

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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DIXIE CREEK-TENMILE CREEK AREA (HYDROGRAPHIC BASIN 4-048)

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 Dixie Creek-Tenmile Creek Area, Hydrographic Basin 4-048, 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 **435 acres** with a total duty of 1,258 acre-feet within Dixie Creek-Tenmile Creek Area. An estimated **112 acres** were irrigated and 288 acre-feet were pumped during 2013.

HYDROGRAPHIC BASIN SUMMARY

| | |
|---|--|
| HYDROGRAPHIC BASIN NUMBER | 048, REGION 4 |
| HYDROGRAPHIC BASIN NAME | DIXIE CREEK-TENMILE CREEK AREA |
| COUNTIES | ELKO |
| MAJOR COMMUNITIES | SPRING CREEK |
| DESIGNATED BASIN | DESIGNATED |
| DENIALS BASED UPON WATER AVAILABILITY | 2964 , IRD DEN, 5/21/1984 3187 , IRD DEN, 5/15/1985 4121 , IRR DEN, 6/7/1994 |
| ESTIMATED IRRIGATION PUMPAGE 2013 (ACRE-FEET) | 288* |
| STATE ENGINEER'S ORDERS | |
| NO. 848 –DESIGNATION OF BASIN NO. 1120 – NOTICE OF CURTAILMENT (PORTION) | SEPTEMBER 6, 1984 APRIL 4, 1996 |

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 1,258 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

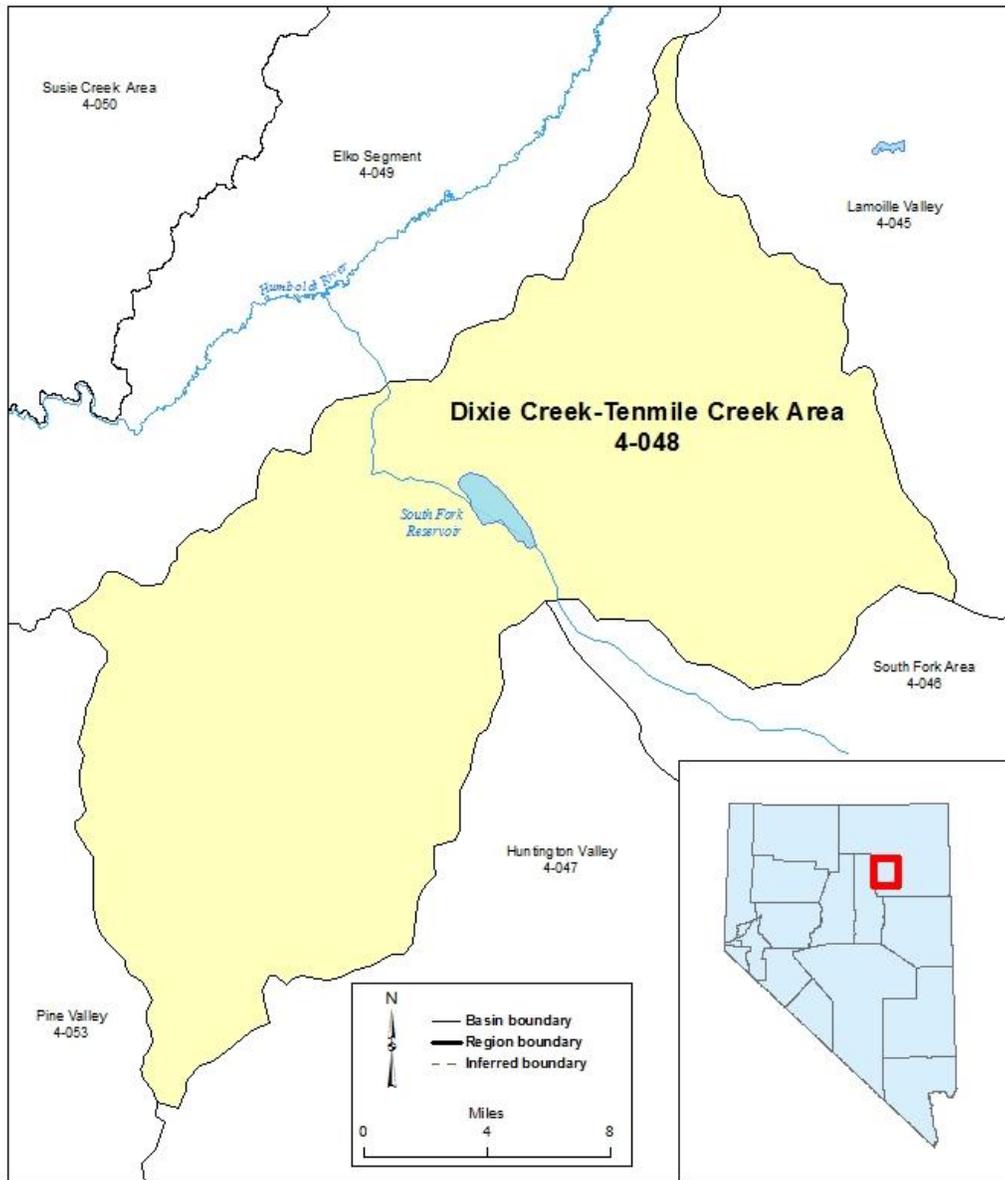
The purpose of this report is to inventory all of the groundwater resources allocated to irrigation and described by the Office of the State Engineer, Nevada Division of Water Resources, and to estimate the amount of groundwater pumped for irrigation purposes within the Dixie Creek-Tenmile Creek Area Hydrographic Basin 4-048, for the year 2013.

DESCRIPTION OF THE STUDY AREA

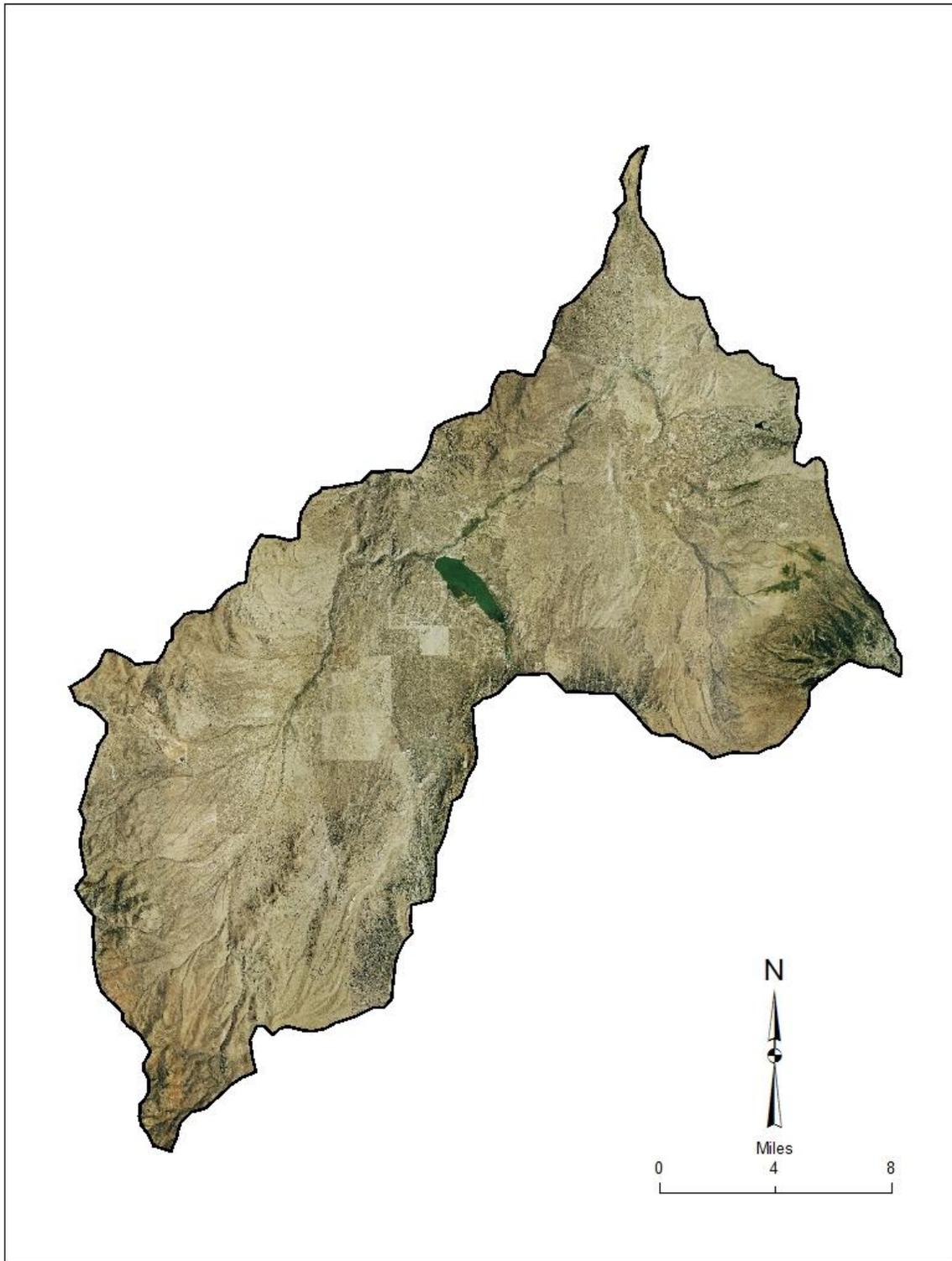
The Dixie Creek-Tenmile Creek Area Hydrographic Basin is located in central Nevada (Figure 1). Dixie Creek-Tenmile Creek Area occupies approximately 392 square miles in west central Elko County. The adjacent hydrographic basins are Pine Valley (4-053) to the west, Elko Segment (4-049) to the northwest, Lamoille Valley (4-045) to the east, and South Fork Area (4-046) and Huntington Valley (4-047) to the south.

Dixie Creek-Tenmile Creek Area is bounded on the north by the Elko Hills, to the east by the Ruby Mountains, to the south by Cedar Ridge, and to the west by the Pinon Range and Grindstone Mountain. This Hydrographic Basin includes the South Fork Reservoir. The valley is approximately 11 miles wide by 30 miles long, trending southwest to northeast, with basin elevations ranging from approximately 5,200 feet above mean sea level on the valley floor to approximately 10,000 feet above mean sea level in the surrounding Ruby Mountains. Irrigation occurs primarily in the central part of the basin (Figure 2).

**FIGURE 1. LOCATION MAP OF DIXIE CREEK-TENMILE CREEK AREA
HYDROGRAPHIC BASIN 4-48**



**FIGURE 2. LOCATION MAP OF DIXIE CREEK-TENMILE 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:

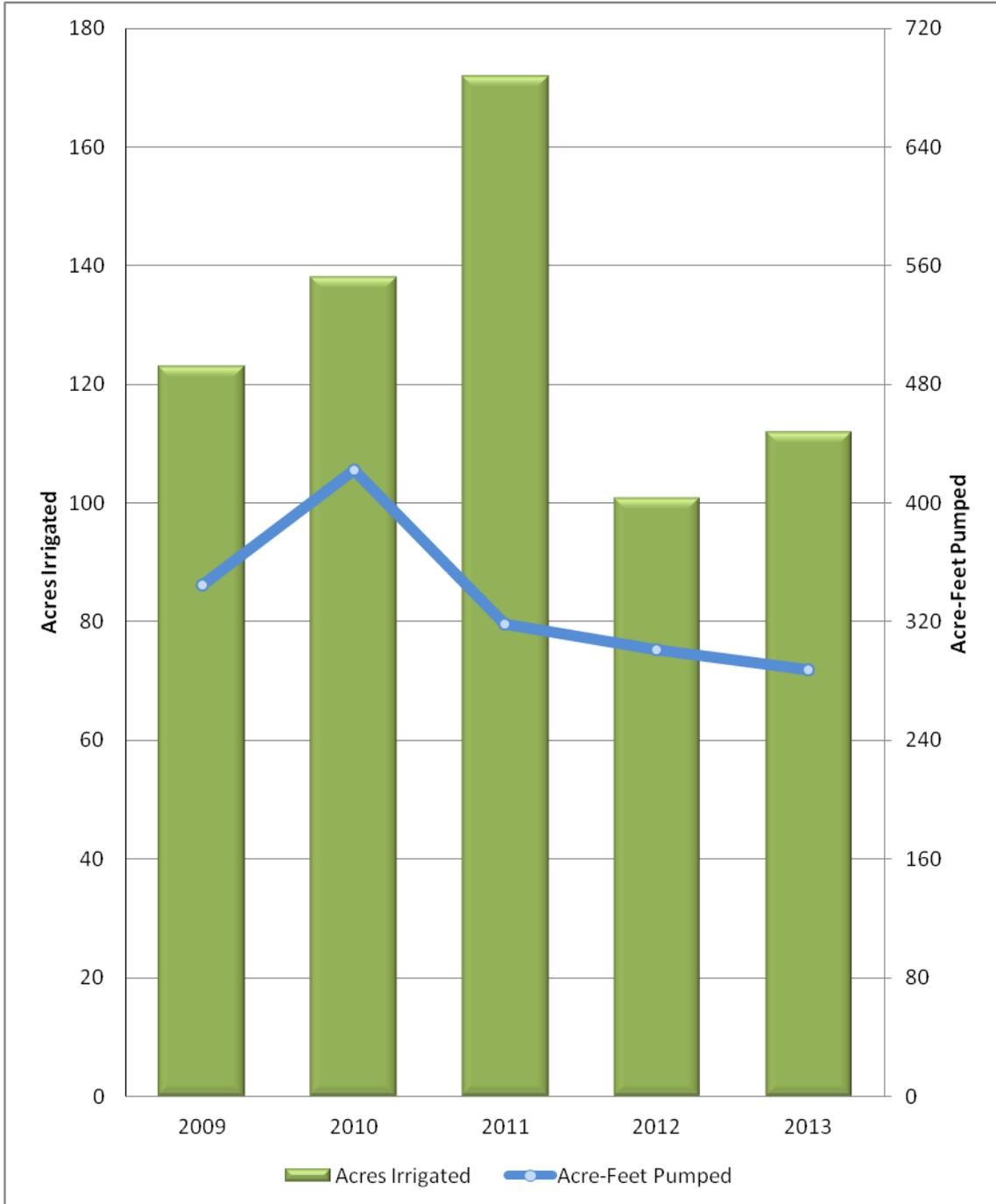
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

APPENDIX A

**DIXIE CREEK-TENMILE CREEK AREA
HISTORICAL CROP INVENTORY**

DIXIE CREEK-TENMILE CREEK AREA HISTORICAL CROP INVENTORY

| Year | 2009 | 2010 | 2011 | 2012 | 2013 |
|------------------|------|------|------|------|------|
| Acres Irrigated | 123 | 138 | 172 | 101 | 112 |
| Acre-Feet Pumped | 345 | 422 | 319 | 301 | 288 |



APPENDIX B

2013 DIXIE CREEK-TENMILE 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 to others. |
| Supplemental Application 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 |
| Supplementally Adjusted Permitted Acres | The supplementally adjusted, total number of acres that is eligible to be irrigated under a supplemental group of water rights. The supplementally adjusted, total number of acres is listed at the beginning of a supplemental group in bold . |
| 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 is listed as a supplementally adjusted duty. |
| Supplementally Adjusted Duty Acre-Feet | The supplementally adjusted, total combined duty that may be pumped in a given year, or season, for a supplemental group of water rights, expressed in acre-feet. The supplementally adjusted, total combined duty is listed at the beginning of a 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. |
| Acreage Estimation Method | The method by which the number of acres irrigated was determined. F – Field inspection. I – Aerial or satellite imagery. |
| 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. |
| Pumpage Estimation Method | The method used to estimate the amount of water pumped. M – Totalizing meter readings. D – The estimate was made by multiplying the number of irrigated acres by the acre-feet per acre duty rate, as defined in the permit or certificate. |

| Crop Inventory and Groundwater Pumpage for Irrigation - Dixie TenMile, Basin 048, 2013 | | | | | | | | | | | | | | | | | | | |
|---|--------|----|----|-----|-----|-----|-----|---------------------------------|-----------------|---|--------------------------|--|----------------------------|--------------------|--------------------|-----------------|---------------------------|------------------|---------------------------|
| App No | Status | QQ | Q | Sec | Twn | Rng | Sup | Supplemental Application Number | Permitted Acres | Supplementally Adjusted Permitted Acres | Permitted Duty Acre-Feet | Supplementally Adjusted Duty Acre-feet | Owner of Record | Crop Type | Irrigation Method | Irrigated Acres | Acreage Estimation Method | Acre-Feet Pumped | Pumpage Estimation Method |
| 81046 | PER | NE | NW | 27 | 31N | 53E | | | 125.00 | 125.00 | 375.00 | 375.00 | TOMERA, KEVIN | NO CROP | NO IRR EQUIP | 0.00 | | 0.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 0.00 | F | 0.00 | |
| 47090 | CER | NW | NE | 23 | 32N | 55E | | | 11.206 | 11.206 | 33.62 | 33.62 | HARRIS, LONDON G | ALFALFA/GRASS HAY | FIX-SET | 11.20 | | 33.60 | |
| | | | | | | | | | | | | | | | TOTAL: | 11.20 | F | 33.60 | D |
| 47973 | CER | NE | SW | 23 | 32N | 55E | | | 2.95 | 2.95 | 8.85 | 8.85 | TESTOLIN, BARBARA | DOMESTIC/YARD | SPRINKLERS | 0.50 | | 2.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 0.50 | F | 2.00 | D |
| 43563 | CER | NE | SW | 25 | 33N | 55E | | | 5.00 | 5.00 | 15.00 | 15.00 | RINALDO, DANIEL RAE LYNN | MEADOW GRASS | HAND LINE | 5.00 | | 15.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 5.00 | F | 15.00 | D |
| 80885 | PER | NE | NW | 25 | 33N | 55E | | | 15.50 | 15.50 | 46.51 | 46.51 | O'DONNELL, BLAKE & ELEANOR | NO CROP | WELL DRILLED | 0.00 | | 0.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 0.00 | F | 0.00 | |
| 48294 | CER | NE | NE | 35 | 33N | 55E | | | 17.52 | 17.52 | 52.56 | 52.56 | CANADAY, MATTHEW & CYNTHIA | NO CROP | FIX-SET | 0.00 | | 0.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 0.00 | F | 0.00 | |
| 48296 | CER | NE | SW | 35 | 33N | 55E | Y | 56322 | 24.97 | 38.26 | 65.16 | 83.90 | LEWIS, CALTON M | MEADOW HAY | HAND LINES | 24.97 | | 65.20 | D |
| 56322 | CER | SW | NW | 35 | 33N | 55E | Y | 48296 | 13.29 | | 18.74 | | LEWIS, CALTON M | PASTURE GRASS | HAND LINES | 13.29 | | 18.70 | |
| | | | | | | | | | | | | | | | TOTAL: | 38.26 | F | 83.90 | D |
| 70525 | PER | NW | NE | 9 | 33N | 56E | | | 40.14 | 40.14 | 120.42 | 120.42 | CARR, RICHARD BRUNO | VEGATABLES/PASTURE | FIXED & HAND LINES | 20.00 | | 60.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 20.00 | F | 60.00 | D |
| 44482 | CER | SW | NE | 10 | 33N | 56E | | | 37.14 | 37.14 | 94.12 | 94.12 | BOTTARI, TIMOTHY & PATRICK | PASTURE | FIX-SET | 37.00 | | 94.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 37.00 | F | 94.00 | D |
| 34821 | CER | NW | SE | 16 | 33N | 56E | Y | DHR-00653 | 79.52 | 79.52 | 238.56 | 238.56 | LEGARZA, JOE M | MEADOW HAY | SURFACE | 0.00 | | 0.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 0.00 | F | 0.00 | |
| 41509 | PER | NW | NW | 30 | 33N | 57E | Y | 56696 | 63.06 | 63.06 | 189.19 | 189.19 | REED, JACOB & LISA | NO CROP | WHEEL LINE | 0.00 | | 0.00 | |
| 56696 | PER | NE | NW | 30 | 33N | 57E | Y | 41509 | 63.06 | | 137.78 | | REED, JACOB & LISA | NO CROP | | 0.00 | | 0.00 | |
| | | | | | | | | | | | | | | | TOTAL: | 0.00 | F | 0.00 | |
| | | | | | | | | | TOTAL: | 435.30 | | 1257.73 | | | TOTAL: | 111.96 | | 288.50 | |