

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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KOBEH VALLEY (HYDROGRAPHIC BASIN 10-139)

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 Kobeh Valley, Hydrographic Basin 10-139, 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 221 **acres** with a total duty of 884 acre-feet within Kobeh Valley. An estimated **110 acres** were irrigated and **357 acre-feet** were pumped during 2012.

HYDROGRAPHIC BASIN SUMMARY

| | |
|---|-------------------|
| HYDROGRAPHIC BASIN NUMBER | 139, REGION 10 |
| HYDROGRAPHIC BASIN NAME | KOBEH VALLEY |
| COUNTIES | EUREKA AND LANDER |
| MAJOR COMMUNITIES | NONE |
| DESIGNATED BASIN | DESIGNATED |
| DENIALS BASED UPON WATER AVAILABILITY | N/A |
| ESTIMATED IRRIGATION PUMPAGE 2012 (ACRE-FEET) | 357* |
| STATE ENGINEER'S ORDERS NO. 816 – DESIGNATION OF BASIN | April 4, 1983 |

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 884 ACRE-FEET
DATE: APRIL 2013

NOTE: Committed groundwater resource data are accurate for APRIL 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 Kobeh Valley Hydrographic Basin 10-139, for the year 2012.

DESCRIPTION OF THE STUDY AREA

The Kobeh Valley Hydrographic Basin is located in central Nevada (Figure 1). Kobeh Valley occupies approximately 850 square miles in Eureka and Lander County. The adjacent hydrographic basins are Diamond Valley (10-153) and Stephens Basin (10-152) to the east, Pine Valley (4-053) to the north, Grass Valley (10-138) to the northwest, Big Smokey Valley (10-137B Northern Part) to the southwest and Monitor Valley (10-140A Northern Part) to the south.

Kobeh Valley is bounded by the Roberts Mountains on the north, on the east by the Mountain Boy Range, on the south by the Monitor Range and on the west by the Simpson Park Mountains. Kobeh Valley is approximately 25 miles wide by 30 miles long with basin elevations ranging from approximately 5,860 feet above mean sea level on the valley floor to approximately 10,400 feet above mean sea level in the surrounding mountains. Irrigation is sparse and scattered throughout the southern portion of the basin (Figure 2).

FIGURE 1. LOCATION MAP OF KOBEH VALLEY, BASIN 10-139

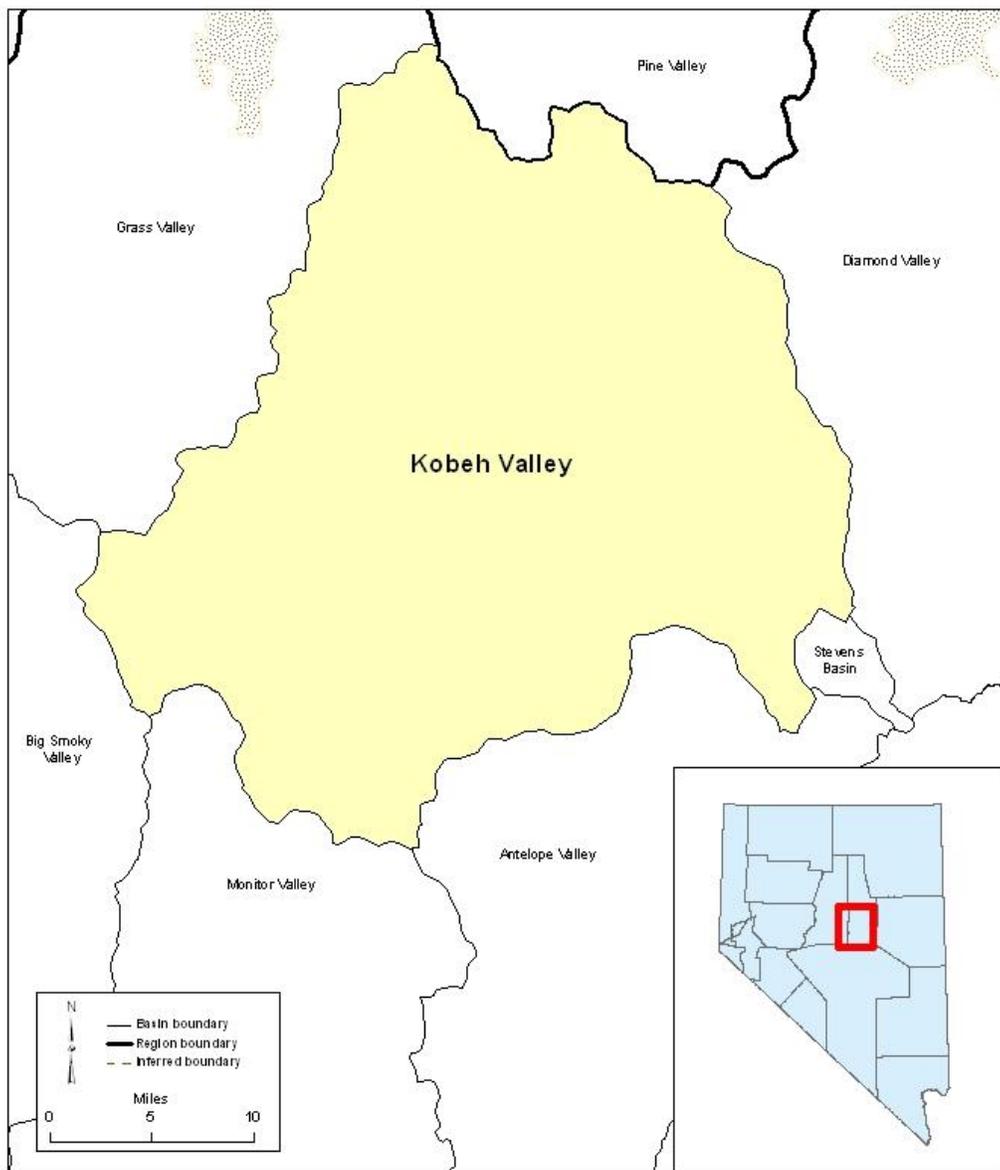
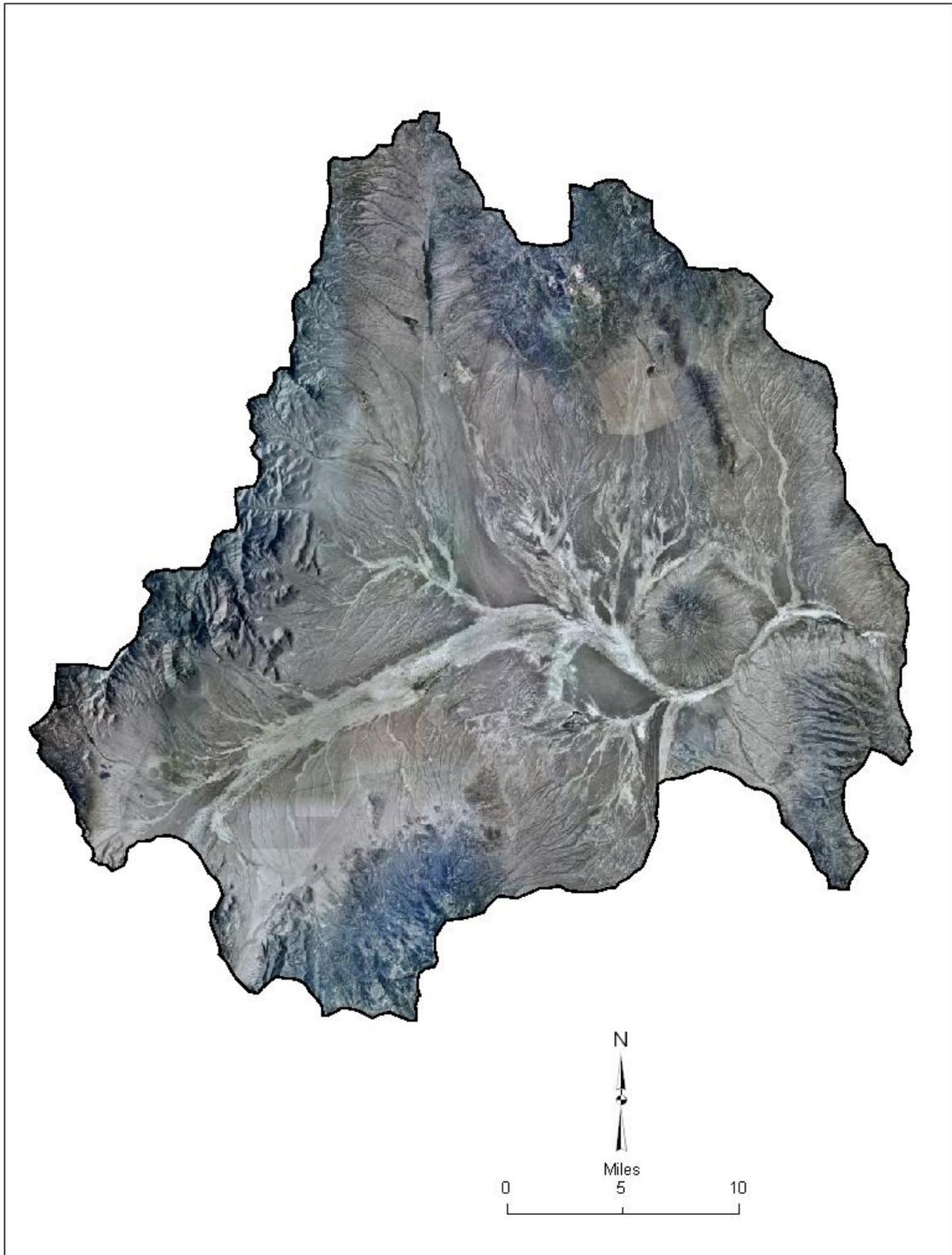


FIGURE 2. MAP OF KOBEH VALLEY IRRIGATED ACREAGE



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:

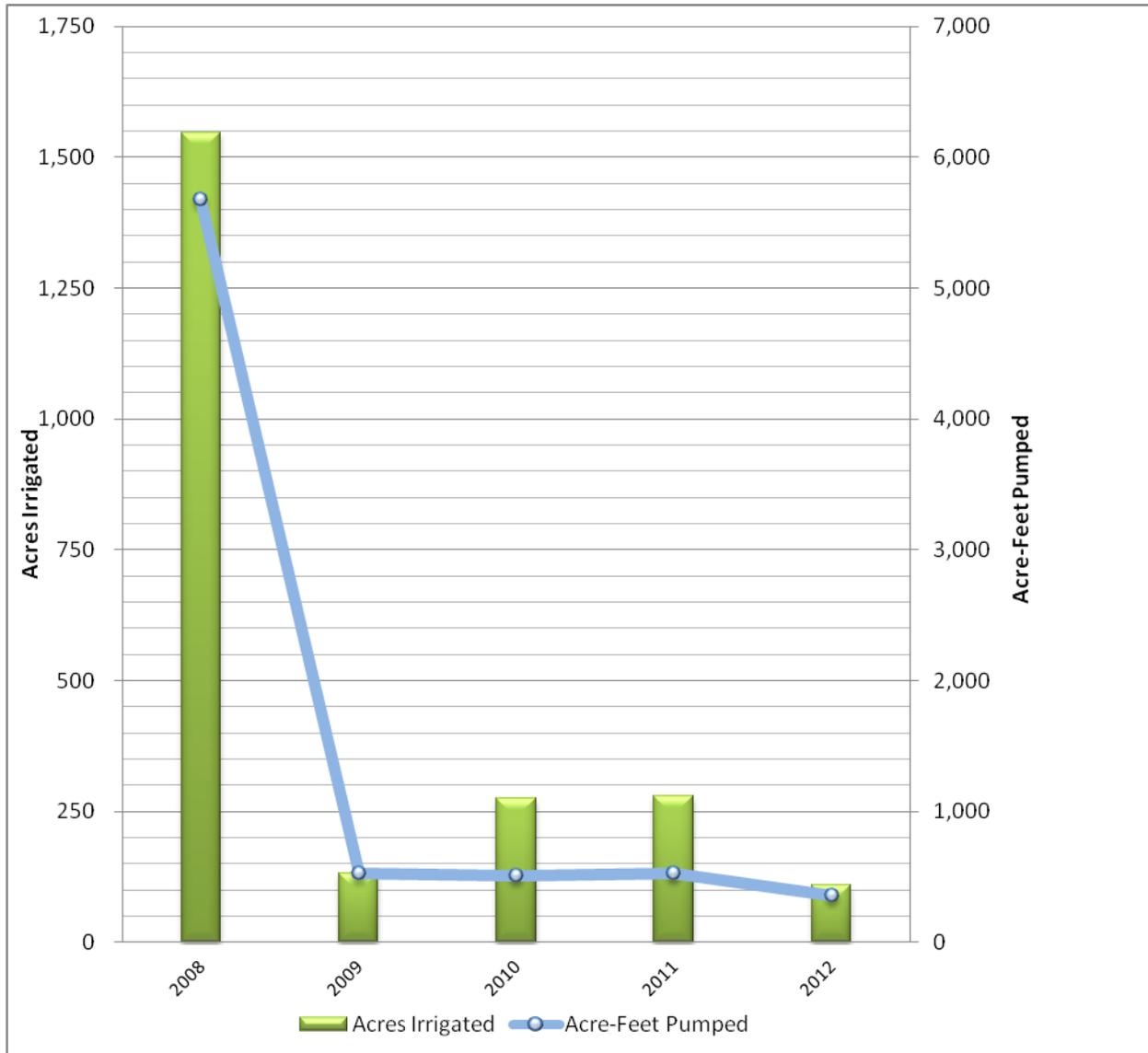
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

APPENDIX A

KOBEH VALLEY HISTORICAL CROP INVENTORY

HISTORICAL CROP INVENTORY

| Year | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------|-------|------|------|------|------|
| Acres Irrigated | 1,547 | 132 | 275 | 280 | 110 |
| Acre-Feet Pumped | 5,681 | 529 | 506 | 526 | 357 |



APPENDIX B
KOBEH 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. |

Crop Inventory and Groundwater Pumpage Inventory from Irrigation - Kobeh Valley, Basin 139, 2012

| Basin | App | Cert | File Date | Status | Source | Qtr | Qtr | Sec | Twn | Rng | Sup | Sup Permit No | Permitted | | Co | Owner of Record | Crop | Type | Irr By | Irr Ac | Pumpage (acre-feet) | | | |
|----------------------------|-------|------|------------|--------|--------|-----|-----|-----|-----|-----|-----|---------------|--------------|---------------|----|---------------------------|-------------|---------------|------------------------|------------|---------------------|--|--|--|
| | | | | | | | | | | | | | Acres | Duty | | | | | | | | | | |
| 139 | 76059 | | 7/13/2007 | PER | UG | SW | SW | 16 | 19N | 47E | Y | 76592 | 37.62 | 150.48 | LA | PETER JOE AND TOME DAMELE | N | no crop | flood | 0 | 0 | | | |
| 139 | 76592 | | 1/4/2008 | PER | UG | SW | SW | 16 | 19N | 47E | Y | 76059 | 37.62 | 150.48 | LA | PETER JOE AND TOME DAMELE | N | no crop | stock water | 0 | 0 | | | |
| Supplemental Totals | | | | | | | | | | | | | 37.62 | 150.48 | | | | | | | | | | |
| 139 | 11072 | 2880 | 2/25/1944 | CER | UG | NE | SE | 17 | 19N | 50E | | | 0 | 8 | EU | FISH CREEK RANCH LLC | Y | pasture grass | flood flowing well | 45 | 95 | | | |
| 139 | 9682 | 2780 | 7/25/1933 | ABR | UG | SE | NE | 17 | 19N | 50E | | | 0 | 0 | EU | KOBEH VALLEY RANCH. LLC | Y | pasture grass | flood artesian well | 59.5 | 238 | | | |
| | | | | | | | | | | | | | | | | | 59.5 | 238 | | | | | | |
| 139 | 13956 | 5334 | 12/31/1951 | CER | UG | SE | SW | 9 | 20N | 49E | | | 169.4 | 677.6 | EU | M W CATTLE CO | N | no crop | flood | 0 | 0 | | | |
| | | | | | | | | | | | | | | | | | 0 | 0 | | | | | | |
| 139 | 23549 | 7899 | 12/15/1966 | CER | UG | NW | SE | 20 | 20N | 52E | | | 12 | 48 | EU | ROY R. AND MARY RISI | Y | pasture | flood | 6 | 24 | | | |
| | | | | | | | | | | | | | | | | | 6 | 24 | | | | | | |
| Totals: | | | | | | | | | | | | | | | | | | | 110.5 | 357 | | | | |