

STATE OF NEVADA  
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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NEWARK VALLEY (HYDROGRAPHIC BASIN 10-154)

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 Newark Valley, Hydrographic Basin 10-154, 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 **7,649 acres** with a total duty of 25,143 acre-feet within Newark Valley. An estimated **2,653 acres** were irrigated and 9,319 acre-feet were pumped during 2012.

## HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	154, REGION 10
HYDROGRAPHIC BASIN NAME	NEWARK VALLEY
COUNTIES	EUREKA AND WHITE PINE
MAJOR COMMUNITIES	NONE
DESIGNATED BASIN	DESIGNATED
DENIALS BASED UPON WATER AVAILABILITY	N/A
ESTIMATED IRRIGATION PUMPAGE 2012 (ACRE-FEET)	9,319*
STATE ENGINEER'S ORDERS	NONE

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 25,143 ACRE-FEET  
DATE: APRIL 2013

NOTE: Committed groundwater resource data are accurate for APRIL 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**

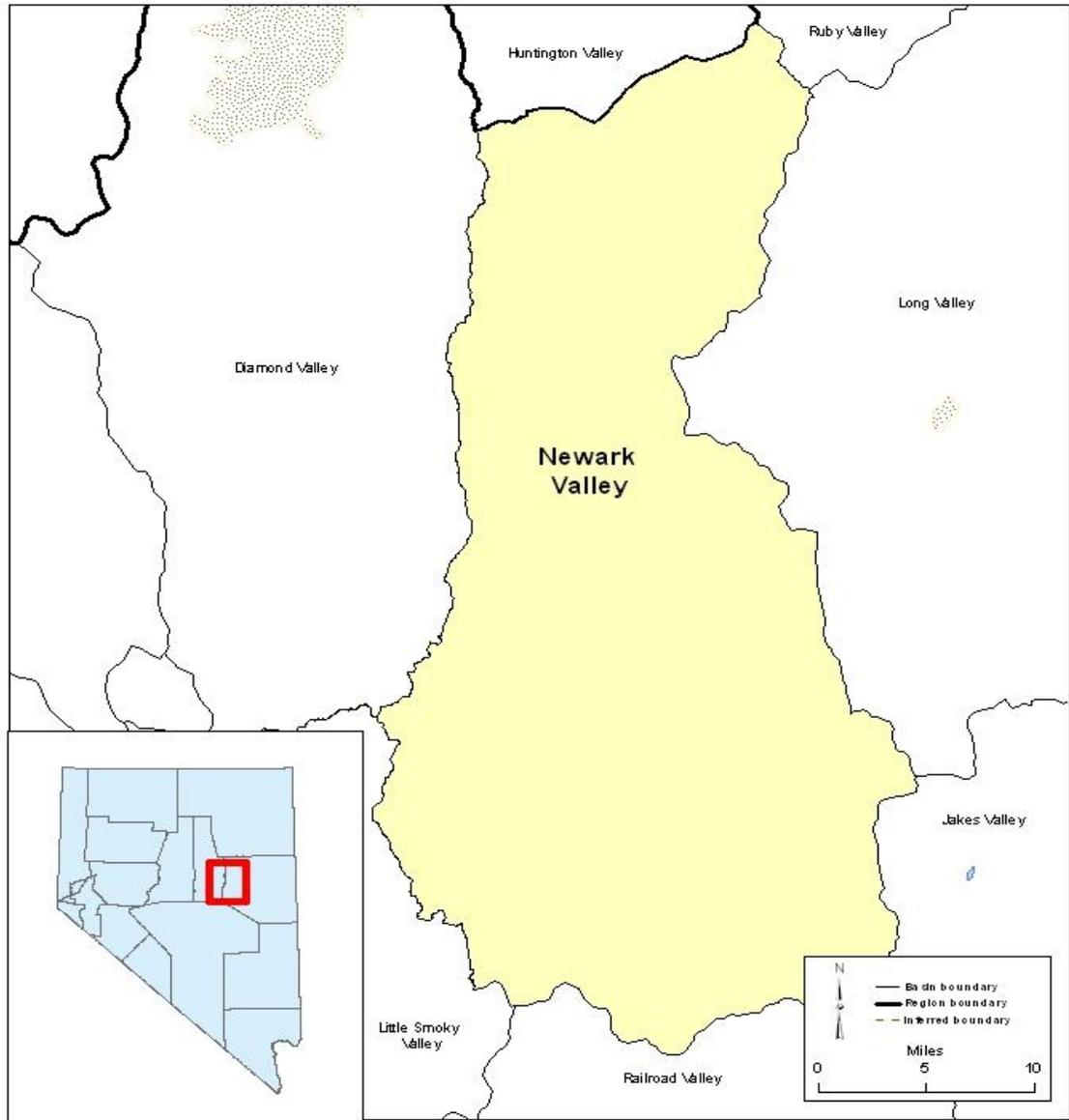
The purpose of this report is to inventory all of the groundwater resources allocated to irrigation and described by the Office of the State Engineer, Nevada Division of Water Resources, and to estimate the amount of groundwater pumped for irrigation purposes within the Newark Valley Hydrographic Basin 10-154, for the year 2012.

## **DESCRIPTION OF THE STUDY AREA**

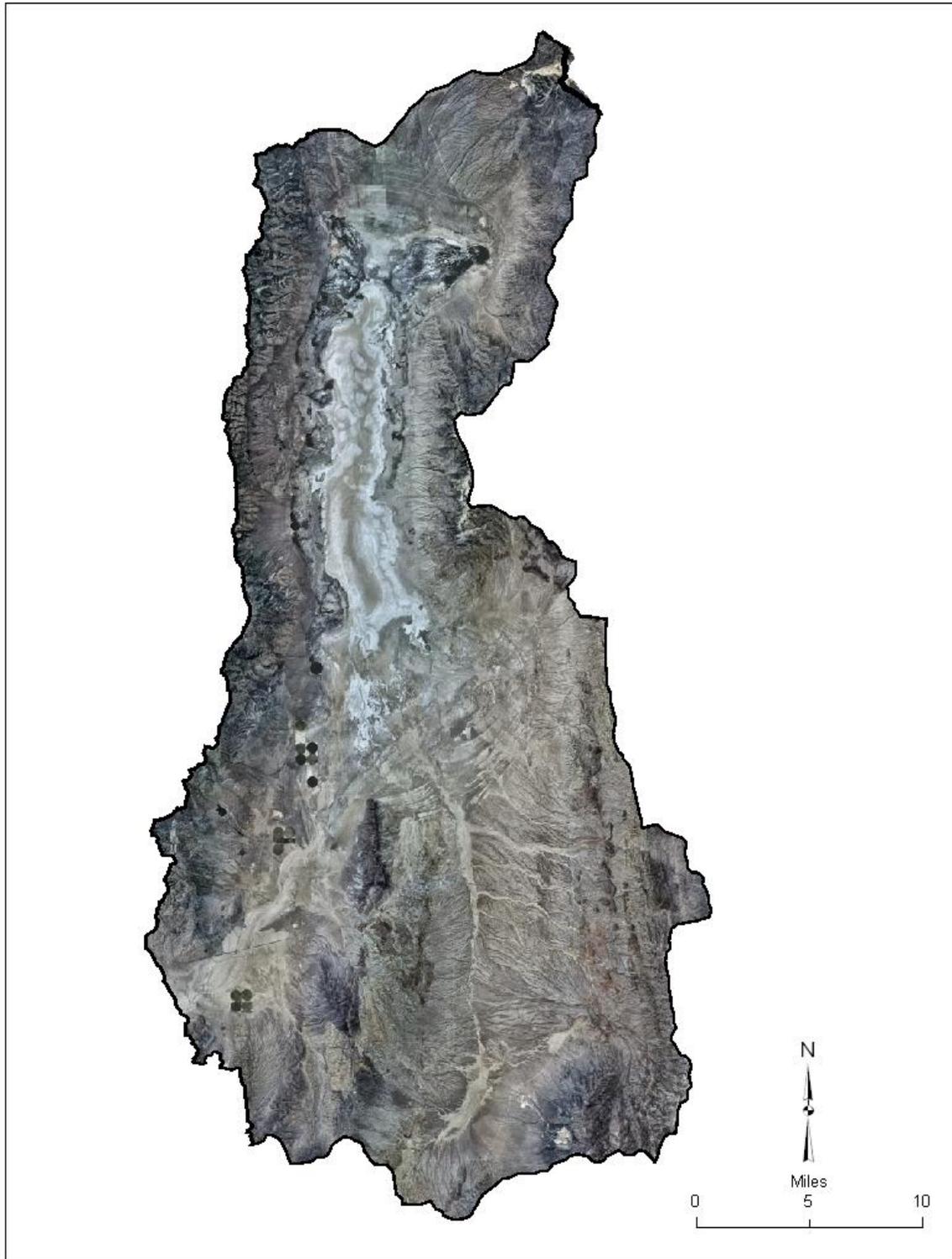
The Newark Valley Hydrographic Basin is located in central Nevada (Figure 1). Newark Valley occupies approximately 800 square miles in White Pine County. The adjacent hydrographic basins are Ruby Valley (10-176) to the northeast, Huntington Valley (4-047) to the north, Diamond Valley (10-153) and Little Smokey Valley (Northern Part 10-155A) to the west, Railroad Valley (Northern Part 10-173B) to the south and Long Valley (10-175) to the east.

Newark Valley is bounded by the Diamond Mountain Range on the west and on the east by the Bald and Buck Mountains, the Antelope Mountains and White Pine Range. Newark Valley is approximately 15 miles wide by 25 miles long with basin elevations ranging from approximately 5,860 feet above mean sea level on the valley floor to approximately 10,600 feet above mean sea level in the surrounding mountains. Irrigation is scattered throughout the basin (Figure 2).

**FIGURE 1. LOCATION MAP OF NEWARK VALLEY, BASIN 10-154**



**FIGURE 2. MAP OF NEWARK 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:

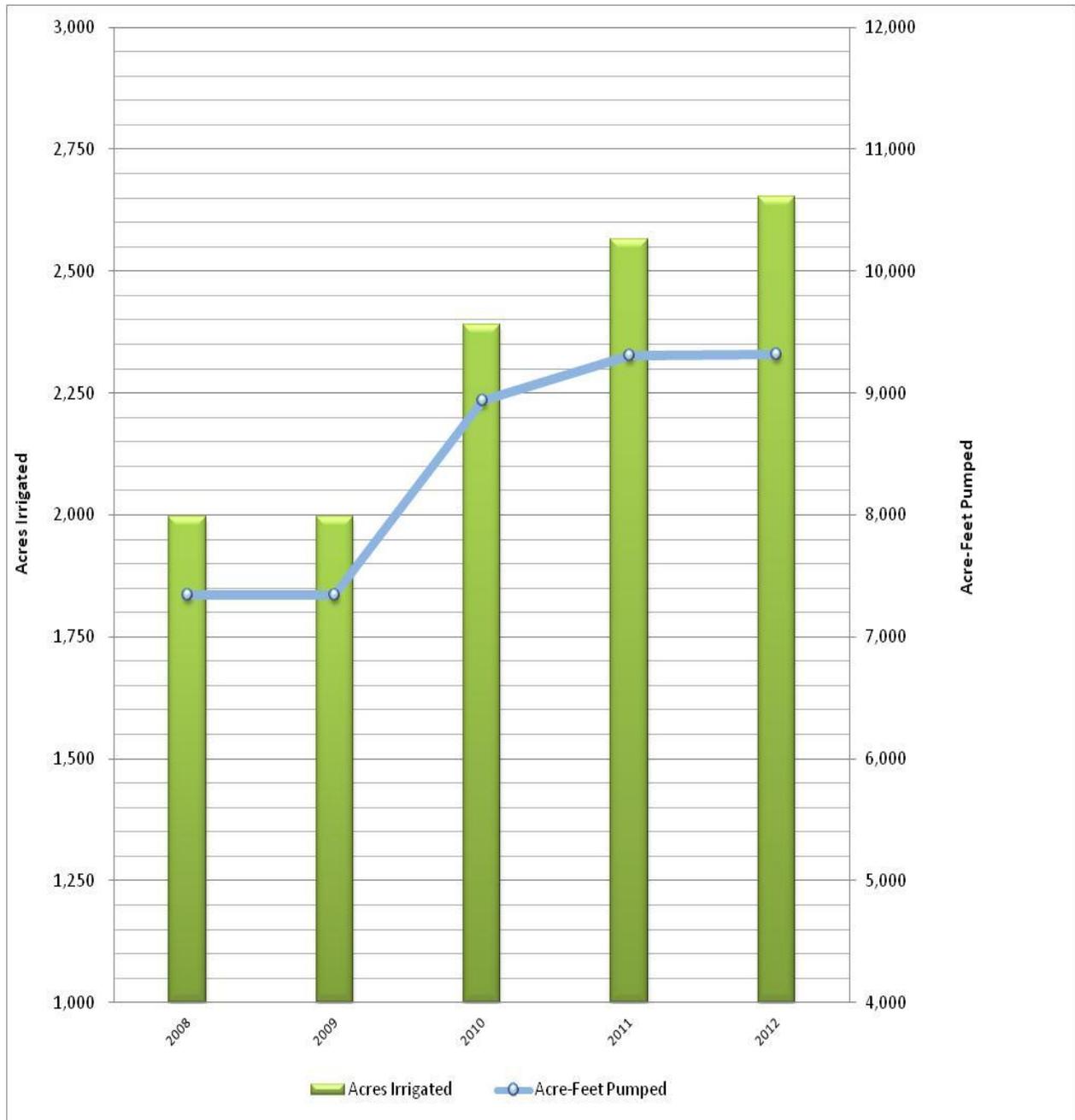
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

**APPENDIX A**

**NEWARK VALLEY HISTORICAL CROP INVENTORY**

## HISTORICAL CROP INVENTORY

Year	2008	2009	2010	2011	2012
Acres Irrigated	1,997	1,997	2,391	2,566	2,653
Acre-Feet Pumped	7,344	7,344	8,934	9,309	9,319



**APPENDIX B**  
**NEWARK 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 <b>bold</b> .
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 - Newark Valley, Basin 154, 2012**

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Co	Owner of Record	Crop	Type	Irr By	Irr Ac	Pumpage (acre-feet)
154	49096	15748	5/30/1985	CER	UG	NW	SE	18	17N	55E	IRR	Y	52925 57430 64848 78029	122.43	367.29	WP	Scoppettone, Warren	Y	alfalfa	pivot SE1/4	115	345.0
154	52925	15335	2/14/1989	CER	UG	NW	NE	18	17N	55E	IRR	Y	49096 57430 64848 78029	135.818	407.45	WP	Scoppettone, Warren	Y	alfalfa	pivot NW1/4	123	369.0
154	57430	15654	4/13/1992	CER	UG	SW	SE	18	17N	55E	IRR	Y	49096 52925 64848 78029	126.03	378.09	WP	Scoppettone, Warren	Y	alfalfa	pivot SW1/4	126	378.0
154	64848		2/12/1999	PER	UG	SE	NE	18	17N	55E	IRR	Y	49096 52925 57430 78029	470	1410.1	WP	Scoppettone, Warren	Y	alfalfa	pivot NE1/4	131	393.0
154	78029		2/12/2009	PER	UG	SE	SE	18	17N	55E	IRR	Y	49096 52925 57430 64848	25	75	WP	Scoppettone, Warren	Y	alfalfa	W. lines SE1/4	15	45.0
<b>Supplemental Totals</b>														<b>495</b>	<b>1485.1</b>						<b>510</b>	<b>1530.0</b>
154	81498		1/20/2012	PER	UG	SE	NW	8	18N	55E	IRR	N		104.5	313.61	WP	Scoppettone, Warren	N	no crop	well drilled	0	0.0
<b>0</b>																						
154	81495		1/20/2012	PER	UG	SE	NW	8	18N	55E	IRR	Y	81496 81500	49.96	199.84		Warren W. & G. Gary Scoppettc	N	no crop	well drilled	0	0.0
154	81496		1/20/2012	PER	UG	SE	NW	8	18N	55E	IRR	Y	81495 81500	49.96	199.84		Warren W. & G. Gary Scoppettc	N	no crop	no irr equip yet	0	0.0
154	81500		1/20/2012	PER	UG	SE	NW	8	18N	55E	IRR	Y	81495 81496	49.96	199.84		Warren W. & G. Gary Scoppettc	N	no crop	no irr equip yet	0	0.0
<b>Supplemental Totals</b>														<b>49.96</b>	<b>199.84</b>						<b>0</b>	<b>0</b>
154	81497		1/20/2012	PER	UG	SE	NW	8	18N	55E	IRR	N		18.18	72.72		Warren W. Scoppettone	N	no crop	well drilled	0	0.0
<b>0</b>																						
154	46818		4/14/1983	PER	UG	NW	NE	9	18N	55E	IRD			61.82	247.28	WP	Scoppettone, Warren	Y	grain+alfalfa	pivot + flood	63	252.0
<b>63</b>																						
154	48548	16260	11/9/1984	CER	UG	NW	NE	9	18N	55E	IRD			62.68	250.72	WP	Scoppettone, Warren	Y	grain+alfalfa	1/2 pivot	57	228.0
<b>57</b>																						
154	48549	16261	11/9/1984	CER	UG	SW	NW	9	18N	55E	IRD			62.68	250.72	WP	Scoppettone, Warren	Y	alfalfa	1/2 pivot	55	220.0
<b>55</b>																						
154	68967		7/18/2002	PER	UG	NW	SW	9	18N	55E	IRD			73.32	293.28	WP	Scoppettone, Warren	Y	grain+pasture	wheel line	78	320.0
<b>78</b>																						
154	36310	11257	12/18/1978	CER	UG	SW	NW	9	18N	55E	IRD	Y	38224 70082	270.04	1080.2	WP	Scoppettone, G. Gary	Y	alfalfa	wheel line	73	0.0
154	38224	11258	5/22/1979	CER	UG	SW	NW	9	18N	55E	IRD	Y	36310 70082	270.04	1080.2	WP	Scoppettone, G. Gary	Y	alfalfa	1/2 pivot NW1/4	71	1076.0
154	70082		6/3/2003	PER	UG	NW	SW	9	18N	55E	IRR	Y	36310 38224	270.04	1080.2	WP	Scoppettone, Gary	Y	alfalfa	pivot SW1/4	125	0.0
<b>Supplemental Totals</b>														<b>270.04</b>	<b>1080.2</b>						<b>269</b>	<b>1076.0</b>

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Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Co	Owner of Record	Crop	Type	Irr By	Irr Ac	Pumpage (acre-feet)
154	21278	6804	5/16/1963	CER	UG	NW	NW	15	19N	55E	IRD	Y	23769	260	1040	WP	Placer Dome US, Inc.	Y	alfalfa	pivot NW 1/4	127	508.0
154	23769	6840	3/22/1967	CER	UG	SW	SW	15	19N	55E	IRD	Y	21278	130	520	WP	Placer Dome US, Inc.	Y	grain	pivot SW 1/4	117	468.0
													<b>Supplemental Totals</b>	<b>260</b>	<b>1040</b>						<b>244</b>	<b>976.0</b>
154	23508	6838	11/22/1966	CER	UG	SW	NE	22	19N	55E	IRD			520	130	WP	Placer Dome US, Inc.	Y	alfalfa	1 pivot	128	32.0
																					<b>128</b>	<b>32.0</b>
154	23510	6778	11/22/1966	CER	UG	SW	NW	22	19N	55E	IRR			127	508	WP	Placer Dome US, Inc.	Y	alfalfa	1 pivot	125	500.0
																					<b>125</b>	<b>504.0</b>
154	23511	6839	11/22/1966	CER	UG	SW	SW	22	19N	55E	IRR			127	508	WP	Placer Dome US, Inc.	Y	alfalfa	1 pivot	126	504.0
																					<b>126</b>	<b>504.0</b>
154	77346		8/27/2008	PER	UG	SW	SE	22	19N	55E	IRR		77352	130	520	WP	Barrick Gold US, Inc.	Y	alfalfa	pivot in se1/4	128	512.0
154	77352		9/3/2008	PER	UG	SW	SE	22	19N	55E	IRR		77346	0	289.6	WP	Barrick Gold US, Inc.	Y	alfalfa	pivot in se1/4	0	0.0
													<b>Supplemental Totals</b>	<b>130</b>	<b>520</b>						<b>128</b>	<b>512.0</b>
154	23743	7553	3/9/1967	CER	UG	SW	SE	27	19N	55E	IRD	Y	33316	97	388	WP	Daly, Mark	Y	alfalfa	pivot	0	0.0
154	33316	12761	8/23/1977	CER	UG	SW	SE	27	19N	55E	IRR	Y	23743	116.5	466	WP	Daly, Mark	Y	alfalfa	pivot SE 1/4	118	472.0
													<b>Supplemental Totals</b>	<b>158.96</b>	<b>635.84</b>					<b>118</b>	<b>472.0</b>	
154	30172	9244	4/16/1976	CER	UG	SE	SE	34	20N	55E	IRR			144.55	578.2	WP	Goicoechea, Peter J & Gladys F	Y	alfalfa	1 pivot	154	616.0
																					<b>154</b>	<b>616</b>
154	62955		3/26/1997	PER	UG	NW	SW	9	21N	56E	IRR		supplemental to sfc rights		326.7	WP	Placer Dome US, Inc.	N	no crop	no well	0	0.0
																					<b>0</b>	<b>0.0</b>
154	62949		3/26/1997	PER	UG	SE	NE	2	22N	55E	IRR		supplemental to sfc rights	520	1560	WP	Placer Dome US, Inc.	Y	no crop	no well	0	0.0
																					<b>0</b>	<b>0</b>
154	62950		3/26/1997	PER	UG	SE	NW	11	22N	55E	IRR		supplemental to sfc rights	0	2896	WP	Placer Dome US, Inc.	Y	no crop	no well	0	0.0
																					<b>0</b>	<b>0</b>
154	62952		3/26/1997	PER	UG		LT04	1	22N	56E	IRR		supplemental to sfc rights	880	2640	WP	Placer Dome US, Inc.	Y	no crop	no well	0	0.0
																					<b>0</b>	<b>0</b>
154	62953		3/26/1997	PER	UG	SW	SW	21	22N	56E	IRR		supplemental to sfc rights	3.3	9.9	WP	Placer Dome US, Inc.	Y	no crop	no well	0	0.0
																					<b>0</b>	<b>0.0</b>
154	62954		3/26/1997	PER	UG	NW	NW	15	22N	56E	IRR		supplemental to sfc rights	18	54	WP	Placer Dome US, Inc.	Y	no crop	no well	0	0.0
																					<b>0</b>	<b>0</b>
154	62947		3/26/1997	PER	UG	SE	NE	26	23N	55E	IRR		supplemental to sfc rights	520	1200.9	WP	Barrick Gold US, Inc	Y	alfalfa	1/2 pivot sec. 26	63	189.0
																					<b>63</b>	<b>189</b>

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Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Type	Sup	Sup Permit No	Permitted Acres	Duty	Co	Owner of Record	Crop	Type	Irr By	Irr Ac	Pumpage (acre-feet)
154	80089		8/10/2010	PER	UG	NE	NW	24	23N	55E	IRR	Y	80090	120	480	WP	Barrick Gold US, Inc	Y	alfalfa	new pivot 2010	120	480.0
154	80090		8/10/2010	PER	UG	NE	NW	24	23N	55E	IRR	Y	80089	120	480	WP	Barrick Gold US, Inc	Y	alfalfa		0	0.0
<b>Supplemental Totals</b>														<b>120</b>	<b>480</b>						<b>120</b>	<b>480</b>
154	80525		2/2/2011	PER	UG	SW	NE	24	23N	55E	IRR	Y	80528	89.8	359.1	WP	Barrick Gold US, Inc	Y	grain	pivot	89.8	359.2
154	80528		2/2/2011	PER	UG	NE	NW	24	23N	55E	IRR	Y	80525	9.2	36.9	WP	Barrick Gold US, Inc	Y	grain		9.2	36.8
<b>Supplemental Totals</b>														<b>99</b>	<b>396</b>						<b>99.0</b>	<b>396.0</b>
154	80526		2/2/2011	PER	UG	NW	SE	24	23N	55E	IRR	Y	80527	44.041	132.12		Barrick Gold US, Inc	Y	grass hay	pivot in place	60	240.0
154	80527		2/2/2011	PER	UG	NW	SE	24	23N	55E	IRR	Y	80526		104.28		Barrick Gold US, Inc	Y	grass hay		0	0.0
<b>Supplemental Totals</b>														<b>59.1</b>	<b>236.4</b>						<b>60</b>	<b>240.0</b>
154	62948		3/26/1997	PER	UG	SE	NE	35	23N	55E	IRR		supplemental to sfc right	880	2640	WP	Placer Dome US, Inc.	Y	grain	new pivot 2010	126	252.0
<b>Supplemental Totals</b>																					<b>126</b>	<b>252</b>
154	80022		7/23/2010	PER	UG	NW	SW	19	23N	56E	IRR	Y	80024	130	520	WP	Barrick Gold US, Inc	Y	grain	pivot	130	520.0
154	80024		7/23/2010	PER	UG	NW	SW	19	23N	56E	IRR	Y	80022	0	520	WP	Barrick Gold US, Inc	Y			0	0
<b>Supplemental Totals</b>														<b>130</b>	<b>520</b>						<b>130.0</b>	<b>520.0</b>
154	80023		7/23/2010	PER	UG	NW	NW	30	23N	56E	IRR	Y	80025	130	520	WP	Barrick Gold US, Inc	N	no crop	pivot	0	0
154	80025		7/23/2010	PER	UG	NW	NW	30	23N	56E	IRR	Y	80023	0	520	WP	Barrick Gold US, Inc	N	no crop	constructed	0	0
<b>Supplemental Totals</b>														<b>130</b>	<b>520</b>						<b>0.0</b>	<b>0.0</b>
154	62951		3/26/1997	PER	UG	NE	NE	35	23N	56E	IRR		supplemental to sfc springs	800	2400	WP	Placer Dome US, Inc.	N	no crop	no crop	0	0.0
<b>Supplemental Totals</b>																					<b>0</b>	<b>0</b>
<b>Totals</b>																				<b>2,653.0</b>	<b>9,319.0</b>	