

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

JASON KING, P.E.
STATE ENGINEER



SILVER STATE VALLEY (HYDROGRAPHIC BASIN 2-032)

CROP INVENTORY

2012

By:
Shannon McDaniel
Steve DelSoldato

Table of Contents

ABSTRACT	1
HYDROGRAPHIC BASIN SUMMARY	2
PURPOSE AND SCOPE	3
DESCRIPTION OF THE STUDY AREA	3
FIGURE 1. LOCATION MAP OF SILVER STATE VALLEY, BASIN 2-032.....	4
FIGURE 2. MAP OF SILVER STATE VALLEY IRRIGATED ACREAGE	5
METHODS TO ESTIMATE IRRIGATED ACREAGE	6
METHODS TO ESTIMATE PUMPAGE	6
APPENDIX A	7
HISTORICAL CROP INVENTORY	8
APPENDIX B	9
EXPLANATION OF COLUMN HEADINGS	10
2012 SILVER STATE VALLEY CROP INVENTORY	12

ABSTRACT

This inventory represents the status and usage of all permitted and certificated groundwater rights for irrigation purposes located within Silver State Valley, Hydrographic Basin 2-032, 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 **4,942 acres** with a total duty of 19,779 acre-feet within Silver State Valley. An estimated **5,092 acres** were irrigated and 19,691 acre-feet were pumped during 2012.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	032, REGION 2
HYDROGRAPHIC BASIN NAME	SILVER STATE VALLEY
COUNTIES	HUMBOLDT
MAJOR COMMUNITIES	N/A
DESIGNATED BASIN	PARTIALLY
DENIALS BASED UPON WATER AVAILABILITY	N/A
ESTIMATED IRRIGATION PUMPAGE 2012 (ACRE-FEET)	19,691*
STATE ENGINEER'S ORDERS	
<u>NO. 285 – PARTIAL DESIGNATION OF BASIN</u>	APRIL 28, 1965

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 19,779 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 Silver State Valley Hydrographic Basin 2-032, for the year 2012.

DESCRIPTION OF THE STUDY AREA

The Silver State Valley Hydrographic Basin is located in north central Nevada (Figure 1). Silver State Valley occupies approximately 320 square miles in Humboldt County. The adjacent hydrographic basins are Desert Valley (2-031) to the west, Kings River Valley – Sod House Subarea (4-030B) to the north and west, Quinn River Valley – Orovada Subarea (2-033A) to the north and east, Paradise Valley (4-069) to the east and Winnemucca Segment (4-070) to the south.

Silver State Valley is bounded on the north by the Davey Town Flat, to the east by the Bloody Run Hills and the Santa Rosa Range, to the south by the Krum Hills and to the west by the Slumbering Hills. The valley is approximately 14 miles wide by 29 miles long with basin elevations ranging from approximately 4,000 feet above mean sea level on the valley floor to approximately 8,000 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 SILVER STATE VALLEY, BASIN 2-032

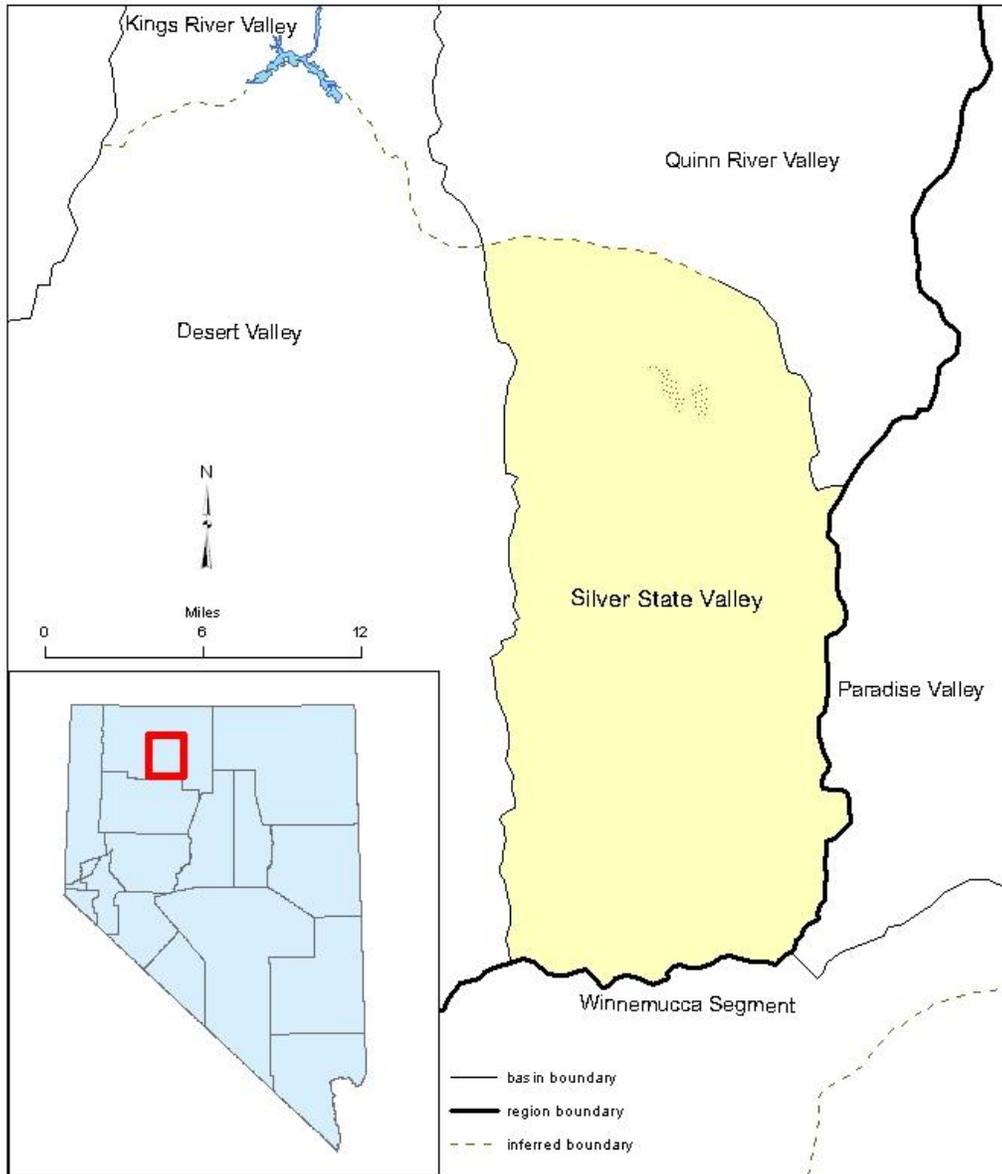
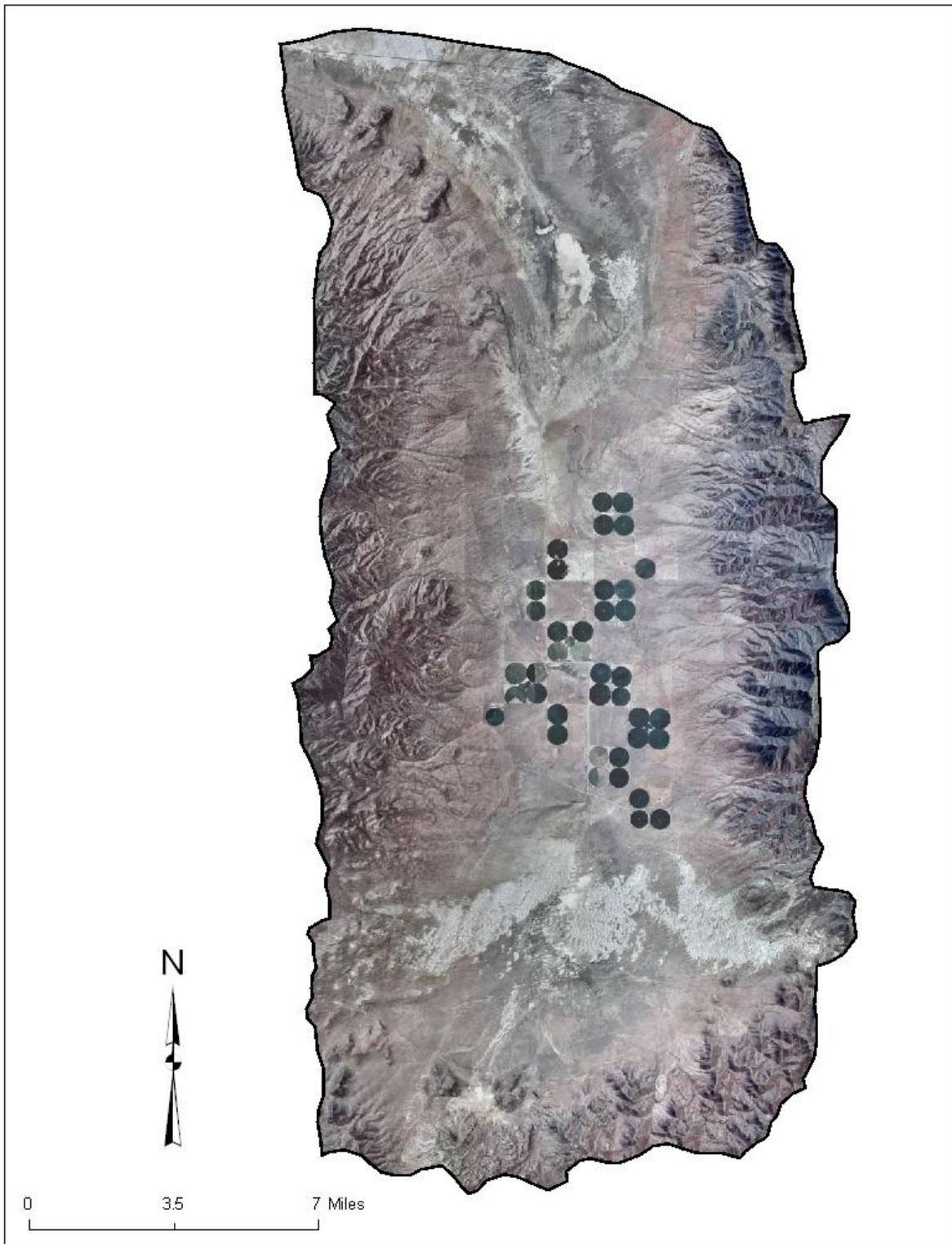


FIGURE 2. MAP OF SILVER STATE VALLEY IRRIGATED ACREAGE



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:

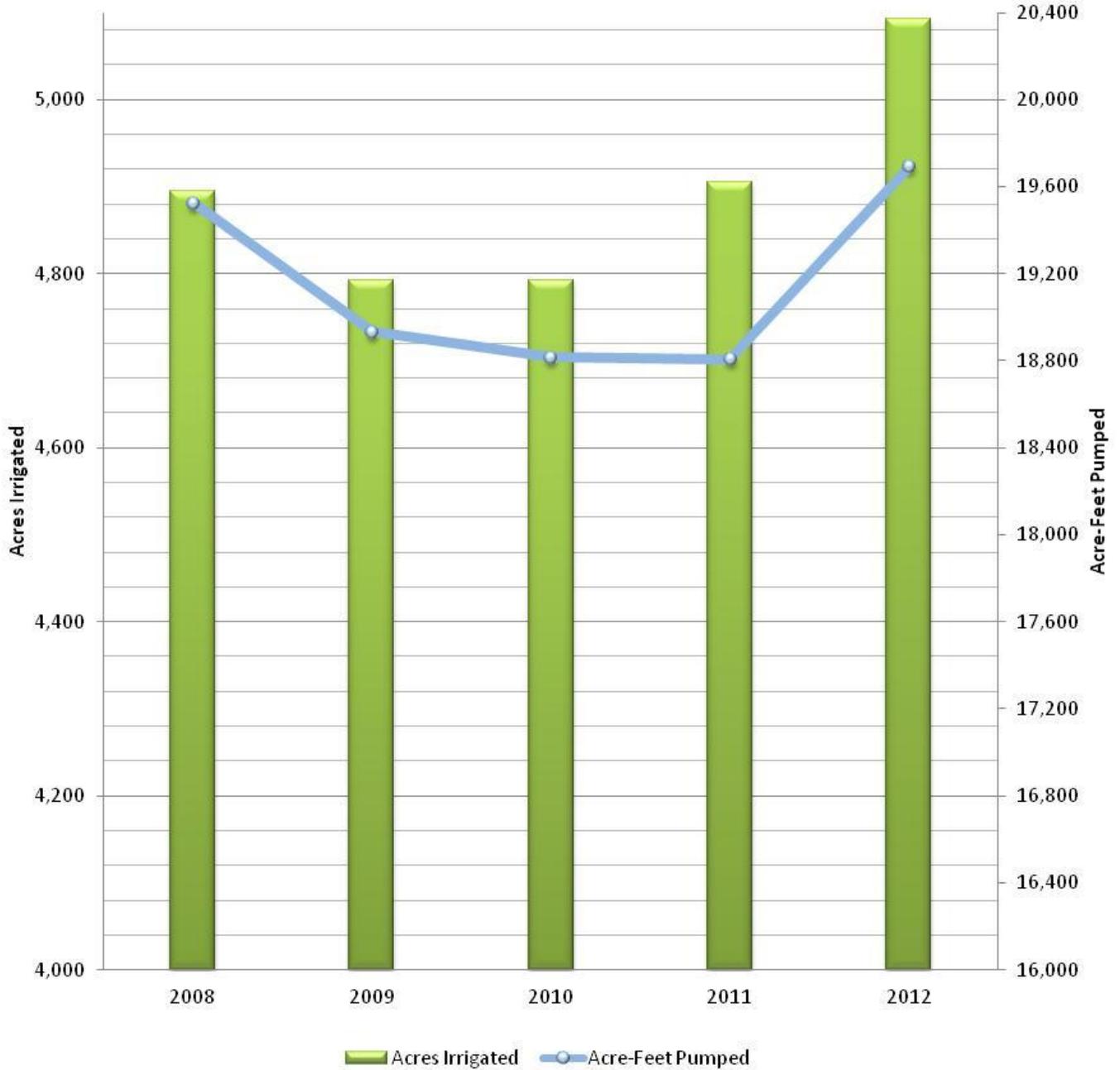
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

APPENDIX A

SILVER STATE VALLEY HISTORICAL CROP INVENTORY

HISTORICAL CROP INVENTORY

Year	2008	2009	2010	2011	2012
Acres Irrigated	4,895	4,793	4,793	4,905	5,092
Acre-Feet Pumped	19,526	18,934	18,816	18,806	19,691



Note: Historical pumpage data modified from previously published data.

APPENDIX B
SILVER STATE 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.
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	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.

SILVER STATE VALLEY CROP INVENTORY

App	Cert	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Sup	Permitted Acres	Duty	Units	County	Owner of Record	Type	Irrigation	Irr Acre	A/F Pumped
20255	7058	CER	UG	NE	NE	1	38N	36E	Y	247.62	989.96	AFA	HU	BRINKERHOFF, FAY & WANDA	Grass Hay	Pivots	135.00	540.00
47307	13308	CER	UG	NE	NE	1	38N	36E	Y	255.20	627.40	AFA	HU	THE FLYING W				
22667	8152	CER	UG	NW	NW	1	38N	36E	Y	251.68	1,006.72	AFA	HU	BRINKERHOFF, FAY & WANDA	Alfalfa	Pivot	126.00	504.00
47306	13307	CER	UG	NW	NW	1	38N	36E	Y	515.50	627.40	AFA	HU	THE FLYING W	Grass Hay	Pivot	126.00	504.00
56841	17252	CER	UG	NE	SE	1	38N	36E	Y	359.00	415.28	AFA	HU	THE FLYING W	Alfalfa	Pivots	170.00	680.00
56842	17253	CER	UG	NE	SE	1	38N	36E	Y	359.00	491.70	AFA	HU	THE FLYING W				
										Supplemental Total	605.16	2,420.64	AFA					
23849	7549	CER	UG	SW	NE	11	38N	36E	Y	335.03	1,341.20	AFA	HU	BRINKERHOFF, FAY & WANDA	Alfalfa	Pivot NE 11	137.00	548.00
24573	8059	CER	UG	NW	SW	11	38N	36E	Y	567.31	2,269.24	AFA	HU	BRINKERHOFF, FAY & WANDA	Alfalfa	Pivot SE 11	127.00	508.00
26798	9982	CER	UG	SW	SW	11	38N	36E	Y	537.14	1,676.60	AFA	HU	BRINKERHOFF, FAY & WANDA	Alfalfa	Pivot NW 11	145.00	580.00
														Grass Hay	Pivot Center 11	20.70	82.80	
														Alfalfa	Pivot Sec 15	100.00	400.00	
														Alfalfa	Pivot SW 11	140.00	560.00	
										Supplemental Total	604.66	2,418.64	AFA					
35787	9992	CER	UG	SW	SW	11	38N	36E	Y	89.64	164.24	AFA	HU	THE FLYING W				
35788	9993	CER	UG	SW	SW	11	38N	36E	Y	89.64	14.84	AFA	HU	THE FLYING W				
35789	9994	CER	UG	SW	SW	11	38N	36E	Y	89.64	71.08	AFA	HU	THE FLYING W				
35790	9995	CER	UG	SW	SW	11	38N	36E	Y	89.64	39.44	AFA	HU	THE FLYING W				
34025	9990	CER	UG	SW	SW	11	38N	36E	Y	89.64	168.84	AFA	HU	THE FLYING W				
34026	9991	CER	UG	SW	SW	11	38N	36E	Y	89.64	205.72	AFA	HU	THE FLYING W				
										Supplemental Total	89.64	358.56	AFA					
72190		PER	UG	SW	NW	13	38N	36E	Y	240.18	326.02	AFA	HU	WADSWORTH FRANKLIN B. & JOYCE C.	Alfalfa	Pivots	250.00	1,000.00
72191		PER	UG	SW	NW	13	38N	36E	Y	240.18	960.72	AFA	HU	WADSWORTH FRANKLIN B. & JOYCE C.				
										Supplemental Total	240.18	960.72	AFA					
71073	17340	CER	UG	NW	SW	25	39N	36E	Y	240.18	912.00	AFA	HU	HARRISON, ALBERT & GEORGIA	Alfalfa	Pivots	240.00	912.00
														Grain	Pivot	120.00	456.00	
										Total	240.18	912.00	AFA					
71070	17337	CER	UG	SW	NE	35	39N	36E	Y	234.64	525.76	AFA	HU	HARRISON, ALBERT & GEORGIA	Grain	Pivots	250.00	945.00
71071	17338	CER	UG	SW	NE	35	39N	36E	Y	234.64	888.00	AFA	HU	HARRISON, ALBERT & GEORGIA				
71072	17339	CER	UG	SW	NE	35	39N	36E	Y	234.64	644.19	AFA	HU	HARRISON, ALBERT & GEORGIA				
										Supplemental Total	234.64	888.00	AFA					
29597	9718	CER	UG	NW	SE	17	38N	37E	Y	488.00	1,952.00	AFA	HU	BETES, SEBASTIAN & BEATRICE	Alfalfa	Pivot	136.00	298.23
29599	9720	CER	UG	NW	NE	17	38N	37E	Y	488.00	1,274.18	AFA	HU	BETES, SEBASTIAN & BEATRICE	Alfalfa	Pivot	131.00	
81355		PER	UG	SW	NW	17	38N	37E	Y				HU	BETES, SEBASTIAN & BEATRICE				315.50
29600	9721	CER	UG	SW	NE	17	38N	37E	Y	488.00	1,613.00	AFA	HU	BETES, SEBASTIAN & BEATRICE	Alfalfa	Pivots	132.00	528.00
63035	16693	CER	UG	NW	NW	17	38N	37E	Y	488.00	545.81	AFA	HU	BETES, SEBASTIAN & BEATRICE	Grain	Pivot	131.00	390.16
										Supplemental Total	488.00	1,952.00	AFA					
68651		PER	UG	SW	SE	7	38N	37E	Y		0.00	AFA	HU	BFE LAND HOLDINGS LLC	Grass Hay	Pivot	112.00	474.65
68840		PER	UG	SW	SE	7	38N	37E	Y		1,952.00	AFA	HU	BFE LAND HOLDINGS LLC				
68841		PER	UG	SW	SE	7	38N	37E	Y		0.00	AFA	HU	BFE LAND HOLDINGS LLC				
29823	9781	CER	UG	NW	SE	7	38N	37E	Y	488.00	813.02	AFA	HU	BFE LAND HOLDINGS LLC	Alfalfa	Pivot	144.00	576.00

SILVER STATE VALLEY CROP INVENTORY

App	Cert	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Sup	Permitted Acres	Duty	Units	County	Owner of Record	Type	Irrigation	Irr Acre	A/F Pumped	
29829	9782	CER	UG	NE	SE	7	38N	37E	Y	488.00	1,952.00	AFA	HU	BFE LAND HOLDINGS LLC	Alfalfa	Pivot	129.00	516.00	
29831	9783	CER	UG	SW	NE	7	38N	37E	Y	488.00	1,773.72	AFA	HU	BFE LAND HOLDINGS LLC	Alfalfa	Pivot	122.00	501.07	
Supplemental Total										488.00	1,952.00	AFA							
68730	17665	CER	UG	NE	NE	19	38N	37E	Y	488.00	889.04	AFA	HU	TROOST FAMILY LIVING TRUST	Supplemental to others in wells in Section 19				
68731	17666	CER	UG	NE	NE	19	38N	37E	Y	488.00	723.97	AFA	HU	TROOST FAMILY LIVING TRUST					
29819	9778	CER	UG	NW	SE	19	38N	37E	Y	488.00	1,773.72	AFA	HU	TROOST FAMILY LIVING TRUST	Alfalfa	Pivot	122.00	488.00	
29820	9779	CER	UG	NW	SE	19	38N	37E	Y	488.00	1,773.72	AFA	HU	TROOST FAMILY LIVING TRUST					
29821	9780	CER	UG	NE	NW	19	38N	37E	Y	488.00	723.97	AFA	HU	TROOST FAMILY LIVING TRUST	Alfalfa	Pivot	122.00	488.00	
29832	9784	CER	UG	SE	NW	19	38N	37E	Y	488.00	723.97	AFA	HU	TROOST FAMILY LIVING TRUST	Grain	Pivot	122.00	488.00	
30062	9785	CER	UG	NW	NE	19	38N	37E	Y		1,773.72	AFA	HU	TROOST FAMILY LIVING TRUST	Grain	Pivot	122.00	488.00	
Supplemental Total										488.00	1,952.00	AFA							
34813	9510	CER	UG	NW	NW	29	38N	37E		122.00	488.00	AFA	HU	TROOST FAMILY LIVING TRUST	Grain	Pivot	122.00	488.00	
Total										122.00	488.00	AFA							
34815	9512	CER	UG	NW	SW	29	38N	37E		122.00	0.00	AFA	HU	TROOST FAMILY LIVING TRUST	Grain	Pivot	97.00	388.00	
43718	14418	CER	UG	NW	SE	29	38N	37E	Y	122.00	488.00	AFA	HU	TROOST FAMILY LIVING TRUST	Grain	Pivot	123.00	492.00	
Supplemental Total										122.00	488.00	AFA							
34816	9513	CER	UG	NW	SE	29	38N	37E	Y	122.00	488.00	AFA	HU	TROOST FAMILY LIVING TRUST					
Total										122.00	488.00	AFA							
29826	9724	CER	UG	SW	SE	19	39N	37E	Y	488.00	1,274.18	AFA	HU	BRINKERHOFF FAMILY TRUST AGREEMENT	Alfalfa	Pivots	252.00	1,008.00	
29824	9722	CER	UG	SW	SE	19	39N	37E	Y	488.00	1,952.00	AFA	HU	BRINKERHOFF FAMILY TRUST AGREEMENT					
29825	9723	CER	UG	SE	NW	19	39N	37E	Y	488.00	1,952.00	AFA	HU	BRINKERHOFF FAMILY TRUST AGREEMENT	Grain	Pivots	252.00	1,008.00	
29830	9726	CER	UG	SE	NW	19	39N	37E	Y	488.00	1,274.18	AFA	HU	NEVADA FIRST CORPORATION					
Supplemental Total										488.00	1,952.00	AFA							
63467	15828	CER	UG	SW	SW	29	39N	37E	Y	122.00	488.00	AFA	HU	BRINKERHOFF, TOBY & KRISTEE	Alfalfa	Pivot	124.00	496.00	
63468	15829	CER	UG	SW	SW	29	39N	37E	Y	122.00	488.00	AFA	HU	BRINKERHOFF, TOBY & KRISTEE					
Supplemental Total										122.00	488.00	AFA							
30713	9727	CER	UG	SW	NE	31	39N	37E	Y	488.00	307.69	AFA	HU	BRINKERHOFF, TOBY & KRISTEE	Alfalfa	Pivots	252.00	1,008.00	
30715	9729	CER	UG	SW	NE	31	39N	37E	Y	488.00	680.52	AFA	HU	BRINKERHOFF, TOBY & KRISTEE					
29827	9725	CER	UG	SW	NE	31	39N	37E	Y	488.00	1,952.00	AFA	HU	BRINKERHOFF, TOBY & KRISTEE					
30716	9730	CER	UG	NE	SW	31	39N	37E	Y	488.00	680.52	AFA	HU	BRINKERHOFF, TOBY & KRISTEE	Alfalfa	Pivot	125.00	500.00	
30714	9728	CER	UG	NE	SW	31	39N	37E	Y	488.00	372.85	AFA	HU	BRINKERHOFF, TOBY & KRISTEE					
29828	9616	CER	UG	NE	SW	31	39N	37E	Y	488.00	558.90	AFA	HU	BRINKERHOFF, TOBY & KRISTEE					
34882	9617	CER	UG	NW	SE	31	39N	37E	Y	488.00	1,613.00	AFA	HU	BRINKERHOFF, TOBY & KRISTEE	Grain	Pivot	133.00	532.00	
Supplemental Total										488.00	1,952.00	AFA							
Total Acre Feet Pumped =																19,691.41			
Total Acres =																5,091.70			