252</b>	<b>1008.0</b>	<b>AFA</b>	
18878	CER	NW	NW	16	18N	42E			196	<b>196</b>	784	<b>784</b>	COUCH, GRACE E.	alfalfa	1 pivot	128	512.0	AFA		
																<b>Total</b>	<b>128</b>	<b>512.0</b>	<b>AFA</b>	
17955	CER	NW	NE	17	18N	42E			153.5	<b>153.5</b>	614	<b>614</b>	HARDY, MICHAEL A. & SEAN E.	no crop	wheel line	0	0.0	AFA		
																<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>AFA</b>	
17956	CER	SE	SE	6	18N	43E			<b>320</b>	<b>320</b>	1280	<b>1280</b>	Champie, James JR.	starter	pivot se4 s6	126.0	504.0	AFA		
																starter	flood ne4 6	160.0	640.0	AFA
																<b>Total</b>	<b>286.0</b>	<b>1144.0</b>	<b>AFA</b>	
24048	CER	SE	NE	17	18N	43E			640	<b>640</b>	1310.07	<b>1310.07</b>	JOHN HANCOCK MUTUAL LIFE INSURANCE	alfalfa	2 pivots	253	1012.0	AFA		
																<b>Total</b>	<b>253</b>	<b>1012.0</b>	<b>AFA</b>	
21548	CER	SW	SW	17	18N	42E	Y	22033	177.01	<b>177.01</b>	543.08	<b>543.08</b>	ANDREOLA FARMS, INC.			0	0.0	AFS		
22033	CER	SE	SE	18	18N	42E	Y	21548	177.01		543.08		ANDREOLA FARMS, INC.	alfalfa	1 pivot	140	560.0	AFS		
																<b>Total</b>	<b>140</b>	<b>560.0</b>	<b>AFS</b>	
19356	CER	NE	SW	19	18N	42E			169	<b>169</b>	676.01	<b>676.01</b>	ANDREOLA FARMS, INC.	alfalfa	1 pivot	126	504.0	AFA		
																<b>Total</b>	<b>126</b>	<b>504.0</b>	<b>AFA</b>	
23782	CER	NW	NE	19	18N	42E			146.35	<b>146.35</b>	585.42	<b>585.42</b>	ANDREOLA FARMS, INC.	alfalfa	1 pivot	134	536.0	AFA		
																<b>Total</b>	<b>134</b>	<b>536.0</b>	<b>AFA</b>	
70080	PER	NW	SE	23	18N	42E			600	<b>600</b>	2400	<b>2400</b>	WILLIAM J. GANDOLFO	pasture grass	flood	250	1000.0	AFA		
																<b>Total</b>	<b>250</b>	<b>1000.0</b>	<b>AFA</b>	
77107	PER	NW	NW	30	18N	42E	Y	77108	41.982	<b>101.404</b>	167.928	<b>405.616</b>	ANDREOLA FARMS INC.	alfalfa	6-T pivot	41.982	167.9	AFA		
77108	PER	NW	NW	30	18N	42E	Y	77107	59.422		237.688		ANDREOLA FARMS INC.	alfalfa	6-T pivot	59.422	237.7	AFA		
																<b>Total</b>	<b>101.4</b>	<b>405.6</b>	<b>AFA</b>	
17957	CER	SW	SW	31	18N	42E	Y	24793	292.45	<b>292.45</b>	1169.8	<b>1169.8</b>	ANDREOLA FARMS INC	no crop in SE31		0	0.0	AFA		
24793	CER	SW	SE	31	18N	42E	Y	17957	78.05		312.2		ANDREOLA FARMS INC	alfalfa SW4	pivot	135	540.0	AFA		
																<b>Total</b>	<b>135</b>	<b>540</b>	<b>AFA</b>	
22077	CER	NW	NW	31	18N	42E			200	<b>200</b>	800	<b>800</b>	ROSE, CECIL D.	alfalfa	3/4 piv	96	384.0	AFA		
																<b>Total</b>	<b>96</b>	<b>384</b>	<b>AFA</b>	
69454		SW	NW	33	18N	42E	Y	81780	468	<b>468</b>	1872	<b>1872</b>	BTAZ NEVADA LLC	no crop	pivot	0	0.0	AFA		
81780		NW	NW	34	18N	42E	Y	69454	468		1872		BTAZ NEVADA LLC	no crop	pivot	0	0.0	AFA		
																<b>Total</b>	<b>0</b>	<b>0</b>	<b>AFA</b>	
7298	CER	SW	SW	15	22N	43E			29.09	<b>29.09</b>	89	<b>89</b>	SILVER CREEK RANCH INC.	meadow hay	flood	11	33.7	AFS		
																<b>Total</b>	<b>11</b>	<b>33.7</b>	<b>AFS</b>	
23969	CER	SE	SE	34	24N	43E	Y	23970	244	<b>244</b>	976	<b>976</b>	SILVER CREEK RANCH, INC.;	pasture	not pumped	0	0.0	AFA		
23970	CER	SE	SE	34	24N	43E	Y	23969	244		976		SILVER CREEK RANCH, INC.;	pasture	not pumped	0	0.0	AFA		
																<b>Total</b>	<b>0</b>	<b>0</b>	<b>AFA</b>	
									<b>GRAND TOTAL:</b>	<b>9531.724</b>		<b>35284.056</b>				<b>GRAND TOTAL:</b>	<b>4707.3</b>	<b>18819.0</b>	<b>AFA</b>	