

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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CLOVER VALLEY (HYDROGRAPHIC BASIN 10-177)

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 Clover Valley, Hydrographic Basin 10-177, 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 **4,285 acres** with a total duty of 17,140 acre-feet within Clover Valley. An estimated **2,304 acres** were irrigated and 9,323 acre-feet were pumped during 2013.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	177, REGION 10
HYDROGRAPHIC BASIN NAME	CLOVER VALLEY
COUNTIES	ELKO
MAJOR COMMUNITIES	WELLS, WELLS
DESIGNATED BASIN	DESIGNATED
DENIALS BASED UPON WATER AVAILABILITY	3013 , IRD DEN, 8/17/1984 3102 , IRC DEN, 1/23/1985 3215 , IRR DEN, 7/25/1985
ESTIMATED IRRIGATION PUMPAGE 2013 (ACRE-FEET)	9,323*
STATE ENGINEER'S ORDERS	
NO. 850 –DESIGNATION OF BASIN	MARCH 11, 1985

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 17,140 ACRE-FEET
DATE: AUGUST 2013.

NOTE: Committed groundwater resource data are accurate for August 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 manners of use 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 for 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 Clover Valley Hydrographic Basin 10-177, for the year 2013.

DESCRIPTION OF THE STUDY AREA

Clover Valley Hydrographic Basin is located in northeast Nevada (Figure 1). The basin occupies approximately 456 square miles and is in Elko County. The bordering hydrographic basins are Marys River Area (4-042) to the north, Independence Valley (10-188) to the east, Goshute Valley (10-187) to the southeast, Butte Valley (10-178A) to the south, and Ruby Valley (10-176) and Starr Valley Area (4-043) to the west

Clover Valley is bounded by the Humboldt Range on the west, by the Wood Hills to the northeast, by the Spruce Mountain Ridge to the south and east, and by Valley Mountain to the southwest. Clover Valley trends north-south with basin elevations ranging from approximately 1,709 feet above mean sea level on the valley floor, where the basin shares a boundary with Independence Valley to the east, to over 10,000 feet above sea level in the surrounding mountains. Spruce Mountain at the south end of the valley has a peak altitude of 11,041 feet above sea level.

FIGURE 1. LOCATION MAP OF CLOVER VALLEY HYDROGRAPHIC BASIN 10-177

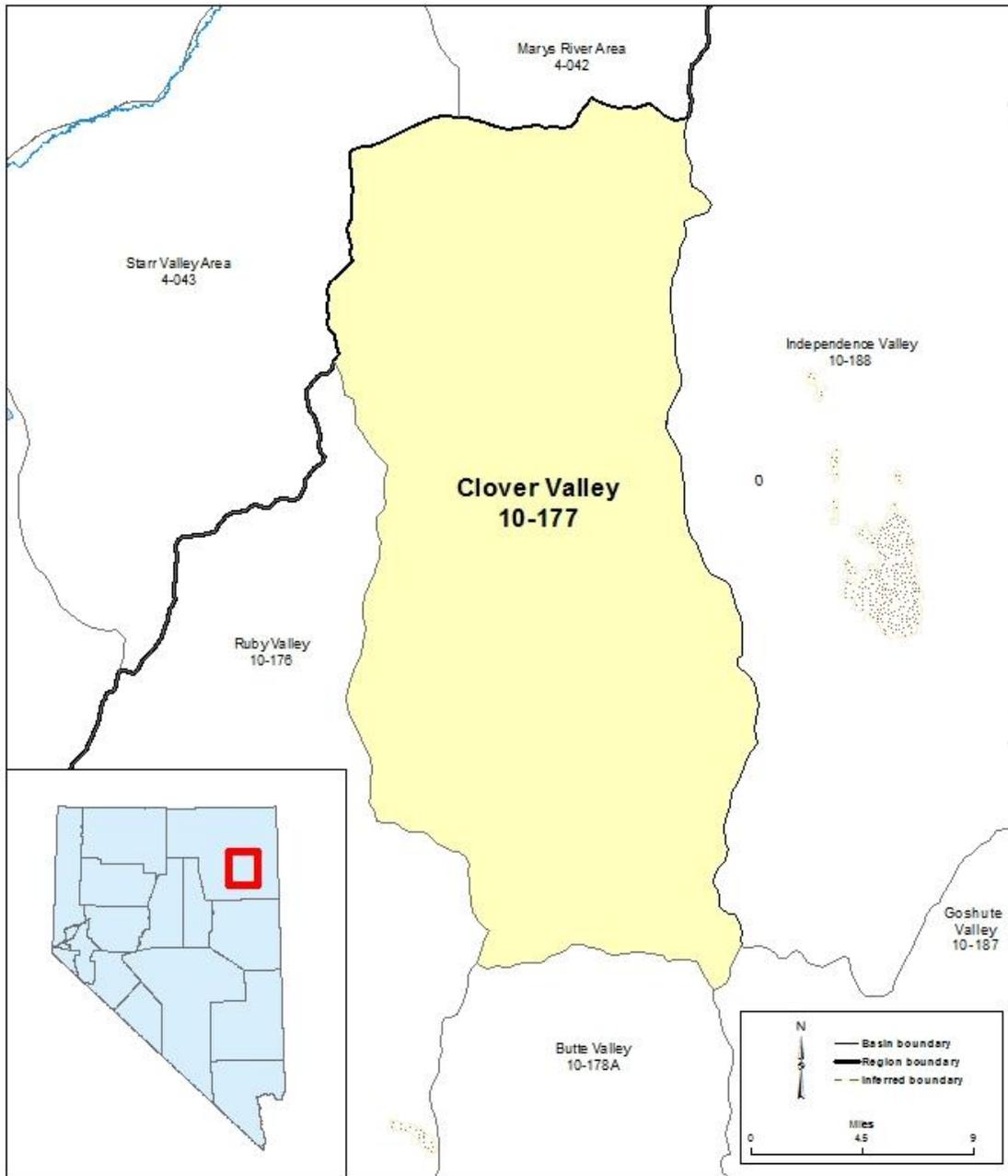
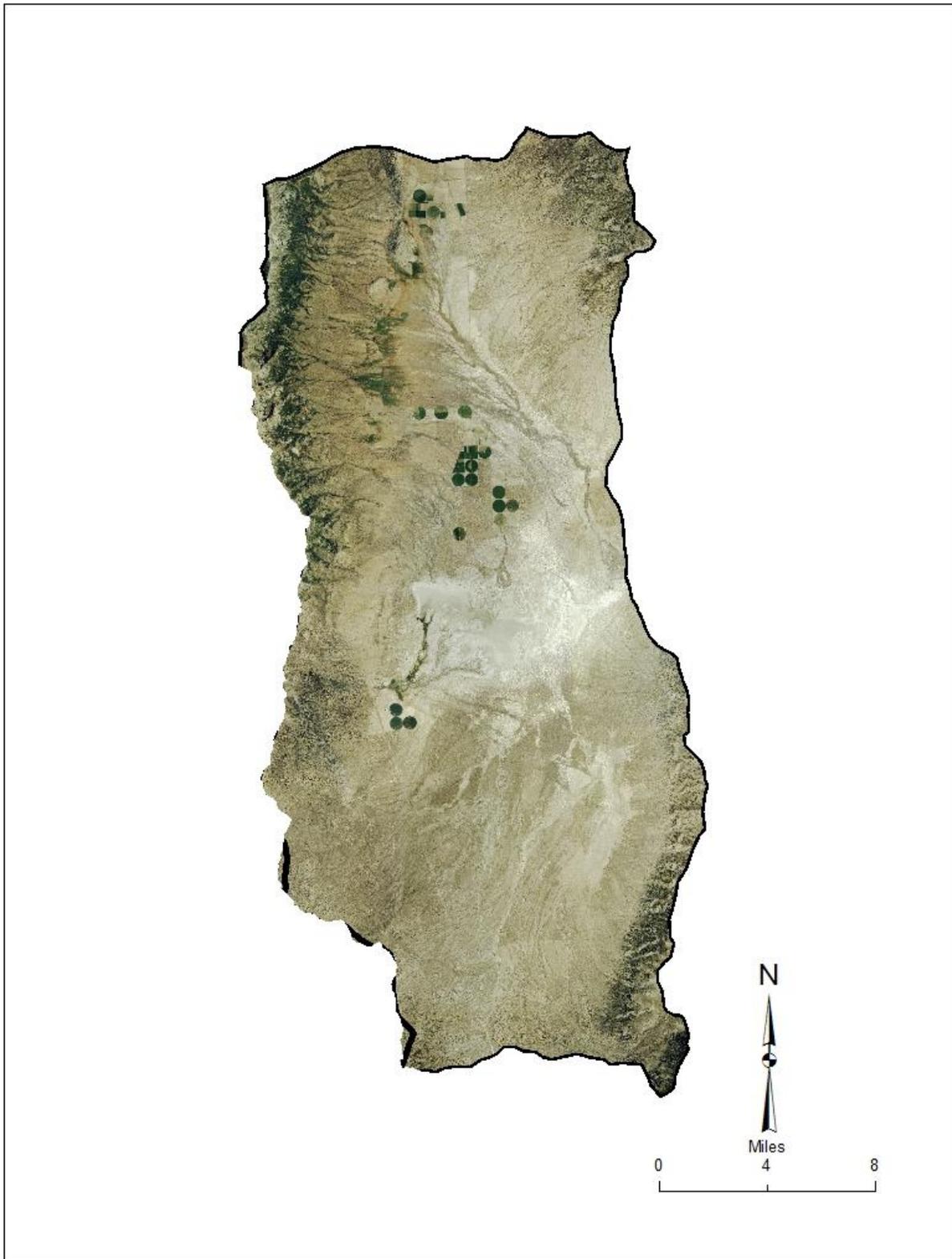


FIGURE 2. LOCATION MAP OF CLOVER VALLEY IRRIGATED ACREAGE



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

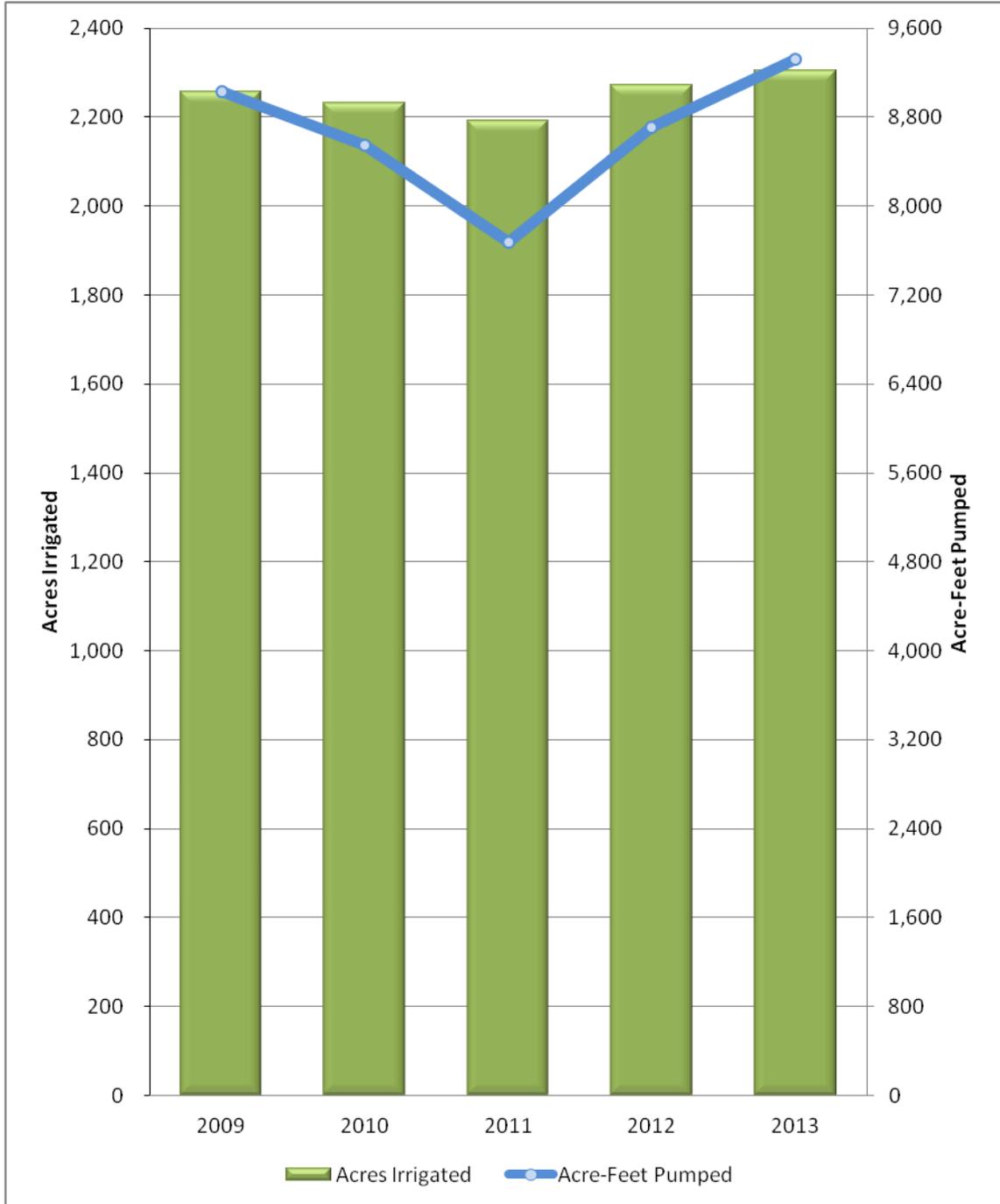
This report estimates the amount of groundwater pumped under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated use:

- 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
CLOVER VALLEY HISTORICAL CROP INVENTORY

CLOVER VALLEY HISTORICAL CROP INVENTORY

Year	2009	2010	2011	2012	2013
Acres Irrigated	2,258	2,231	2,193	2,271	2,304
Acre-Feet Pumped	9,032	8,546	7,678	8,709	9,323



APPENDIX B
2013 CLOVER 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 irrigated. If there is a supplemental group, the supplementally adjusted permitted acres is listed 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 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.

Crop Inventory and Groundwater Pumpage for Irrigation - Clover Valley, Basin 177, 2013																
App No	Status	QQ	Q	Sec	Twn	Rng	Sup	Supplemental Application Number	Permitted Acres	Permitted Duty Acre-Feet	Owner of Record	Crop Type	Irrigation Method	Irrigated Acres	Acreage Estimation Method	Acre-Feet Pumped
27900	CER	NE	NE	19	33N	62E			246.67	986.68	TOMMY, LLC	alfalfa	pivot	126		504.0
														126		504.0
66815	PER	NW	SW	2	34N	62E	Y	66815 69069 69070 78657 81946	320	1280	SIMS, MARTHA P	alfalfa	1/2 pivot	63		252.0
66816	PER	SW	SW	2	34N	62E	Y	66815 69069 69070 78657 81946	160	640	SIMS, MARTHA P	alfalfa	1/2 pivot	0		0.0
69069	PER	NE	NW	11	34N	62E	Y	66815 66816 69070 78657 81946	240	960	SIMS, MARTHA P	alfalfa	1/2 pivot	63		252.0
69070	PER	SE	NW	11	34N	62E	Y	66815 66816 69069 78657 81946	30	120	SIMS, MARTHA P	alfalfa	1/2 pivot	63		252.0
78657	PER	SE	SW	2	34N	62E	Y	66815 66816 69069 69070 81946	160	640	SIMS, MARTHA P	alfalfa	2 pivots	63		252.0
81946	PER	NW	SW	11	34N	62E	Y	66815 66816 69069 69070 78657	210	840	SIMS, MARTHA P	grain	pivot	126		504.0
								Supplemental Totals	800	3200				252		1512.0
72293	PER	NE	SW	4	34N	62E	Y		40.00	160.00	EGBERT, F SCOTT & LAUREL S	no crop	no irr equip	0		0.0
														0		0.0
34822	CER	SE	SE	5	34N	62E	Y	57405	160.00	44.23	BOYER, STEPHEN L & DORIAN V	no crop	wheel lines	0		0.0
57405	CER	NE	SE	5	34N	62E	Y	34822	160.00	640.00	BOYER, DORIAN V	no crop	wheel lines	0		0.0
								Supplemental Totals	160.00	640.00				0		0.0
35534	CER	LT02		4	34N	62E	Y	35535 35536 37885 42818 51365 51366 78770	113.10	295.99	DALTON REAL ESTATE LLC	alfalfa	pivot	42		168.0
35535	CER	LT03		3	34N	62E	Y	35534 35536 37885 42818 51365 51366 78770	311.23	587.3	DALTON LIVESTOCK	alfalfa	pivot	0		0.0
35536	CER	LT04		3	34N	62E	Y	35534 35535 37885 42818 51365 51366 78770	311.10	526.70	DALTON LIVESTOCK	alfalfa	pivot	42		168.0
37885	CER	LT02		4	34N	62E	Y	35534 35535 35536 42818 51365 51366 78770	310.92	478.5	DALTON LIVESTOCK	alfalfa	pivot	42		168.0
42818	CER	LT02		4	34N	62E	Y	35534 35535 35536 37885 51365 51366 78770	310.92	482.5	DALTON LIVESTOCK	alfalfa	pivot	42		168.0
51365	CER	SW	SW	34	35N	62E	Y	35534 35535 35536 37885 42818 51366 78770	310.68	423.14	DALTON LIVESTOCK	alfalfa	pivot	42		168.0
51366	CER	SW	SW	34	35N	62E	Y	35534 35535 35536 37885 42818 51365 78770	310.68	423.14	DALTON LIVESTOCK	alfalfa	pivot	42		168.0
78770	PER	LT01		4	34N	62E	Y	35534 35535 35536 37885 42818 51365	122.44	317.00	DALTON REAL ESTATE LLC	alfalfa	2 pivots	42		168.0
								Supplemental Totals	312.43	1249.72				294		1176.0
77332	PER	SE	NE	9	34N	62E			10	40	LARA, VICTOR & CAROLYN	no crop	no irr equip	0		0.0
														0		0.0
70097	PER	NE	NW	8	34N	62E			13	52	DINSMORE LAND TRUST	no crop	no irr equip	0		0.0
														0		0.0
74678	PER	NW	NE	16	34N	62E			81.31	325.24	F. SCOTT EGBERT AND LAUREL S.	grain	1/2 pivot	63		252.0
														63		252.0
50066	CER	NW	NE	16	34N	62E			80.35	321.40	F. SCOTT EGBERT AND LAUREL S.	grain	1/2 pivot	63		252.0
														63		252.0
78662	PER	SE	NE	17	34N	62E			80	320	TIERNEY, MICHAEL E & DEANNA N	no crop	no irr equip	0		0.0
														0		0.0
38483	PER	SW	NE	5	34N	63E			13.25	53	F. SCOTT EGBERT AND LAUREL S.	grass/	impacts	2		8.0
														2		8.0
78929	PER	NW	NW	21	35N	62E			270.00	1080	BROUGH PARTNERSHIP	no crop	not developed	0		0.0
														0		0.0
32169	CER	SE	SE	21	35N	62E	Y	32170	554.49	1650.72	BOYER, BRUCE E & HEATHER	grass	pivot	126		504.0
32170	CER	SW	SW	21	35N	62E	Y	32169	554.49	2217.96	BOYER, BRUCE E & HEATHER	alfalfa	pivot	252		1008.0
								Supplemental Totals	554.49	2217.96				378		1512.0
27002	CER	SE	SE	28	35N	62E	Y	27003 27004 69876 70848	0.50	2.02	LAWRENCE B APOSHIAN TRUST	domestic	domestic use only	0.5		2.0
27003	CER	SE	SW	27	35N	62E	Y	27002 27004 69876 70848	227.3	909.2	LAWRENCE B APOSHIAN TRUST	grain		0		0.0
27004	CER	SW	SE	27	35N	62E	Y	27002 27003 69876 70848	227.3	909.2	LAWRENCE B APOSHIAN TRUST	grass		126		504.0

App No	Status	QQ	Q	Sec	Twn	Rng	Sup	Supplemental Application Number	Permitted Acres	Permitted Duty Acre-Feet	Owner of Record	Crop Type	Irrigation Method	Irrigated Acres	Acreage Estimation Method	Acre-Feet Pumped
69876	PER	SW	SE	27	35N	62E	Y	27002 27003 27004 70848	62.8	251.2	LAWRENCE B APOSHIAN TRUST	no crop		0		0.0
70848	PER	SE	SW	27	35N	62E	Y	27002 27003 27004 69876	62.8	251.2	LAWRENCE B APOSHIAN TRUST	no crop		0		0.0
								Supplemental Totals	290.1	1160.4				126.5		506.0
64510	CER	NW	SE	33	35N	62E			0.98	3.92	DINSMORE LAND TRUST	yard & garden	domestic use	0.78		3.1
														0.78		3.1
30345	CER	SW	SW	34	35N	62E	Y	30350 48485 48486	121.91	487.63	DALTON REAL ESTATE LLC	grain	1 pivot sw4 sec 34	126		504.0
30350	CER	SE	SE	33	35N	62E	Y	30345 48485 48486	121.91	487.63	DALTON REAL ESTATE LLC	alfalfa	wheel lines	67		268.0
48485	CER	NE	SE	33	35N	62E	Y	30345 30350 48486	290.19	340.33	DALTON REAL ESTATE LLC	alfalfa		51		204.0
48486	CER	SW	SW	34	35N	62E	Y	30345 30350 48485	290.19	355.46	DALTON REAL ESTATE LLC	grain		36		144.0
								Supplemental Totals	302.9	1211.6				286		1120.0
39373	CER	SW	NW	34	35N	62E	Y	39374 39375	284.00	701.02	WHITED, JIMMIE C & ANNA WRIGHT	alfalfa	wheel lines	80		320.0
39374	CER	SE	SW	34	35N	62E	Y	39373 39375	284.00	708.51	WHITED, JIMMIE C & ANNA WRIGHT	alfalfa	wheel lines	80		320.0
39375	CER	SW	NE	34	35N	62E	Y	39373 39374	284.00	671.03	WHITED, JIMMIE C & ANNA WRIGHT	alfalfa & grain	pivot	126		504.0
								Supplemental Totals	284.0	1136.0				276		984.0
50265	CER	SW	NE	35	35N	62E			91.73	366.92	TEEL, OLAN C	no crop	wheel line in place	0		0.0
														0		0.0
77524	PER	NW	NW	3	36N	62E			23.17	92.68	WITTIG, MALCOLM F & GERLINDE	no crop	no irr equip	0		0.0
														0		0.0
78454	PER	NW	SE	36	36N	61E	Y	78455 78456	125	500	EGBERT, F SCOTT & LAUREL	pasture	pump not yet installed	0		0.0
78455	PER	NW	SE	36	36N	61E	Y	78454 78456	10	40	EGBERT, F SCOTT & LAUREL	pasture	irrigated by sfce undr	0		0.0
78456	PER	NW	SE	36	36N	61E	Y	78454 78455	25	100	EGBERT, F SCOTT & LAUREL	pasture	suppl v02192	0		0.0
								Supplemental Totals	160	640				0		0.0
24362	CER	SW	SE	8	36N	62E	Y	24363	228.00	725.22	SAFFORD, STEVEN P & MARGARETHA	alfalfa & hay	wheel lines	130		248.0
24363	CER	NW	SE	8	36N	62E	Y	24362	228	912	SAFFORD, STEVEN P & MARGARETHA	alfalfa & hay	wheel lines & pivot	62		272.0
								Supplemental Totals	228	912				192		520.0
29684	CER	NW	NW	9	36N	62E			172.75	691	SAFFORD, STEVEN P & MARGARETHA	no crop	no irr equip	0		0.0
														0		0.0
27719	CER	NW	NE	16	36N	62E	Y	27723	90.42	361.68	JOHNS, HESTON	alfalfa	wheel lines	0		0.0
27723	CER	SE	NE	16	36N	62E	Y	27719	90.42	57.91	JOHNS, HESTON	alfalfa	wheel lines	92		361.7
								Supplemental Totals	90.42	361.68				92		361.7
28107	CER	NE	NE	17	36N	62E			152.19	608.76	MORTENSEN PARTNERS	alfalfa	pivot & 1 wheel line	153		612.0
														153		612.0
								Totals:	4284.99	17830.96		Totals:		2304.28		9322.8