

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

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 Little Humboldt Valley, Hydrographic Basin 4-067, 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 **2,603.0 acres** with a total duty of 10,123.2 acre-feet within Little Humboldt Valley. An estimated **2,294.4 acres** were irrigated and 9,070.4 acre-feet were pumped during 2012.

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 2012 (ACRE-FEET)	9,070.4*
STATE ENGINEER'S ORDERS	NONE

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 10,123.2 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 Little Humboldt Valley Hydrographic Basin 4-067, for the year 2012.

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), Hardscrabble Area (4-068) and Quinn River Valley (2-033B) to the west, 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, Winnemucca Segment (4-070), Kelly Creek Area (4-066) and Clovers Area (4-064) to the south.

Little Humboldt Valley Hydrographic Basin includes the area known as Eden Valley Chimney Dam Reservoir, and the North Fork Little Humboldt River. This basin is bounded on the north by the Calico Mountains and to the south by the Snow Storm Mountains and Dry Hills of the Osgood Mountains. This tri-valley 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

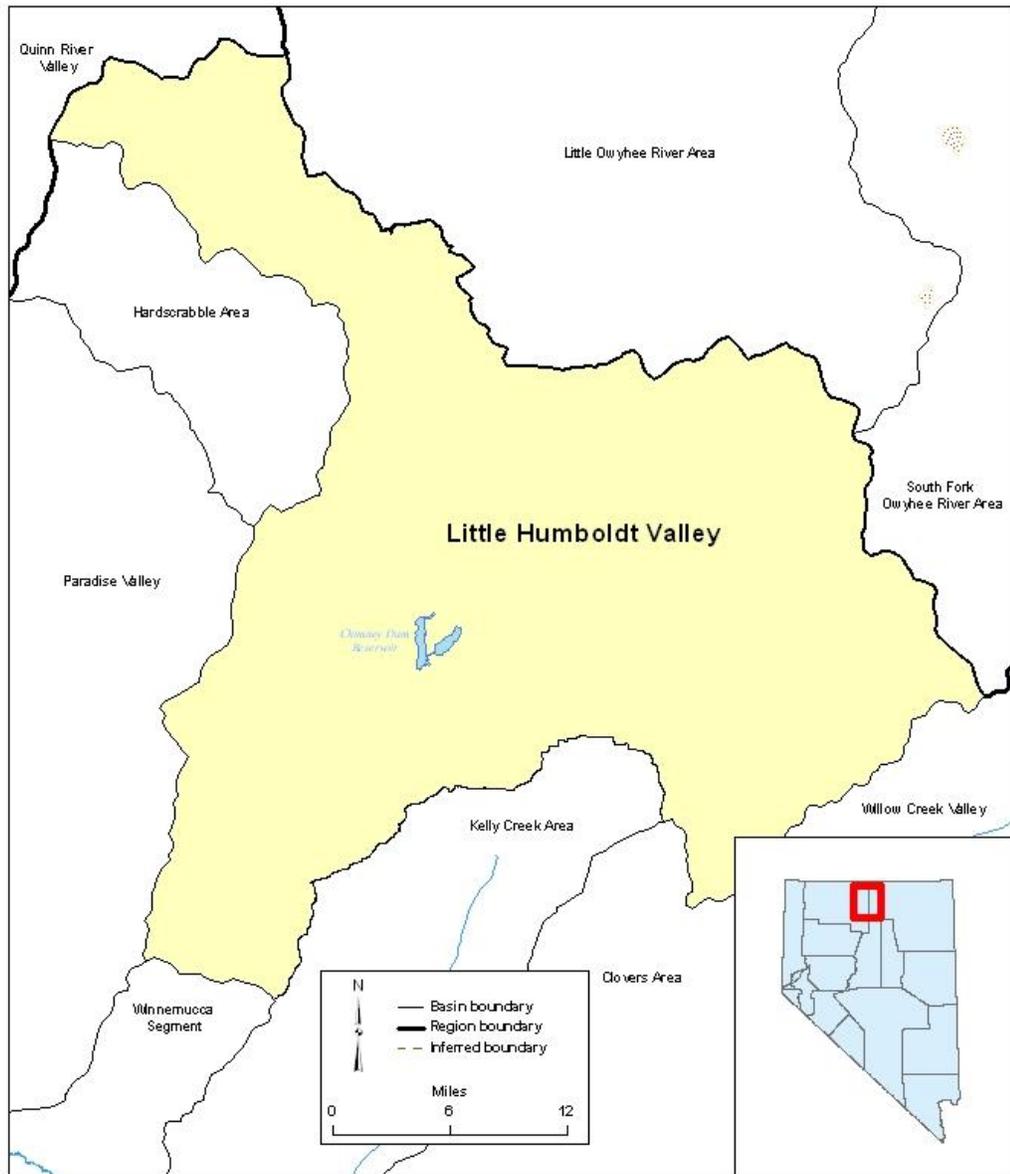
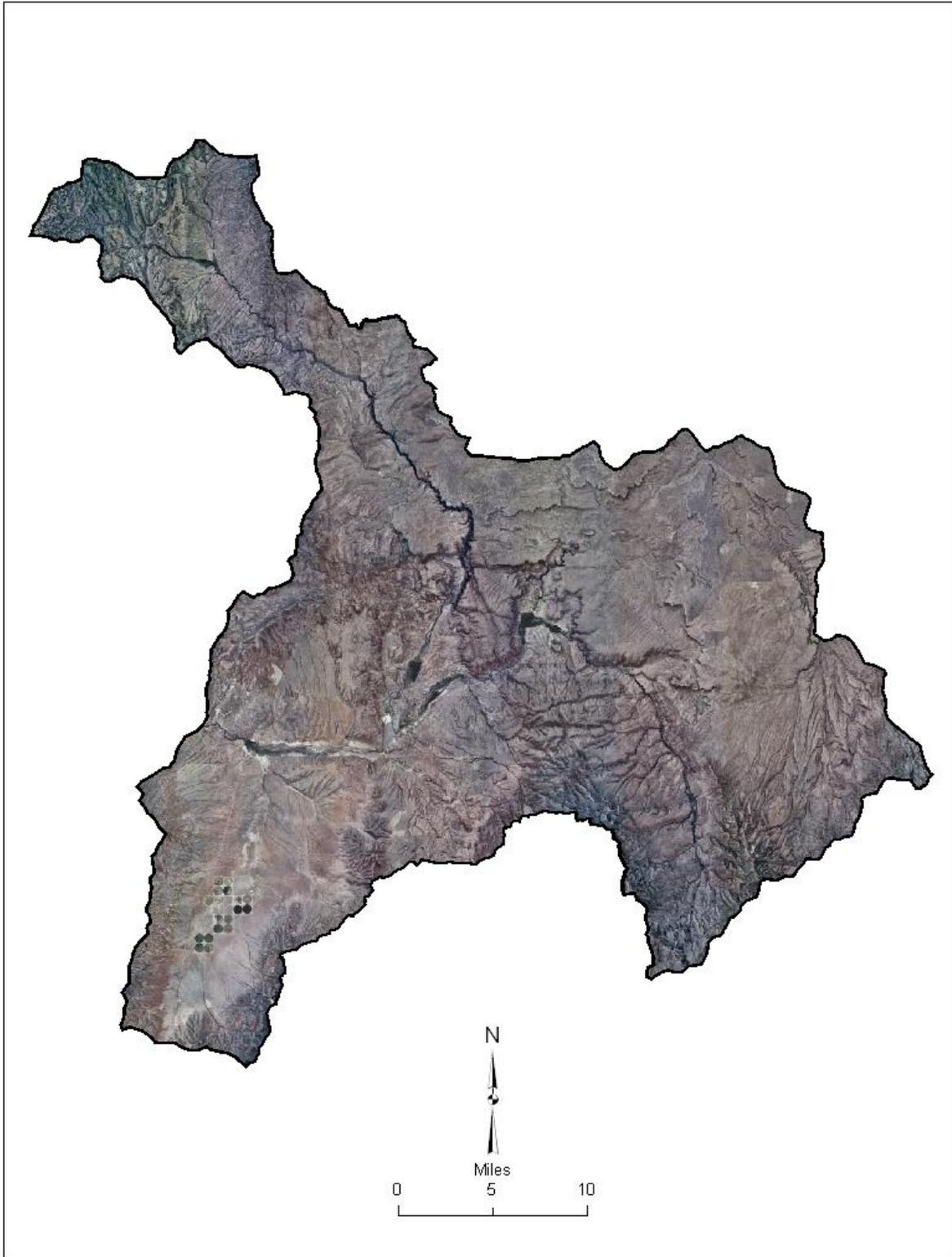


FIGURE 2. MAP OF LITTLE HUMBOLDT VALLEY IRRIGATED ACREAGE



NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP) 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:

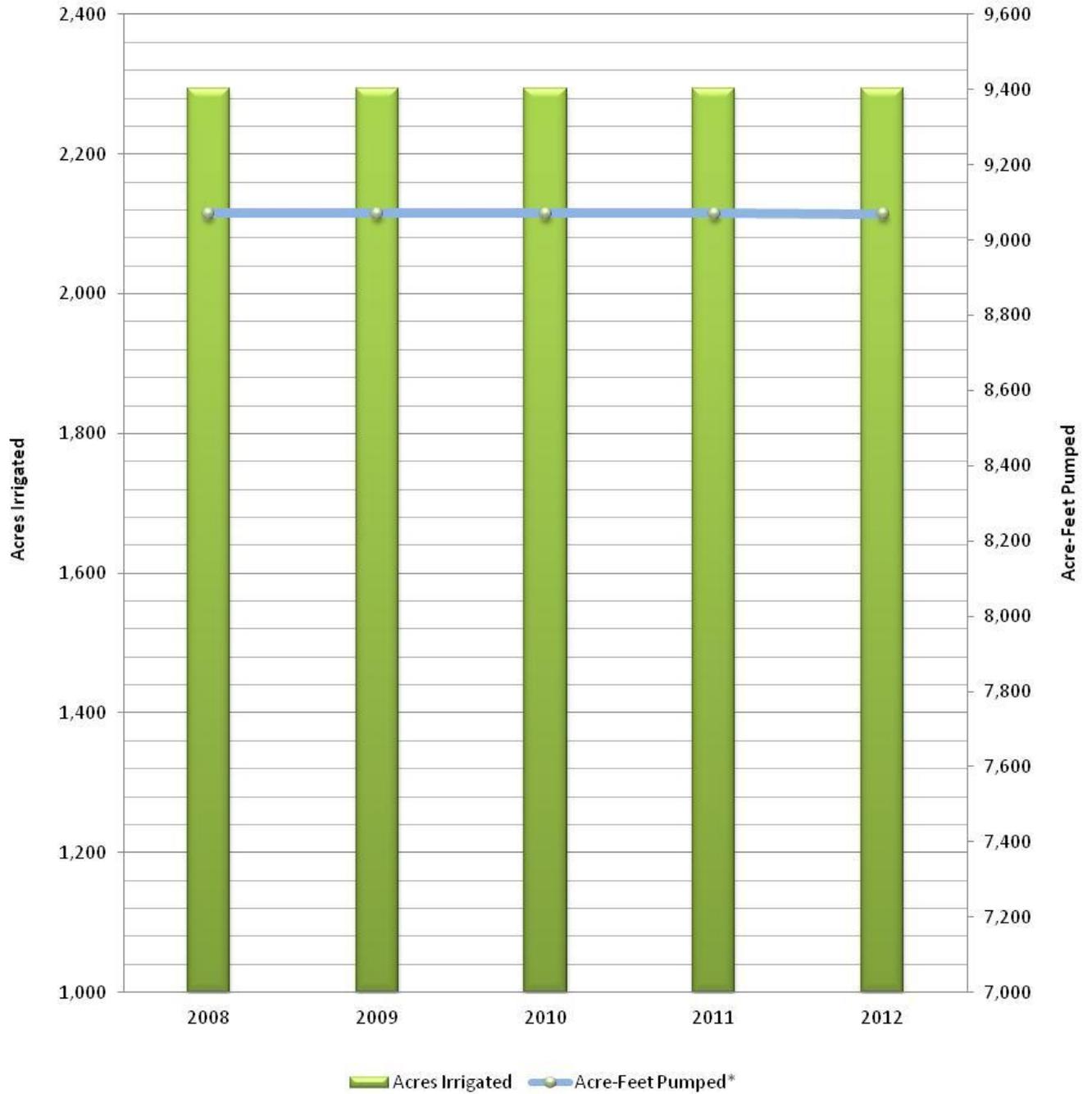
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

APPENDIX A

LITTLE HUMBOLDT VALLEY HISTORICAL CROP INVENTORY

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



Note: Historical pumpage data modified from previously published data.

APPENDIX B

LITTLE HUMBOLDT 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.

