

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

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 Newark Valley, Hydrographic Basin 10-154, 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 supplementally adjusted permitted and certificated groundwater rights for irrigation purposes totaled **7,217 acres** with a total duty of 24,903 acre-feet within Newark Valley. An estimated **2,856 acres** were irrigated and 10,051 acre-feet were pumped during 2013.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	154, REGION 10
HYDROGRAPHIC BASIN NAME	NEWARK VALLEY
COUNTY	WHITE PINE, EUREKA
MAJOR COMMUNITIES	NONE
DESIGNATED BASIN	NON-DESIGNATED
DENIALS BASED UPON WATER AVAILABILITY	5562 , IRR DEN, 2/9/2006 5925 , IRR DEN, 2/4/2009
ESTIMATED IRRIGATION PUMPAGE 2013 (ACRE-FEET)	10,051*
STATE ENGINEER'S ORDERS	NONE

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 24,513 ACRE-FEET
DATE: MAY 2014

NOTE: Committed groundwater resource data are accurate for May 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 as 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 2013.

DESCRIPTION OF THE STUDY AREA

The Newark Valley Hydrographic Basin is located in eastern central Nevada (Figure 1). Newark Valley occupies approximately 801 square miles in White Pine and Eureka Counties. The adjacent hydrographic basins are Huntington Valley (4-047) to the north, Ruby Valley (10-176) to the northeast, Long Valley (10-175) to the east, Jakes Valley (10-174) to the southeast, Railroad Valley – Northern Part (10-173B) to the south, Little Smokey Valley – Northern Part (10-155A) and Diamond Valley (10-153) to the west.

Newark Valley is bounded by the Diamond Mountain Range on the west, the Ruby Mountains to the north, White Pine Range to the east and by the Pancake Range to the south. The southwest bounded by an administrative delineation with the adjacent Little Smokey Valley – Northern Part hydrographic basin. 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 HYDROGRAPHIC BASIN 10-154

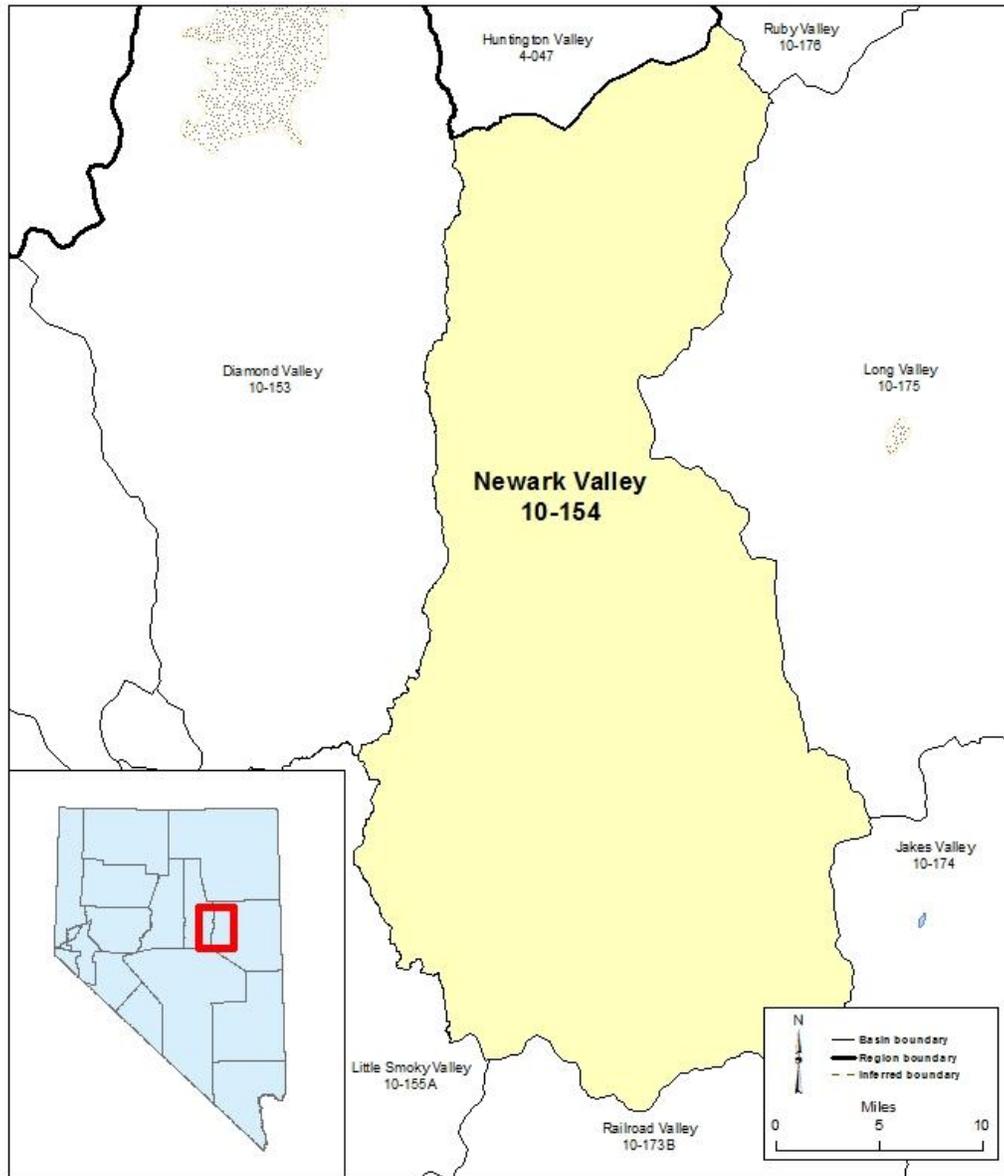
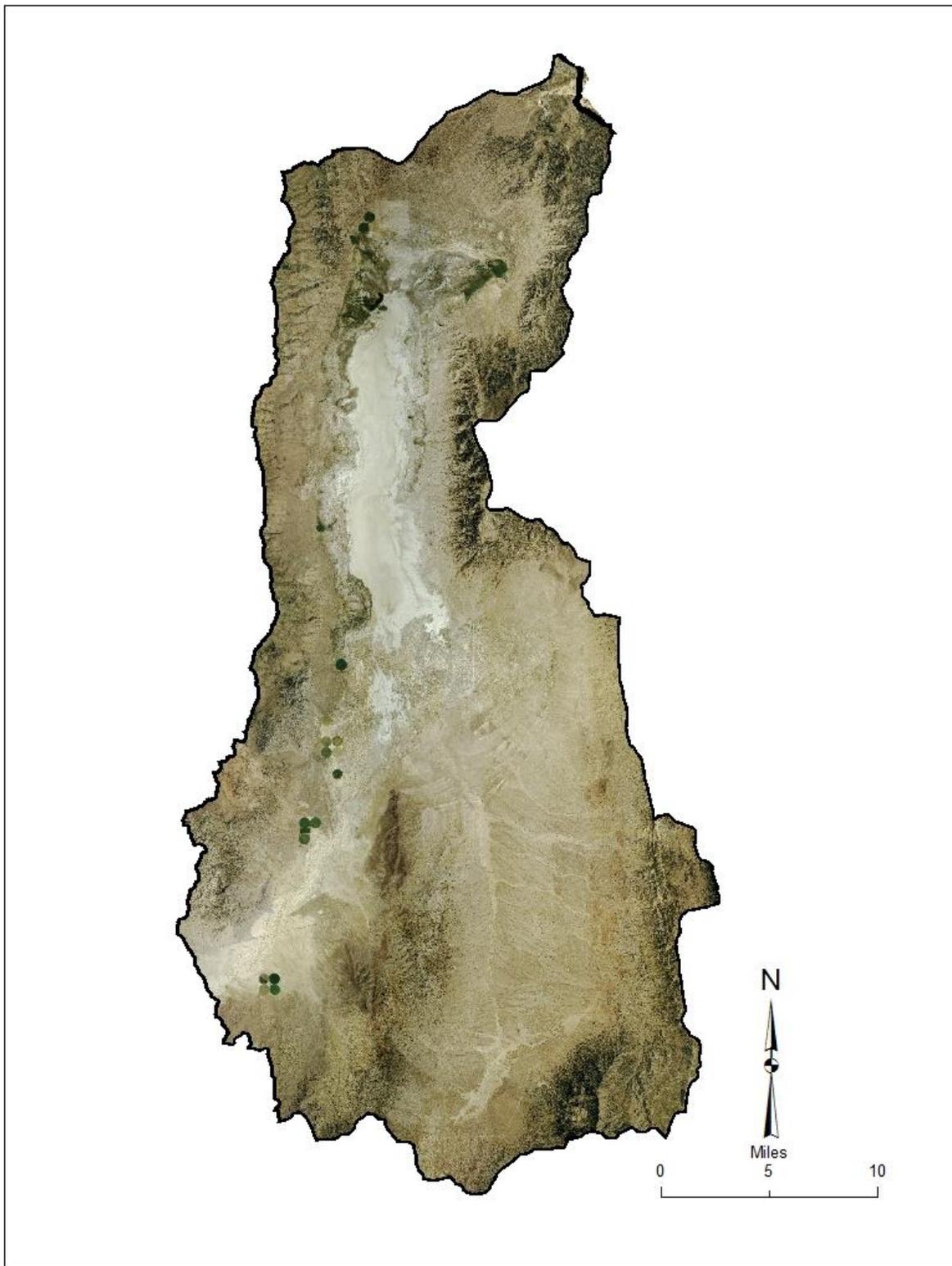


FIGURE 2. LOCATION MAP OF NEWARK VALLEY IRRIGATED ACREAGE



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

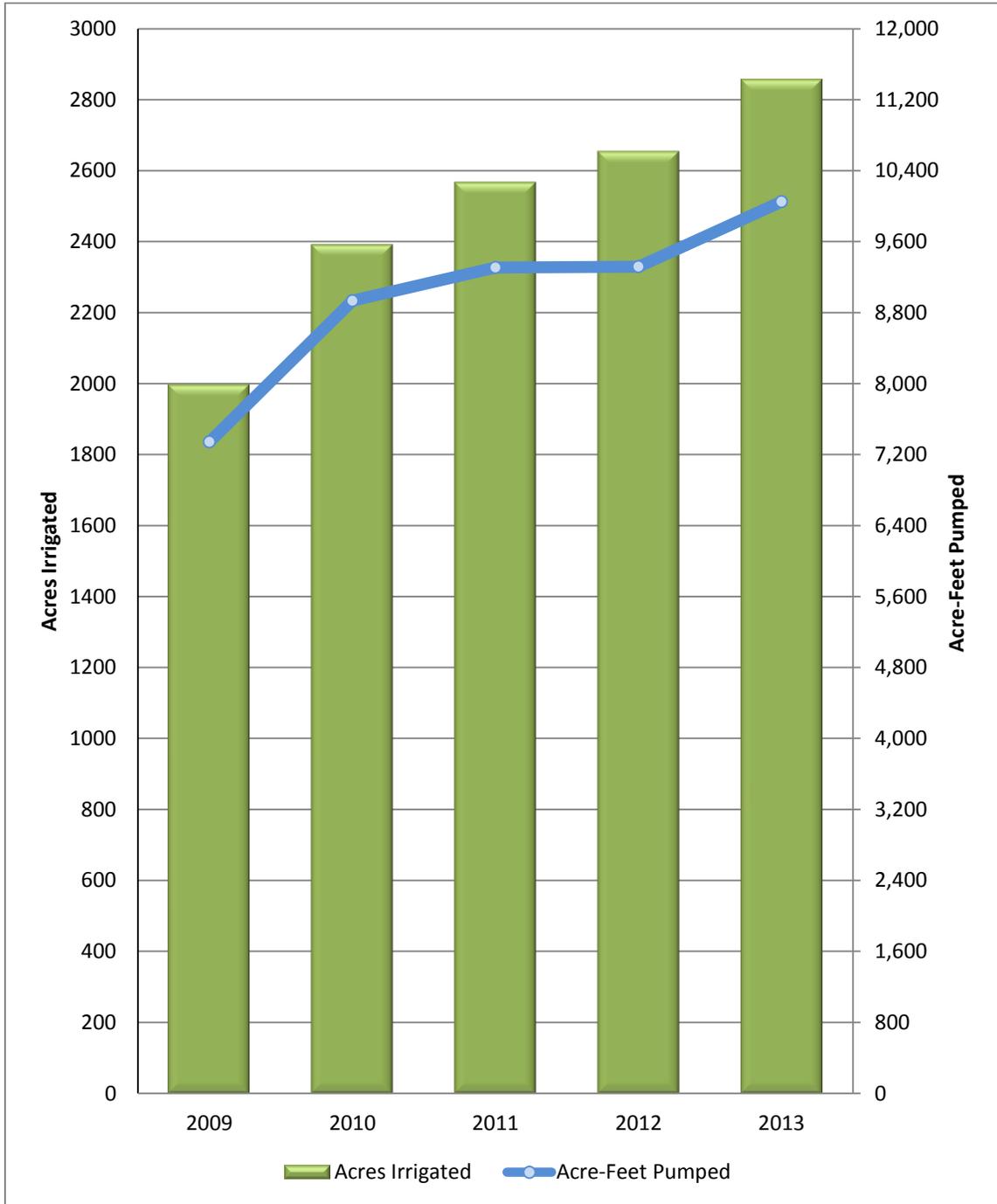
This report estimates the amount of groundwater pumped under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated use:

- 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.

APPENDIX A
NEWARK VALLEY HISTORICAL CROP INVENTORY

NEWARK VALLEY HISTORICAL CROP INVENTORY

Year	2009	2010	2011	2012	2013
Acres Irrigated	1,997	2,391	2,566	2,653	2,856
Acre-Feet Pumped	7,344	8,934	9,309	9,319	10,051



APPENDIX B
2013 NEWARK 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. The supplementally adjusted, total number of acres is listed at the beginning of a supplemental group in bold .
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 beginning of a supplemental group in bold .
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.
Acreage Estimation Method	The method by which the number of acres irrigated was determined. F – Field inspection. I – Aerial or satellite imagery.
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.
Pumpage Estimation Method	The method used to estimate the amount of water pumped. M – Totalizing meter readings. D – The estimate was made by multiplying the number of irrigated acres by the acre-feet per acre duty rate, as defined in the permit or certificate.

Crop Inventory and Groundwater Pumpage for Irrigation - Newark Valley, Basin 154, 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	Acreage Estimation Method	Acre-Feet Pumped	Pumpage Estimation Method
49096	CER	NW	SE	18	17N	55E	Y	52925, 57430, 64848, 78029	122.43	495.00	367.29	1485.10	SCOPPETTONE, WARREN	ALFALFA	PIVOT+ SE1/4	123.00		345.00	
52925	CER	NW	NE	18	17N	55E	Y	49096, 57430, 64848, 78029	135.818		407.45		SCOPPETTONE, WARREN	ALFALFA	PIVOT NW1/4	123.00		369.00	
57430	CER	SW	SE	18	17N	55E	Y	49096, 52925, 57430, 78079	126.03		378.09		SCOPPETTONE, WARREN	ALFALFA	PIVOT SW1/4	126.00		378.00	
64848	PER	SE	NE	18	17N	55E	Y	49096, 52925, 57430, 78029	470.00		1410.10		SCOPPETTONE, WARREN	ALFALFA	PIVOT NE1/4	131.00		393.00	
78029	PER	SE	SE	18	17N	55E	Y	49096, 52925, 57430, 64848	25.00		75.00		SCOPPETTONE, WARREN	NO CROP	WHEEL LINES SE1/4	0.00		0.00	
															TOTAL:	503.00	F	1485.00	D
81498	PER	SE	NW	8	18N	55E			104.50	104.50	313.61	313.61	SCOPPETTONE, WARREN	GRAIN	1/2 PIVOT	63.00		189.00	
															TOTAL:	63.00	F	189.00	D
81495	PER	SE	NW	8	18N	55E	Y	81496, 81500	49.96	49.96	199.84	199.84	WARREN W & G GARY SCOPPETTONE	GRAIN	WHEEL LINE	40.00		160.00	
81496	PER	SE	NW	8	18N	55E	Y	81495, 81500	49.96		199.84		WARREN W & G GARY SCOPPETTONE	NO CROP		0.00		0.00	
81500	PER	SE	NW	8	18N	55E	Y	81495, 81496	49.96		199.84		WARREN W & G GARY SCOPPETTONE	NO CROP		0.00		0.00	
															TOTAL:	40.00	F	160.00	D
81497	PER	SE	NW	8	18N	55E			18.18	18.18	72.72	72.72	WARREN W SCOPPETTONE	GRAIN	WHEEL LINE	10.00		40.00	
															TOTAL:	10.00	F	40.00	D
46818	PER	NW	NE	9	18N	55E			61.82	61.82	247.28	247.28	SCOPPETTONE, WARREN	ALFALFA	PIVOT + FLOOD	70.00		280.00	
															TOTAL:	70.00	F	280.00	D
48548	CER	NW	NE	9	18N	55E			62.68	62.68	250.72	250.72	SCOPPETTONE, WARREN	ALFALFA	1/2 PIVOT	57.00		228.00	
															TOTAL:	57.00	F	228.00	D
48549	CER	SW	NW	9	18N	55E			62.68	62.68	250.72	250.72	SCOPPETTONE, WARREN	ALFALFA	1/2 PIVOT	55.00		220.00	
															TOTAL:	55.00	F	220.00	D
68967	PER	NW	SW	9	18N	55E			73.32	73.32	293.28	293.28	SCOPPETTONE, WARREN	GRAIN	WHEEL LINE	78.00		320.00	
															TOTAL:	78.00	F	320.00	D
36310	CER	SW	NW	9	18N	55E	Y	38224, 70082	270.04	270.04	1080.20	1080.20	SCOPPETTONE, G. GARY	ALFALFA	WHEEL LINE	73.00		0.00	
38224	CER	SW	NW	9	18N	55E	Y	36310, 70082	270.04		1080.20		SCOPPETTONE, G. GARY	ALFALFA	1/2 PIVOT NW 1/4	87.00		1076.00	
70082	PER	NW	SW	9	18N	55E	Y	38224, 36310	270.04		1080.20		SCOPPETTONE, GARY	ALFALFA	PIVOT SW 1/4	133.00		0.00	
															TOTAL:	293.00	F	1172.00	D
21278	CER	NW	NW	15	19N	55E	Y	23769	260.00	260.00	1040.00	1040.00	PLACER DOME US, INC	ALFALFA	PIVOT NW 1/4	127.00		508.00	
23769	CER	SW	SW	15	19N	55E	Y	21278	130.00		520.00		PLACER DOME US, INC	GRAIN	PIVOT SW 1/4	117.00		468.00	
															TOTAL:	244.00	F	976.00	D
23508	CER	SW	NE	22	19N	55E			520.00	520.00	130.00	130.00	PLACER DOME US, INC	ALFALFA	1 PIVOT	128.00		32.00	
															TOTAL:	128.00	F	32.00	D
23510	CER	SW	NW	22	19N	55E			127.00	127.00	508.00	508.00	PLACER DOME US, INC	ALFALFA	1 PIVOT	125.00		504.00	
															TOTAL:	125.00	F	504.00	D
23511	CER	SW	SW	22	19N	55E			127.00	127.00	508.00	508.00	PLACER DOME US, INC	ALFALFA	1 PIVOT	126.00		504.00	

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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	Acreage Estimation Method	Acre-Feet Pumped	Pumpage Estimation Method
															TOTAL:	126.00	F	504.00	D
77346	PER	SW	SE	22	19N	55E	Y	77352	130.00	130.00	520.00	520.00	BARRICK GOLD US, INC	GRAIN	PIVOT SE 1/4	128.00		512.00	
77352	PER	SW	SE	22	19N	55E	Y	77346	0.00		289.60		BARRICK GOLD US, INC	GRAIN	PIVOT SE 1/4	0.00		0.00	
															TOTAL:	128.00	F	512.00	D
23743	CER	SW	SE	27	19N	55E	Y	33316	97.00	158.96	388.00	635.84	DALY, MARK	BARLEY	PIVOT	0.00		0.00	
33316	CER	SW	SE	27	19N	55E	Y	23743	116.50		466.00		DALY, MARK	BARLEY	PIVOT SE 1/4	118.00		472.00	
															TOTAL:	118.00	F	472.00	D
30172	CER	SE	SE	34	20N	55E			144.55	144.55	578.20	578.20	GOICOCHEA, PETER J & GLADYS P	ALFALFA	1 PIVOT	154.00		616.00	
															TOTAL:	154.00	F	616.00	D
62955	PER	NW	SW	9	21N	56E		SUPPLIMENTAL TO SURFACE RIGHTS			326.70	326.70	PLACER DOME US, INC	NO CROP	NO WELL	0.00		0.00	
															TOTAL:	0.00	F	0.00	
62949	PER	SE	NE	2	22N	55E		SUPPLIMENTAL TO SURFACE RIGHTS	520.00	520.00	1560.00	1560.00	PLACER DOME US, INC	NO CROP	NO WELL	0.00		0.00	
															TOTAL:	0.00	F	0.00	
62950	PER	SE	NW	11	22N	55E		SUPPLIMENTAL TO SURFACE RIGHTS	0.00	0.00	2896.00	2896.00	PLACER DOME US, INC	NO CROP	NO WELL	0.00		0.00	
															TOTAL:	0.00	F	0.00	
62952	PER		LT04	1	22N	56E		SUPPLIMENTAL TO SURFACE RIGHTS	880.00	880.00	2640.00	2640.00	PLACER DOME US, INC	NO CROP	NO WELL	0.00		0.00	
															TOTAL:	0.00	F	0.00	
62953	PER	SW	SW	21	22N	56E		SUPPLIMENTAL TO SURFACE RIGHTS	3.30	3.30	9.90	9.90	PLACER DOME US, INC	NO CROP	NO WELL	0.00		0.00	
															TOTAL:	0.00	F	0.00	
62954	PER	NW	NW	15	22N	56E		SUPPLIMENTAL TO SURFACE RIGHTS	18.00	18.00	54.00	54.00	PLACER DOME US, INC	NO CROP	NO WELL	0.00		0.00	
															TOTAL:	0.00	F	0.00	
62947	PER	SE	NE	26	23N	55E		SUPPLIMENTAL TO SURFACE RIGHTS	520.00	520.00	1200.90	1200.90	BARRICK GOLD US, INC	ALFALFA	1/2 PIVOT SEC 26	63.00		189.00	
															TOTAL:	63.00	F	189.00	D
81962	PER	NE	NW	24	23N	55E			130.00	130.00	520.00	520.00	BARRICK GOLD US, INC	STARTER	PIVOT	126.00		504.00	
															TOTAL:	126.00	F	504.00	D
80089	PER	NE	NW	24	23N	55E	Y	80090	120.00	120.00	480.00	480.00	BARRICK GOLD US, INC	ALFALFA	NEW PIVOT 2010	120.00		480.00	
80090	PER	NE	NW	24	23N	55E	Y	80089	120.00		480.00		BARRICK GOLD US, INC	ALFALFA		0.00		0.00	
															TOTAL:	120.00	F	480.00	D
80525	PER	SW	NE	24	23N	55E	Y	80528	89.80	99.00	359.10	396.00	BARRICK GOLD US, INC	GRAIN	PIVOT	89.80		359.20	
80528	PER	NE	NW	24	23N	55E	Y	80525	9.20		36.90		BARRICK GOLD US, INC	GRAIN		9.20		36.80	
															TOTAL:	99.00	F	396.00	D
80526	PER	NW	SE	24	23N	55E	Y	80527	44.041	59.10	132.12	236.40	BARRICK GOLD US, INC	NO CROP	PIVOT IN PLACE	0.00			
80527	PER	NW	SE	24	23N	55E	Y	80526			104.28		BARRICK GOLD US, INC	NO CROP		0.00		0.00	
															TOTAL:	0.00	F	0.00	

Crop Inventory and Groundwater Pumpage for Irrigation - Newark Valley, Basin 154, 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	Acreage Estimation Method	Acre-Feet Pumped	Pumpage Estimation Method	
62948	PER	SE	NE	35	23N	55E		SUPPLEMENTAL TO SURFACE RIGHT	880.00	880.00	2640.00	2640.00	PLACER DOME US, INC	PASTURE	NEW PIVOT 2010	126.00		252.00		
															TOTAL:	126.00	F	252.00	D	
80022	PER	NW	SW	19	23N	56E	Y	80024	130.00	130.00	520.00	520.00	BARRICK GOLD US, INC	GRAIN	PIVOT	130.00		520.00		
80024	PER	NW	SW	19	23N	56E	Y	80022	0.00		520.00		BARRICK GOLD US, INC			0.00		0.00		
															TOTAL:	130.00	F	520.00	D	
80023	PER	NW	NW	30	23N	56E	Y	80025	130.00	130.00	520.00	520.00	BARRICK GOLD US, INC	NO CROP	PIVOT	0.00		0.00		
80025	PER	NW	NW	30	23N	56E	Y	80023	0.00		520.00		BARRICK GOLD US, INC	NO CROP	CONSTRUCTED	0.00		0.00		
															TOTAL:	0.00	F	0.00		
62951	PER	NE	NE	35	23N	56E		SUPPLEMENTAL TO SURFACE SPRINGS	800.00	800.00	2400.00	2400.00	PLACER DOME US, INC	NO CROP		0.00		0.00		
															TOTAL:	0.00	F	0.00		
								TOTAL:		6955.09		24513.41			TOTAL:	2856.00		10051.00		