

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

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 Clover Valley, Hydrographic Basin 10-177, 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 **4484 acres** with a total duty of 18,423 acre-feet within Clover Valley. An estimated **2,271 acres** were irrigated and 8,709 acre-feet were pumped during 2012.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	177, REGION 10
HYDROGRAPHIC BASIN NAME	CLOVER VALLEY
COUNTIES	ELKO
MAJOR COMMUNITIES	WELLS
DESIGNATED BASIN	YES
DENIALS BASED UPON WATER AVAILABILITY	N/A
ESTIMATED IRRIGATION PUMPAGE 2012 (ACRE-FEET)	8,709*
STATE ENGINEER'S ORDERS	
<u>NO. 850 –DESIGNATION OF BASIN</u>	MARCH 11, 1985

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 18,423 ACRE-FEET
DATE: JUNE 2013

NOTE: Committed groundwater resource data are accurate for June 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 2012.

DESCRIPTION OF THE STUDY AREA

Clover Valley is located in northeast Nevada and lies wholly within the state. The basin occupies approximately 456 square miles and is in Elko County. Clover Valley is a north-south trending valley in the south-central part of Elko County. Clover Valley lies adjacent to and northeast of Ruby Valley, and Independence Valley adjoins Clover Valley on the East. The East Humboldt Range is the principal range that borders Clover Valley on the west. The crest altitude of the range averages somewhat more than 10,000 feet above sea level for a distance of 10 miles. Spruce Mountain at the south end of the valley has a peak altitude of 11,041 feet above sea level. The mountains which border other parts of the valley have substantially lower altitudes. A narrow alluvial divide forms the north boundary of the valley. The bordering hydrographic basins are as follows: The preferred use portion of the Marys River Area (4-042) to the north, Starr Valley Area (4-043) and Ruby Valley (10-176) to the west, Butte Valley (10-178A) and Goshute Valley (10-187) to the south and Independence Valley (10-188) to the east. (See Figure 1) The boundary of the Clover Valley Hydrographic Basin is as described by Designation Order 850 issued by the Nevada State Engineer dated March 11, 1985.

FIGURE 1. LOCATION MAP OF CLOVER VALLEY HYDROGRAPHIC BASIN 2-032

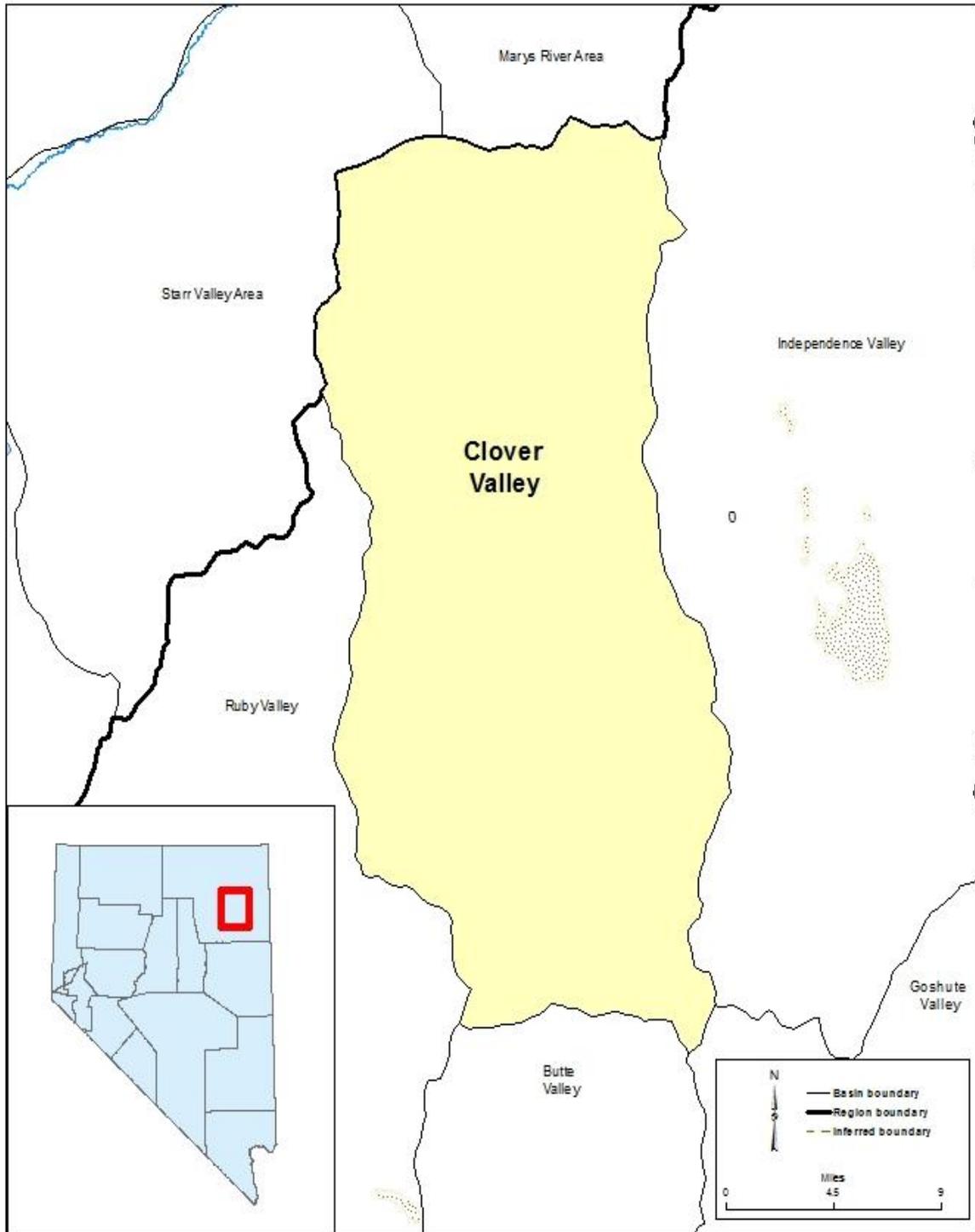
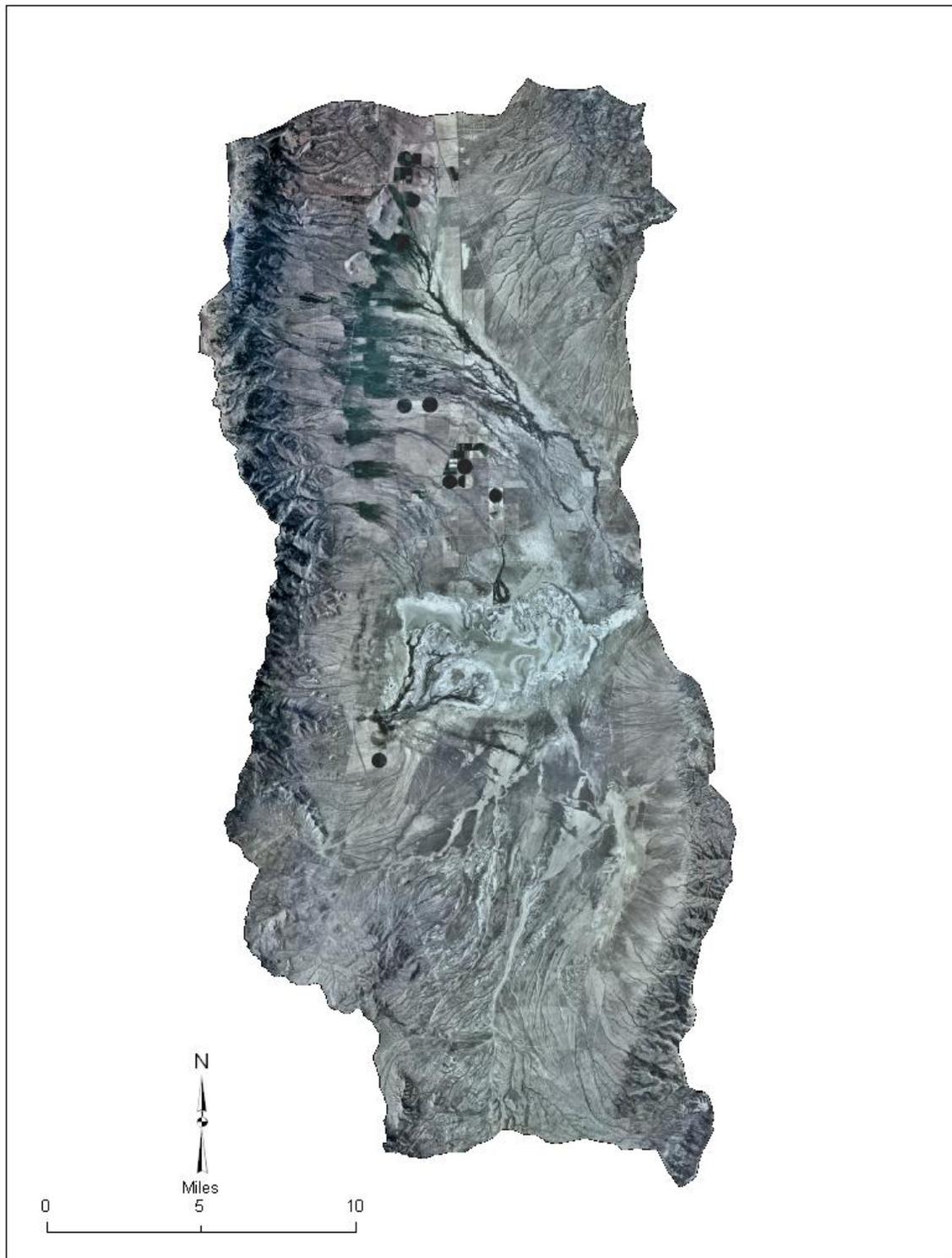


FIGURE 2. LOCATION MAP OF CLOVER VALLEY IRRIGATED ACREAGE



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

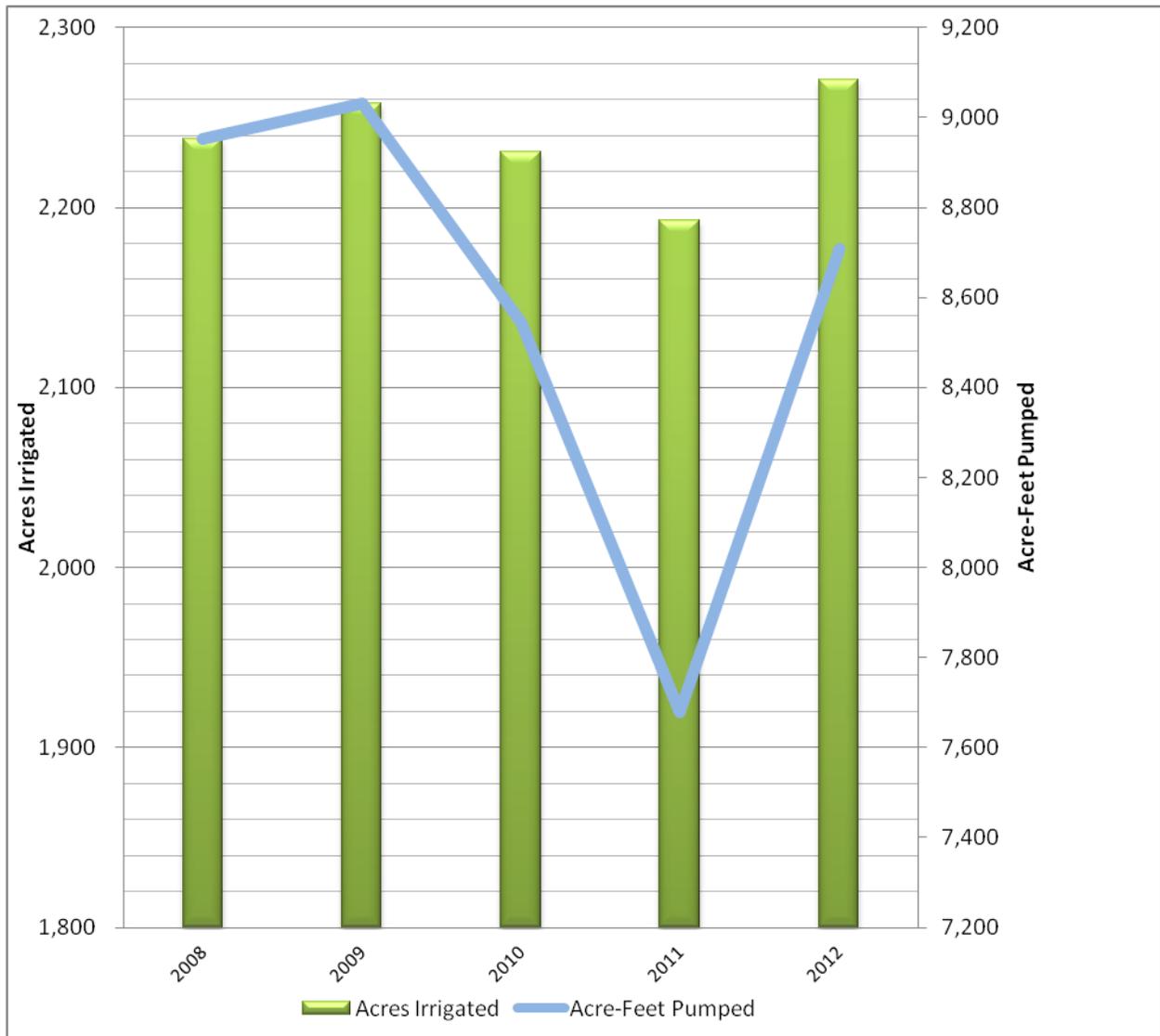
This report estimates the amount of groundwater pumped under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated use:

- 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
CLOVER VALLEY HISTORICAL CROP INVENTORY

CLOVER VALLEY HISTORICAL CROP INVENTORY

Year	2008	2009	2010	2011	2012
Acres Irrigated	2,238	2,258	2,231	2,193	2,271
Acre-Feet Pumped	8,952	9,032	8,546	7,678	8,709



APPENDIX B
2012 CLOVER VALLEY CROP INVENTORY

Explanation of Abbreviations and Column Headings

APP NO.	The file number of the Permit/Vest Right to Appropriate/Change Water.
STATUS	Indicates if the application is a Permit (PER) or if it has been Certificated (CERT). If a permit is certificated, the specific certificate number will be listed in the column.
MOU	<p>The manner of use of the appropriated water.</p> <p>COM - Commercial STK - Stock</p> <p>IRR - Irrigation MM - Mining and Milling</p> <p>QM - Quasi-Municipal IND - Industrial</p> <p>REC - Recreational OTH - Other</p> <p>MUN - Municipal</p>
OWNER OF RECORD	The owner of the water right as confirmed by the State Engineer’s Office based on recorded documents submitted. A water right can have more than one owner of record.
TWN	Based on a rectangular survey system with Mount Diablo, CA serving as the initial point for the meridian and base lines. Township lines run east and west, parallel to the base line, six miles apart and form township tiers. The township tiers are designated by consecutive numbers north or south of the baseline. Those lines north of the baseline are indicated by an “N”, while those to the south are designated by an “S”.
RNG	Based on a rectangular survey system with Mount Diablo, CA serving as the initial point for the meridian and base lines. Range lines run north and south to the meridian and divide land into six mile-wide strips. Lines falling east of the meridian are indicated by “E”, while those to the west are designated by “W”.
SEC	Township squares are subdivided into sections and subsections called “halves” and “quarters” that can be further divided. Each township contains 36 sections. Each section is one square mile, or 640 acres, and is used to describe the location of the place of use.
Q	The 160-acre subdivision of a section within which the place of use is located.
QQ	The forty-acre subdivision (quarter quarter) portion of a quarter section within which the place of use is located.
PER ACRES	The number of acres as designated by the permit, certificate or vested right allowed to be irrigated.

- DUTY (AF) The number of acre-feet of water that the permit holder is approved to pump. One acre-foot equals 325,851 gallons.
- SUPP ADJ. Supplementally Adjusted is whether the acre-feet of water are additive to another water right (permitted or decreed) for a final total amount, or being supplemental in nature through the allowance of the water user to divert a specific amount of water from multiple points of diversion (for example, having two wells on a parcel being limited to 50 acre-feet of water whether pumped from one or both wells).
- DUTY USED The amount of water used during the water year as determined by review of records submitted to the State Engineer or field inventories/meter readings.
- UNITS AFA Stands for acre-feet annually, and AFS stands for acre-feet seasonally. AFS limits water usage to certain months out of the year.

Crop Inventory and Groundwater Pumpage for Irrigation - Clover Valley, Basin 177, 2012																
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	986.679999	TOMMY, LLC	starter grain	pivot	126		504.0
														126		504
66815	PER	NW	SW	2	34N	62E	Y	66816 69069 69070 78657	320	1280	SIMS, MARTHA P.	alfalfa	1/2 pivot	63		252.0
66816	PER	SW	SW	2	34N	62E	Y	66815 69069 69070 78657	320	194.05	SIMS, MARTHA P.	alfalfa	1/2 pivot	0		0.0
69069	PER	NE	NW	11	34N	62E	Y	66815 66816 69070 78657	80	320	SIMS, MARTHA P.	alfalfa	1/2 pivot	63		252.0
69070	PER	SE	NW	11	34N	62E	Y	66815 66816 69069 78657	80	320	SIMS, MARTHA P.	alfalfa	1/2 pivot	63		252.0
78657	PER	SE	SW	2	34N	62E	Y	66815 66816 69069,69070	320	1085.95	SIMS, MARTHA P.	alfalfa	2 pivots	63		252.0
81661T	PER	NW	SW	11	34N	62E	Y	66815 66816 69069,69070	160	640	SIMS, MARTHA P.	no crop	pivot under construct	0		0.0
81662T	PER	NW	NW	11	34N	62E	Y	66815 66816 69069,69070	160	640	SIMS, MARTHA P.	no crop	pivot under construct	0		0.0
								Supplemental Totals	800	3200				252		1008.0
72293	PER	NE	SW	4	34N	62E	Y	72294	40	160	F SCOTT AND LAUREL S. EGBERT	no crop	no irrig equip.	0		0.0
								Supplemental Totals	40	160				0		0
34822	CER	SE	SE	5	34N	62E	Y	57405	160	44.23	BOYER, STEPHEN L. & DORIAN V.	no crop	wheel lines	0		0.0
57405	CER	NE	SE	5	34N	62E	Y	34822	160	640	BOYER, DORIAN V.	no crop	wheel lines	0		0.0
								Supplemental Totals	160	640				0		0.0
35534	CER		LT02	4	34N	62E	Y	35535 35536 37885 42818 51365 51366	312.43	295.99	DALTON LIVESTOCK	alfalfa	pivot	63		252.0
35535	CER		LT03	3	34N	62E	Y	35534 35536 37885 42818 51365 51366	312.43	587.3	DALTON LIVESTOCK	alfalfa	pivot	63		252.0
35536	CER		LT04	3	34N	62E	Y	35534 35535 37885 42818 51365 51366	312.43	526.7	DALTON LIVESTOCK	alfalfa	pivot	0		0.0
37885	CER		LT02	4	34N	62E	Y	35534 35535 35536 42818 51365 51366	312.43	478.5	DALTON LIVESTOCK	alfalfa	pivot	0		0.0
42818	CER		LT02	4	34N	62E	Y	35535 35536 37885 51365 51366 53334	312.43	478.5	DALTON LIVESTOCK	alfalfa	pivot	0		0.0
51365	CER	SW	SW	34	35N	62E	Y	35534 35535 35536 37885 42818 51366	312.43	423.14	DALTON LIVESTOCK	alfalfa	pivot	63		252.0
51366	CER	SW	SW	34	35N	62E	Y	35534 35535 35536 37885 42818 51365	312.43	423.14	DALTON LIVESTOCK	alfalfa	pivot	63		252.0
78770	PER		LT1	4	34N	62E	Y	35534 35535 35536 37885 42818 51365	130.1	520.41	DALTON LIVESTOCK	alfalfa	2 pivots	0		0.0
								Supplemental Totals	312.43	1249.72				252		1008.0
77332	PER	SE	NE	9	34N	62E	N		10	40	VICTOR AND CAROLYN LARA	no crop	no irrig equip	0		0.0
														0		0.0
70097	PER	NE	NW	8	34N	62E			13	52	DINSMORE LAND TRUST	no crop	no irrig equip	0		0.0
														0		0.0
74678	PER	NW	NE	16	34N	62E			81.31	325.24	HOFSCHULTE, DAPHNE	grain	1/2 pivot	63		252.0
														63		252.0
50066	CER	NW	NE	16	34N	62E			80.3499999	321.4	HOFSCHULTE, DWAYNE & DAPHNE	grain	1/2 pivot	63		252.0
														63		252.0
78662	PER	SE	NE	17	34N	62E	N		80	320	MICHAEL E TIERNEY AND DEANNA	no crop	no irrigation equip.	0		0.0
														0		0
38483	PER	SW	NE	5	34N	63E			13.25	53	PATANE', JAMES R. & ANGELA L.	grass/pasture	impacts	2		8.0
														2		8.0
78929	PER	NW	NW	21	35N	62E			270	1080	BROUGH PARTNERSHIP	no crop	not developed	0		0.0
														0.0		0.0
32169	CER	SE	SE	21	35N	62E	Y	32170	554.49	1650.72	BRUCE E BOYER AND HEATHER BOYER	grass hay	pivot	126		504.0
32170	CER	SW	SW	21	35N	62E	Y	32169	554.49	1520.22	BRUCE E BOYER AND HEATHER BOYER	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	0.5	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	290.1	909.2	LAWRENCE B. APOSHIAN TRUST	grain		15		60.0

