

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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KELLY CREEK AREA (HYDROGRAPHIC BASIN 4-066)

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 Kelly Creek Area, Hydrographic Basin 4-066, 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 **2,216 acres** with a total duty of 7,583 acre-feet within Kelly Creek Area. An estimated **1,508 acres** were irrigated and 6,032 acre-feet were pumped during 2013.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	066, REGION 4
HYDROGRAPHIC BASIN NAME	KELLY CREEK AREA
COUNTIES	HUMBOLDT AND ELKO
MAJOR COMMUNITIES	N/A
DESIGNATED BASIN	ALL
DENIALS BASED UPON WATER AVAILABILITY	N/A
ESTIMATED IRRIGATION PUMPAGE 2013 (ACRE-FEET)	6,032*
STATE ENGINEER'S ORDERS	
NO. 536 – DESIGNATION OF BASIN	MAY 9, 1975
NO. 1087 - WELL SPACING	DECEMBER 30, 1993

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 7,583 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 Kelly Creek Area Hydrographic Basin 4-066, for the year 2013.

DESCRIPTION OF THE STUDY AREA

The Kelly Creek Area Hydrographic Basin is located in north central Nevada (Figure 1). Kelly Creek Area occupies approximately 300 square miles in Humboldt and Elko Counties. The adjacent hydrographic basins are Winnemucca Segment (4-070) to the southwest, Little Humboldt Valley (4-067) to the north and west, Clovers Area (4-064) to the south and east, and Pumpnickel Valley (4-065) to the south.

Kelly Creek Area is bounded on the north and east by the Snowstorm Mountain Range, to the south by the Humboldt River and the Red House Flat and to the west by the Dry Hills and the Osgood Mountains. The valley is approximately 13 miles wide by 32 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 KELLY CREEK AREA, BASIN 4-066

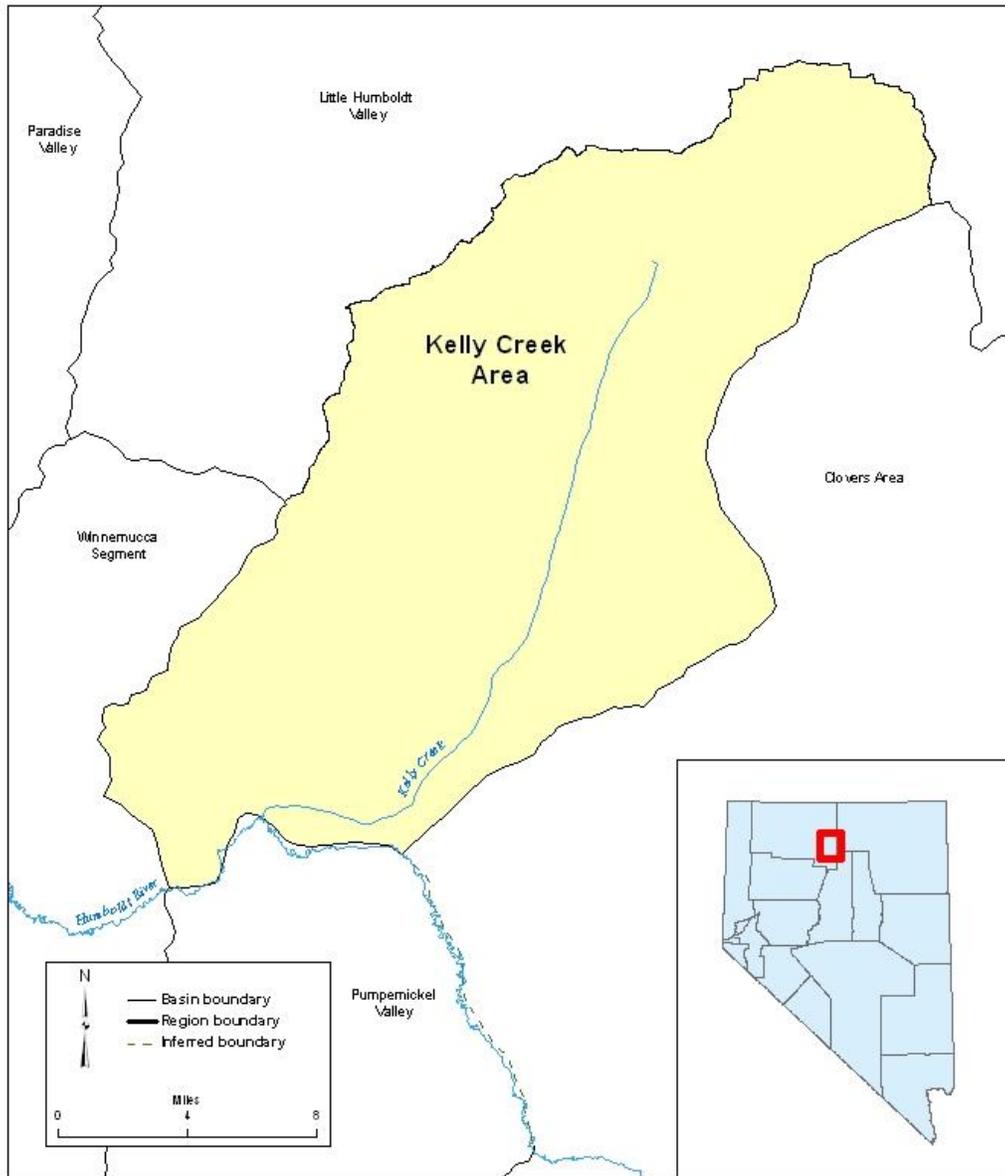


FIGURE 2. MAP OF KELLY CREEK AREA IRRIGATED ACREAGE



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

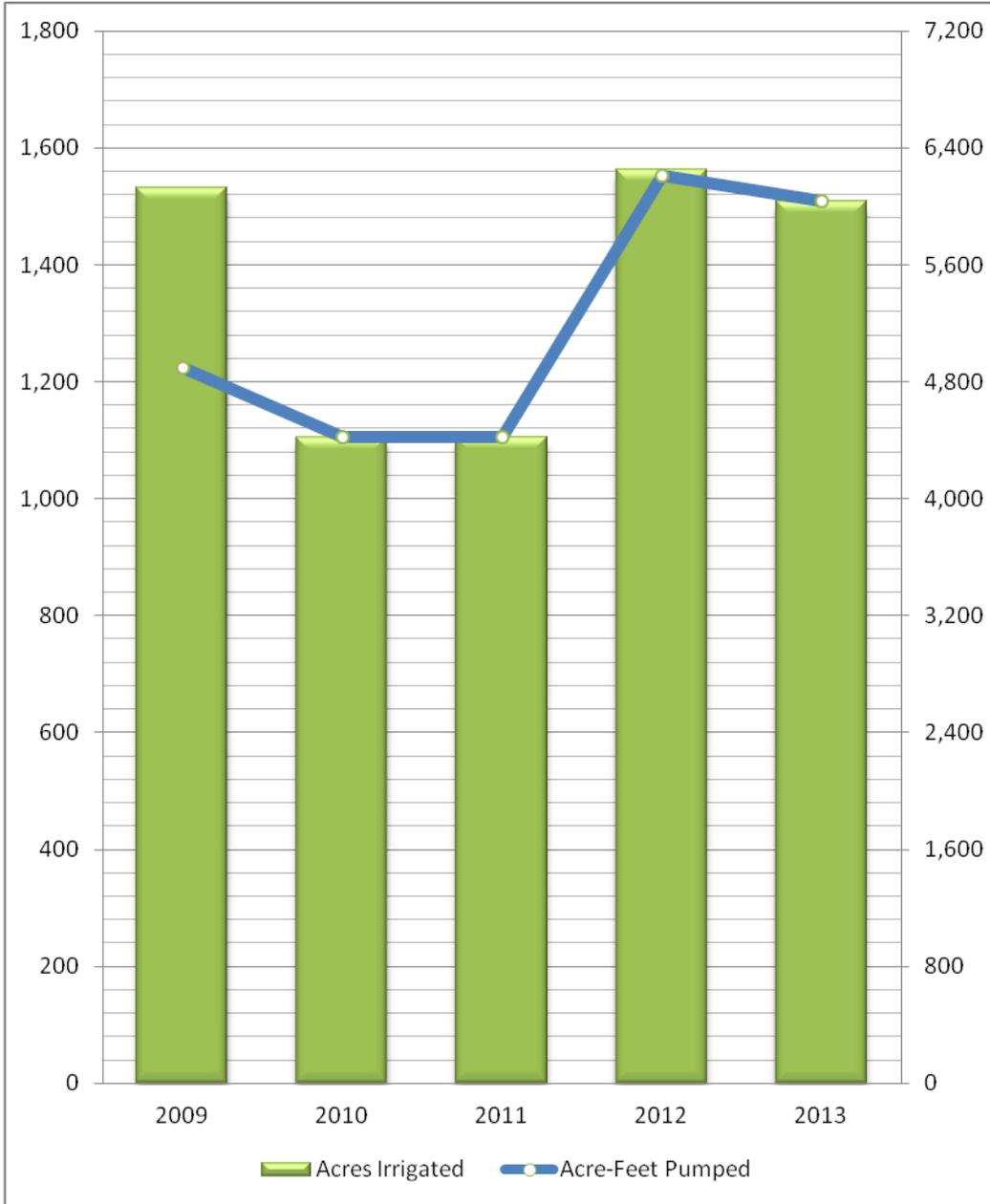
This report estimates the amount of groundwater pumped under permits and certificates issued by the State Engineer. The following methods were used to arrive at the estimated use:

- 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.
- Prior to 2006, only cultivated acreage was recorded; therefore, the acres under cultivation were then multiplied by the duty rate per acreage (4.0 AF/acre).

APPENDIX A
KELLY CREEK AREA HISTORICAL CROP INVENTORY

KELLY CREEK AREA HISTORICAL CROP INVENTORY

Year	2009	2010	2011	2012	2013
Acres Irrigated	1,532	1,106	1,106	1,562	1,508
Acre-Feet Pumped	4,899	4,424	4,424	6,208	6,032



APPENDIX B

2013 KELLY CREEK AREA 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.
Sup App 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
Permitted 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 .
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 Acreage	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 - KELLY CREEK, Basin 066, 2013															
App No	Status	QQ	Q	Sec	Twn	Rng	Sup	Sup App Number	Permitted Acres	Permitted Duty	Owner of Record	Crop Type	Irrigation Method	Irrigated Acres	Acre-Feet Pumped
60154	PER	NW	SE	24	37N	41E			85.00	340.00	GENE & JO CHRISTISON	NO CROP	NOT PUMPED	0.00	0.00
													TOTAL:	0.00	0.00
80903	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	70.00	280.00	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	0.00	0.00
80904	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	70.00	280.00	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	0.00	0.00
80905	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	500.00	397.74	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	125.00	500.00
80908	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	292.90	583.41	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	125.00	500.00
80909	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	137.10	275.45	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	0.00	0.00
80910	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	137.10	200.33	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	0.00	0.00
80911	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	137.10	179.14	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	0.00	0.00
81006	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	137.10	275.45	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	125.00	500.00
81007	PER	LT	0	1	37N	42E	Y	80903-80905, 80908-80911, 81006, 81007	500.00	198.87	CRAWFORD FAMILY LIVING TRUST DTD 3/17/2004	ALFALFA	4 PIVOTS SEC1	125.00	500.00
								Supplemental Totals:	500.00	2000.00			TOTAL:	500.00	2000.00
28768	CER	NE	SW	2	37N	42E	Y	ALL	1594.50	435.33	CRAWFORD FM TR & KADE & ELIZABETH CRAWFORD	ALFALFA	PIVOT SE1/4 SEC 2	126.00	504.00
29154	CER	NW	NW	2	37N	42E	Y	ALL	637.10	1004.55	CRAWFORD FM TR & KADE & ELIZABETH CRAWFORD	ALFALFA	PIVOT NW1/4 SEC 2	126.00	504.00
29885	CER	NE	SW	36	38N	42E	Y	ALL	320.00	1000.00	CRAWFORD FAMILY TRUST	ALFALFA	PIVOT SE1/4 SEC 36	126.00	504.00
29886	CER	NW	SW	36	38N	42E	Y	ALL	320.00	1000.00	CRAWFORD FAMILY TRUST	ALFALFA	PIVOT SW1/4 SEC 36	126.00	504.00
29887	CER	NW	SW	2	37N	42E	Y	ALL	1594.50	870.66	CRAWFORD FAMILY TRUST	ALFALFA	PIVOT SW1/4 SEC 2	126.00	504.00
29888	CER	NE	NW	10	37N	42E	Y	ALL	277.60	640.00	CRAWFORD FAMILY TRUST	ALFALFA	PIVOT NE1/4 SEC 10	126.00	504.00
29889	CER	NE	NW	10	37N	42E	Y	ALL	317.40	640.00	CRAWFORD FAMILY TRUST	NO CROP	W1/2 SEC 10		
29890	CER	NE	SW	10	37N	42E	Y	ALL	637.40	686.19	CRAWFORD FAMILY TRUST	GRAIN	Pivot SE1/4 SEC 10	126.00	504.00
29891	CER	NE	NW	2	37N	42E	Y	ALL	637.10	1004.55	CRAWFORD FAMILY TRUST	ALFALFA	PIVOT NE1/4 SEC 2	126.00	504.00
41522	CER	NE	NW	10	37N	42E	Y	ALL	637.40	235.63	CRAWFORD FAMILY TRUST	NO CROP	W1/2 SEC 10	0.00	0.00
43848	CER	SW	SW	2	37N	42E	Y	ALL	637.10	653.30	CRAWFORD FAMILY TRUST	ALFALFA	COUNTED w/ 29887	0.00	0.00
								Supplemental Totals:	1594.50	5098.49			TOTAL:	1008.00	4032.00
35494	CER	NE	SE	18	37N	43E			36.18	144.72	NEWMONT USA LIMITED	NO CROP	NO IRR EQUIP	0.00	0.00
													TOTAL:	0.00	0.00
								TOTAL:	2215.68	7583.21			TOTAL:	1508.00	6032.00