STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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LITTLE HUMBOLDT VALLEY (HYDROGRAPHIC BASIN 4-067)

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 Little Humboldt Valley, Hydrographic Basin 4-067, 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 **2,558 acres** with a total duty of 10,123 acre-feet within Little Humboldt Valley. An estimated **2,294 acres** were irrigated and 9,178 acre-feet were pumped during 2013.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	067, REGION 4
HYDROGRAPHIC BASIN NAME	LITTLE HUMBOLDT VALLEY
COUNTIES	HUMBOLDT & ELKO
MAJOR COMMUNITIES	N/A
DESIGNATED BASIN	NO
DENIALS BASED UPON WATER AVAILABILITY	N/A
ESTIMATED IRRIGATION PUMPAGE 2013 (ACRE-FEET)	9,178*
STATE ENGINEER'S ORDERS	NONE

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 10,123 ACRE-FEET

DATE: FEBRUARY 2014

NOTE: Committed groundwater resource data are accurate for February 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 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 Little Humboldt Valley Hydrographic Basin 4-067, for the year 2013.

DESCRIPTION OF THE STUDY AREA

The Little Humboldt Valley Hydrographic Basin is located in north northeast Nevada (Figure 1). Little Humboldt Valley occupies approximately 975 square miles in Humboldt and Elko Counties. The adjacent hydrographic basins are Paradise Valley (4-069) and Hardscrabble Area (4-068) to the west, Quinn River Valley (2-033B) and Little Owyhee River Area (3-034) to the north, South Fork Owyhee River Area (3-035) and Willow Creek Area (4-063) to the east, and Clovers Area (4-064), Kelly Creek Area (4-066) and Winnemucca Segment (4-070) to the south.

Little Humboldt Valley Hydrographic Basin includes the North Fork and the South Fork of the Little Humboldt River, Chimney Dam Reservoir, and the area known as Eden Valley. This basin is bounded to the northwest by the Calico Mountains, to the southeast by the Snow Storm Mountains, to the south by the Dry Hills of the Osgood Mountains, and to the southwest by the Hot Springs Range. On the north and east, the basin is bounded by the administrative boundaries with adjacent Little Owyhee River Area and South Fork Owyhee River Area hydrographic basins. The Little Humboldt Valley Hydrographic Basin is approximately 27 miles wide by 30 miles long with basin elevations ranging from approximately 4,600 feet above mean sea level on the valley floor to approximately 8,200 feet above mean sea level in the surrounding mountains. Irrigation occurs primarily in the southwest part of the basin (Figure 2).

FIGURE 1. LOCATION MAP OF LITTLE HUMBOLDT VALLEY, BASIN 4-067

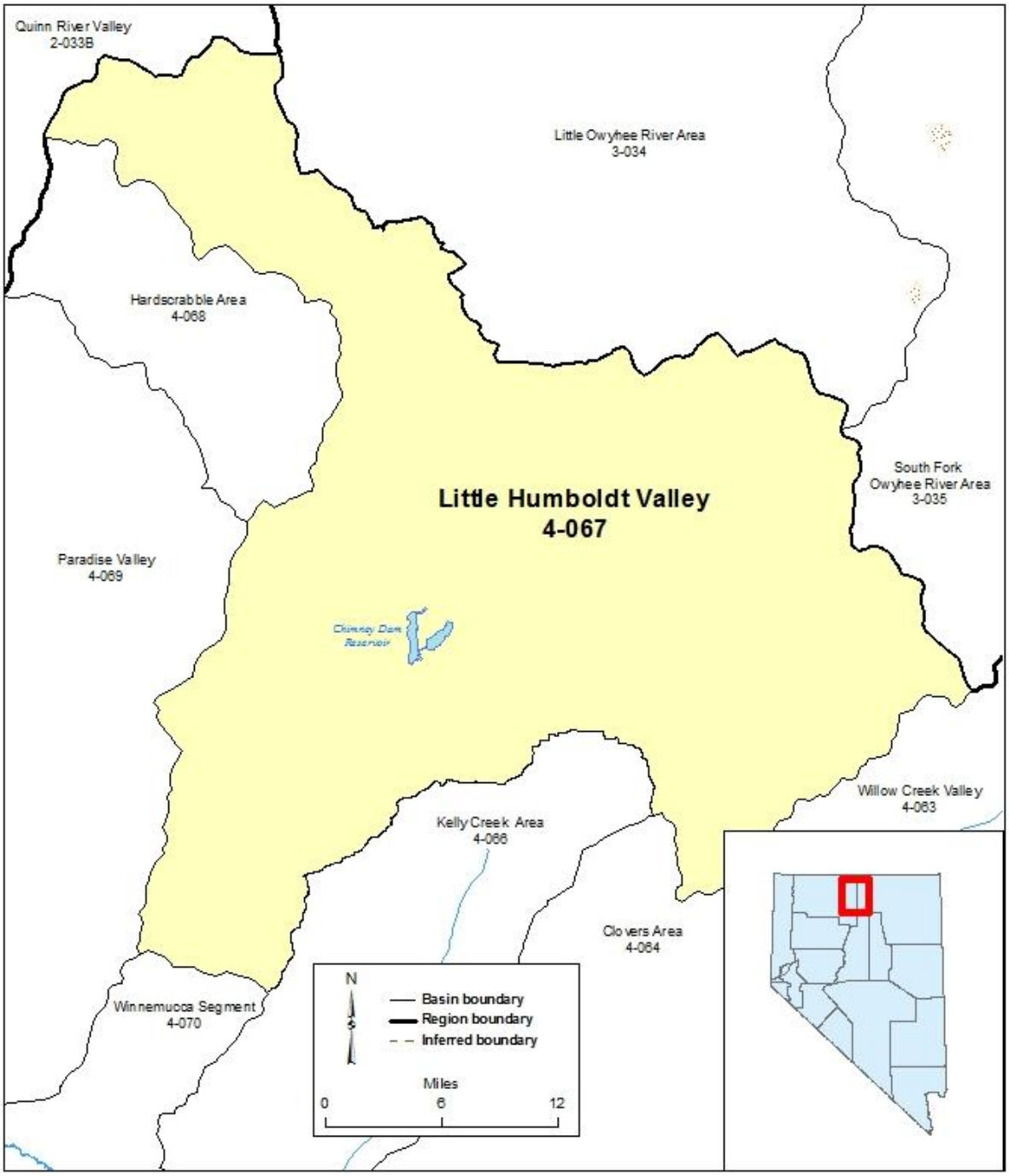
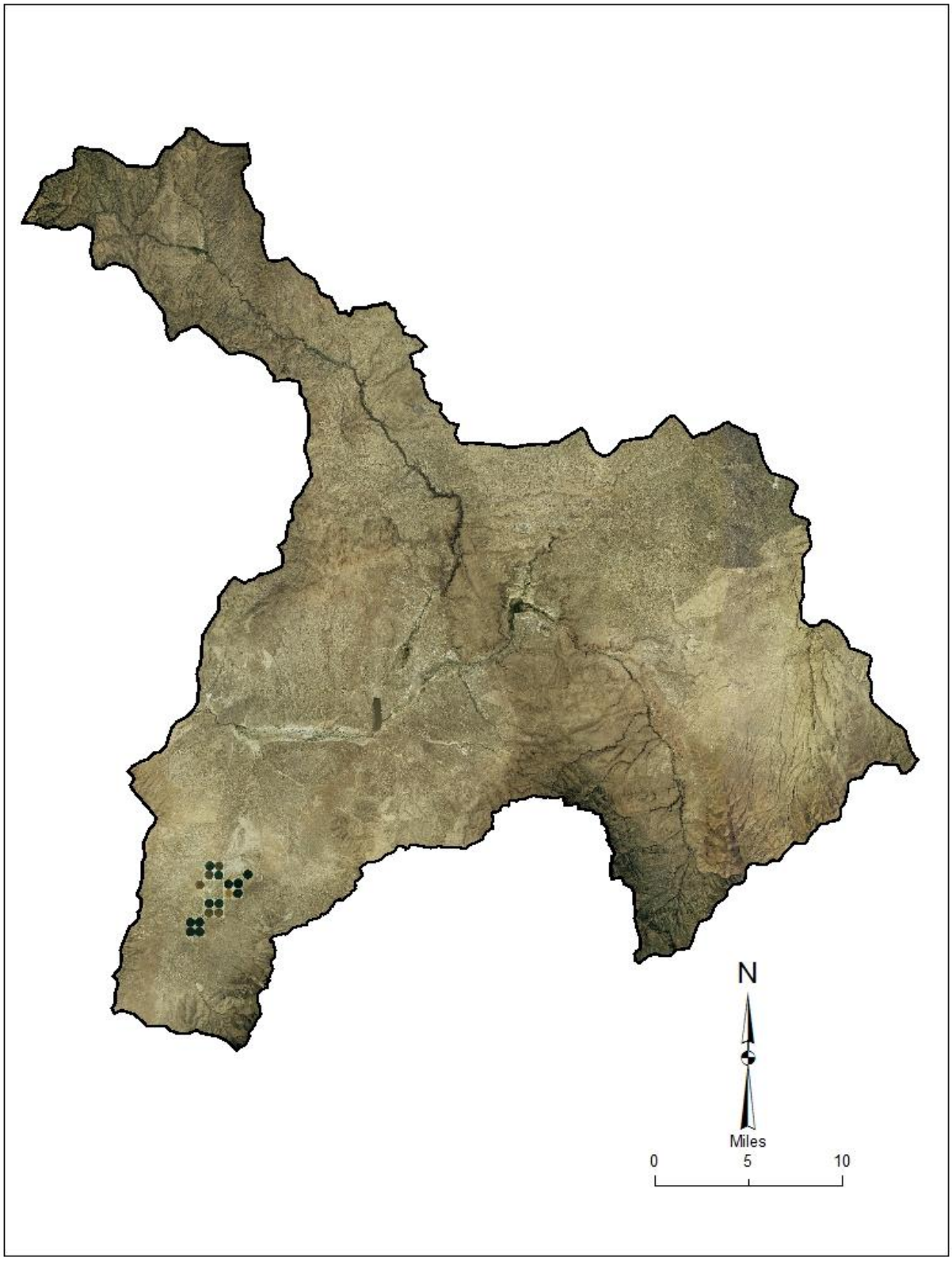


FIGURE 2. MAP OF LITTLE HUMBOLDT VALLEY IRRIGATED ACREAGE



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:

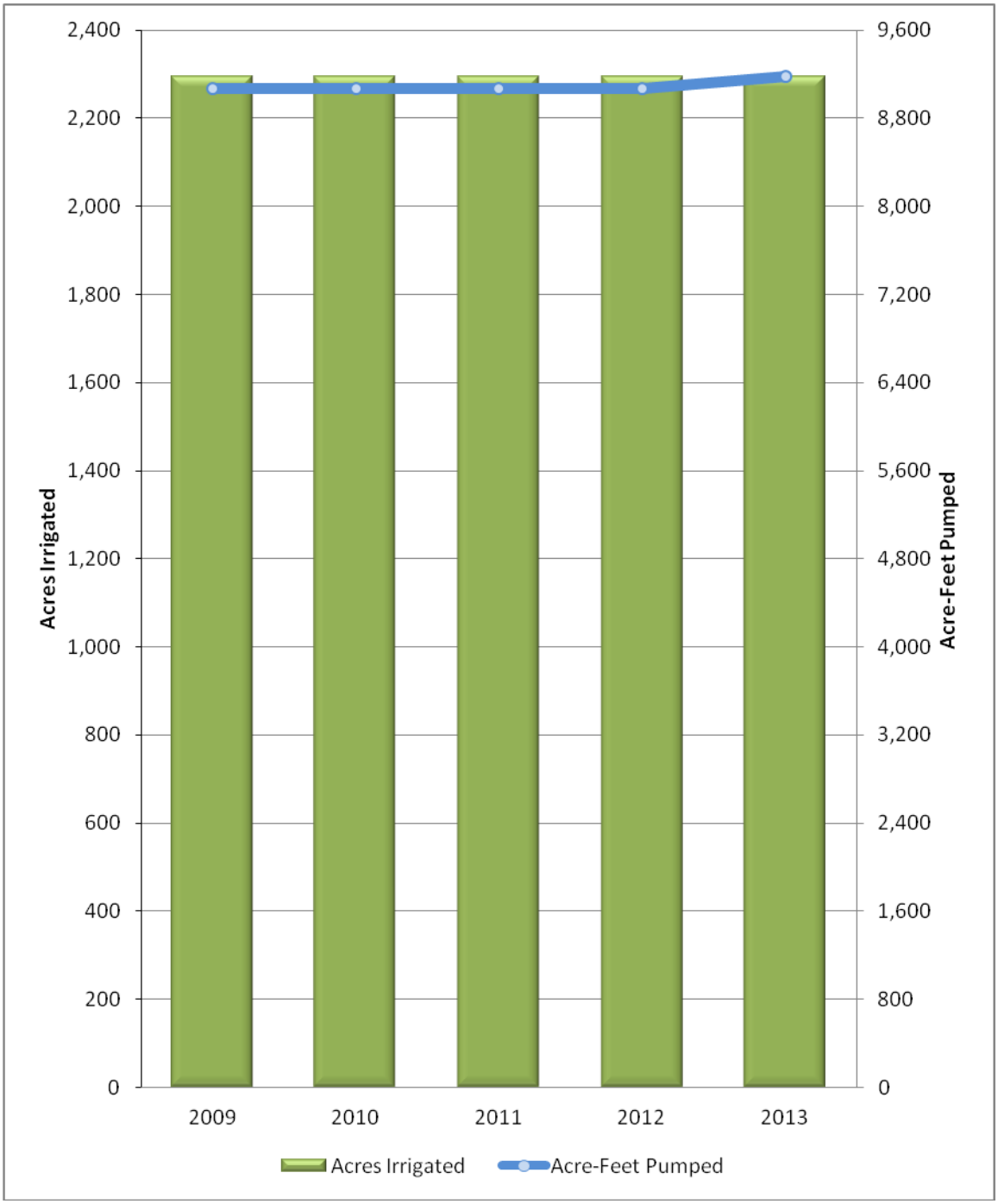
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

APPENDIX A

LITTLE HUMBOLDT VALLEY HISTORICAL CROP INVENTORY

LITTLE HUMBOLDT VALLEY HISTORICAL CROP INVENTORY

Year	2008	2009	2010	2011	2012	2013
Acres Irrigated	2,294	2,294	2,294	2,294	2,294	2,294
Acre-Feet Pumped	9,070	9,070	9,070	9,070	9,070	9,177



Note: Historical pumpage data modified from previously published data.

APPENDIX B

2013 LITTLE HUMBOLDT 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 (CER), or 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.
Permitted Acres	The number of acres defined by the permit or certificate that are eligible to be irrigated.
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 may be listed at the end of the 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 and lists the common name description of the plants under cultivation (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.
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 - Little Humboldt Valley - Basin 67, 2013

App No	Status	QQ	Q	Sec	Twn	Rng	Permitted Acres	Permitted Duty Acre-Feet	Owner of Record	Crop Type	Irrigation Method	Irrigated Acres	Acre-Feet Pumped
30472	CER	SW	SW	15	39N	41E	263.2	1052.8	Crawford Family Living Trust	Grain	Pivots	263.2	1052.8
30473	CER	SW	SE	15	39N	41E	263.2	1052.8	Crawford Family Living Trust			0	0
30474	CER	SW	NW	15	39N	41E	131.6	526.4	Crawford Family Living Trust	Alfalfa	Pivot	131.6	526.4
30475	CER	SW	NE	15	39N	41E	131.6	526.4	Crawford Family Living Trust	Alfalfa	Pivot	131.6	526.4
30476	CER	SW	SW	21	39N	41E	122	488	Crawford Family Living Trust	Alfalfa	Pivot	122	488
30477	CER	SW	SE	21	39N	41E	122	488	Crawford Family Living Trust	Alfalfa	Pivot	122	488
30478	CER	SW	NE	21	39N	41E	122	488	Crawford Family Living Trust	Alfalfa	Pivot	122	488
30479	CER	SW	NW	21	39N	41E	122	488	Crawford Family Living Trust	Alfalfa	Pivot	122	488
30480	CER	SW	SW	3	39N	41E	122	488	Crawford Family Living Trust	Grain	Pivot	122	488
30481	CER	SW	SE	3	39N	41E	122	488	Crawford Family Living Trust	Alfalfa	Pivot	122	488
30482	CER	SW	NW	3	39N	41E	122	488	Crawford Family Living Trust	Alfalfa	Pivot	122	488
35940	CER	SW	NE	3	39N	41E	134	482.4	Crawford Family Living Trust	Grain	Pivot	134	536
30486	CER	SW	SW	1	39N	41E	122	488	Crawford Family Living Trust	Alfalfa	Pivot	122	488
30488	CER	SW	SW	11	39N	41E	134	536	Crawford Family Living Trust	Grain	Pivot	134	536
30489	CER	SW	SE	11	39N	41E	134	536	Crawford Family Living Trust	Alfalfa	Pivot	134	536
30491	CER	SW	NE	11	39N	41E	134	536	Crawford Family Living Trust	Alfalfa	Pivot	134	536
35939	CER	SW	NW	11	39N	41E	134	482.4	Crawford Family Living Trust	Alfalfa	Pivot	134	536
30485	CER	SW	NE	9	39N	41E	122	488	Crawford Family Living Trust	Grain	Pivot	122	488
					Total:		2557.6	10123.2			Total:	2294.4	9177.6