

STATE OF NEVADA  
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

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PINE FOREST VALLEY (HYDROGRAPHIC BASIN 2-029)

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 Pine Forest Valley, Hydrographic Basin 2-029, 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 **8,030 acres** with a total duty of 37,712 acre-feet within Pine Forest Valley. An estimated **6,656 acres** were irrigated and 25,784 acre-feet were pumped during 2012.

## HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	029, REGION 2
HYDROGRAPHIC BASIN NAME	PINE FOREST VALLEY
COUNTIES	HUMBOLDT
MAJOR COMMUNITIES	N/A
DESIGNATED BASIN	DESIGNATED
DENIALS BASED UPON WATER AVAILABILITY	N/A
ESTIMATED IRRIGATION PUMPAGE 2012 (ACRE-FEET)	25,784*
STATE ENGINEER'S ORDERS	
<a href="#">NO. 711 – DESIGNATION OF BASIN</a>	May 1, 1978
<a href="#">NO. 831 – NOTICE OF CURTAILMENT</a>	December 1, 1983
COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 37,712 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**

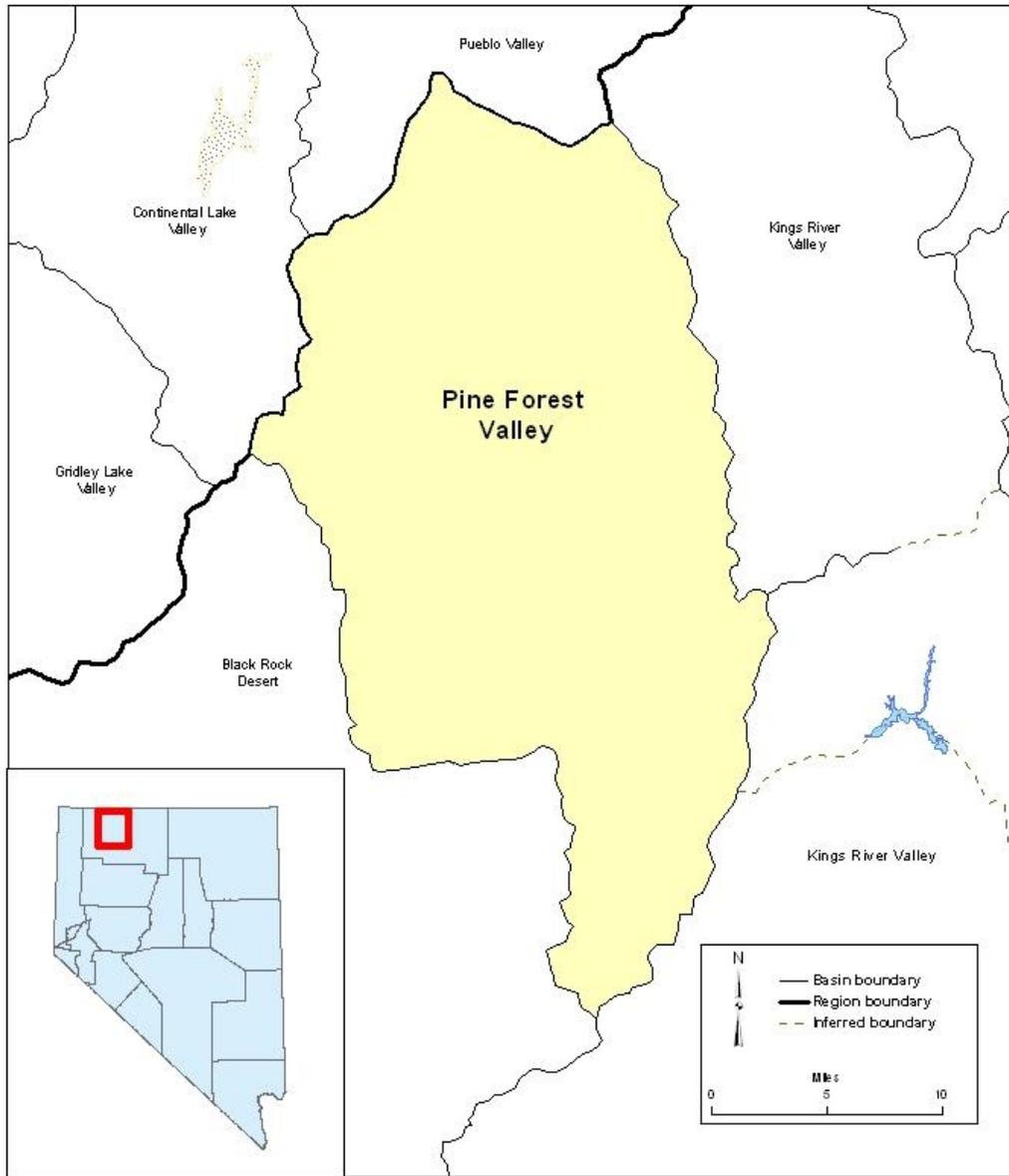
The purpose of this report is to inventory all of the groundwater resources allocated to irrigation and described by the Office of the State Engineer, Nevada Division of Water Resources, and to estimate the amount of groundwater pumped for irrigation purposes within the Pine Forest Valley Hydrographic Basin 2-029, for the year 2012.

## **DESCRIPTION OF THE STUDY AREA**

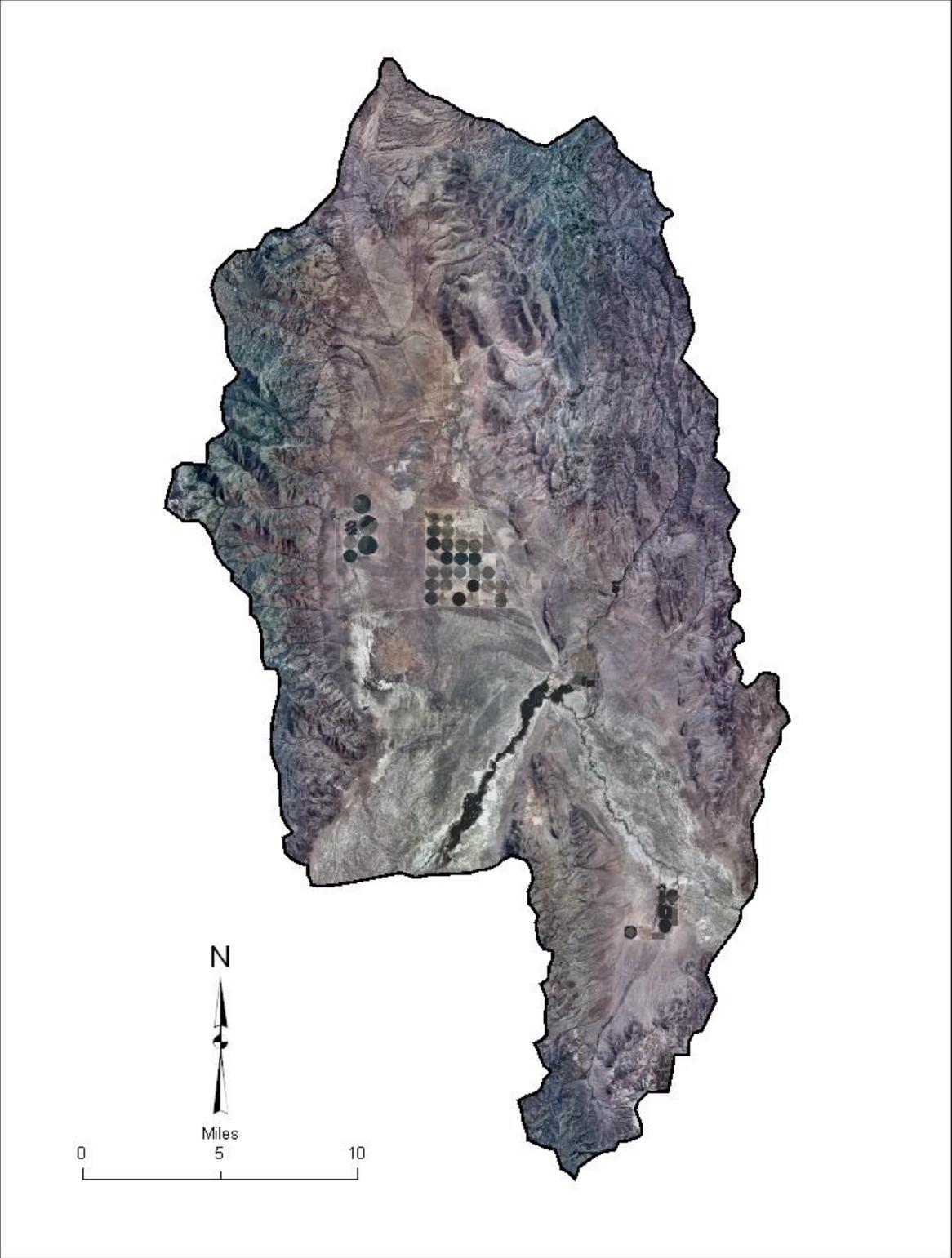
The Pine Forest Valley Hydrographic Basin is located in north central Nevada (Figure 1). Pine Forest Valley occupies approximately 528 square miles in Humboldt County. The adjacent hydrographic basins are Pueblo Valley (1-001) to the north, Continental Lake Valley (1-002) to the north and west, Black Rock Desert (2-028) to the south and west, King's River Valley – Sod House Subarea (2-030B) to the south and east, and King's River Valley – Rio King Subarea (2-030A) to the north and east.

Pine Forest Valley is bounded on the north and east by the Bilk Creek Mountains, to the south by the Jackson Mountains and to the west by the Pine Forest Range. The Quinn River flows through the southern part of the basin. The valley is approximately 20 miles wide by 41 miles long with basin elevations ranging from approximately 4,200 feet above mean sea level on the valley floor to approximately 8,700 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 PINE FOREST VALLEY BASIN 2-029**



**FIGURE 2. LOCATION MAP OF PINE FOREST 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:

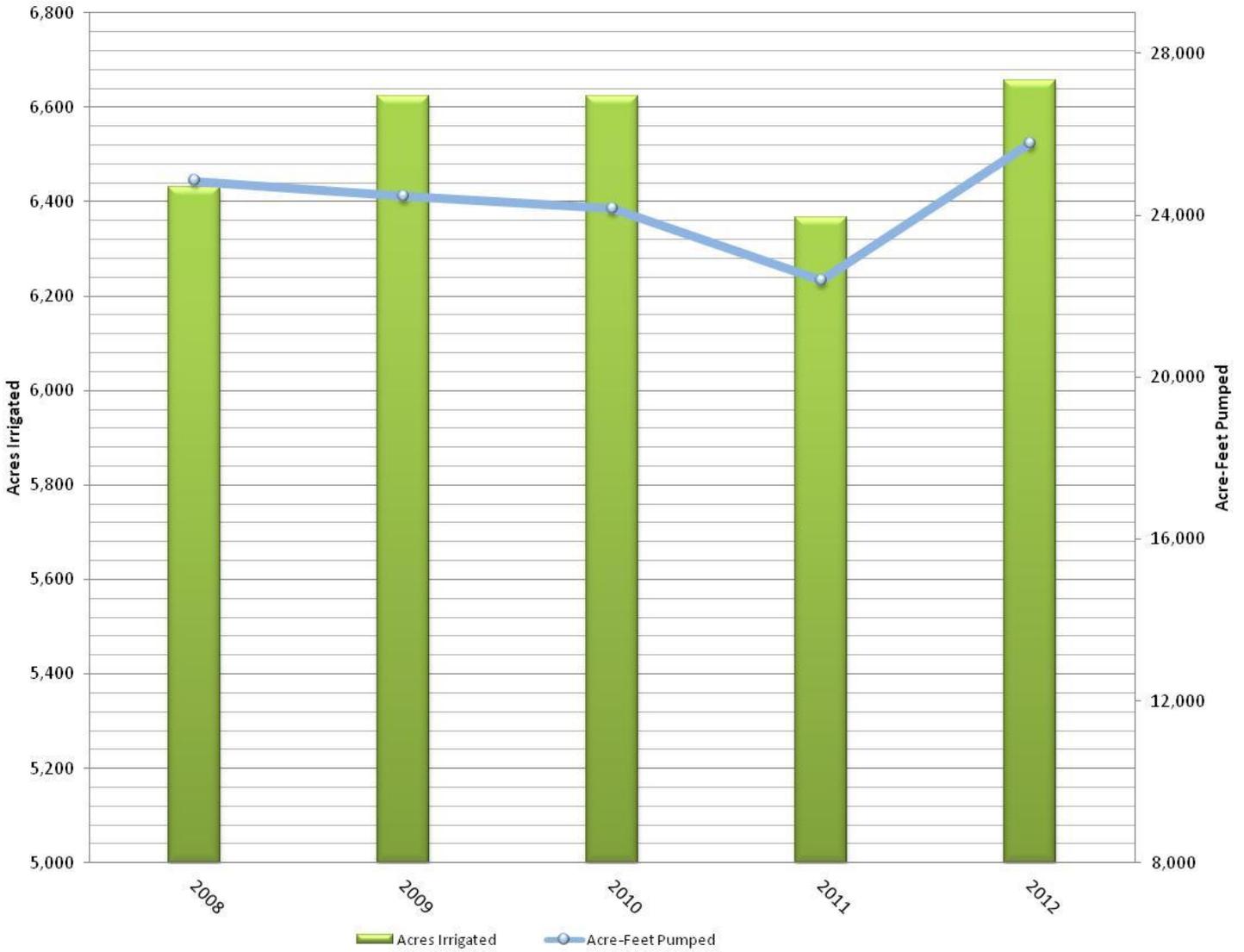
- Where totalizing meters were in place, meter readings were taken and compared with previous data (if available).
- Where meters were not in place, the place of use was inspected to estimate the amount of acreage under cultivation. The number of acres under cultivation was then multiplied by certificated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

**APPENDIX A**

**PINE FOREST VALLEY HISTORICAL CROP INVENTORY**

## HISTORICAL CROP INVENTORY

Year	2008	2009	2010	2011	2012
Acres Irrigated	6,431	6,624	6,624	6,366	6,656
Acre-Feet Pumped	24,844	24,470	24,156	22,400	25,784



Note: Historical pumpage data modified from previously published data.

**APPENDIX B**

**2012 PINE FOREST 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 <b>bold</b> .
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.

## 2012 PINE FOREST VALLEY CROP INVENTORY

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Sup	Supplemental		Duty	Units	County	Owner of Record	Crop	Type	Irrigation	Irr Acre	A/F Pumped
												Permit No	Permitted Acres									
29	76242		9/7/07	PER	UG	SW	NW	1	41N	32E	Y			772.59	AFA	HU	Happy Creek Inc.	Y	ALF	Flood	133	537.00
												Sup. Total	765.9	3063.6	AFA							
29	76239		9/7/07	PER	UG	SE	NE	2	41N	32E	Y			228.66	AFA	HU	Happy Creek Inc.	Y	ALF	Pivot	125	198.00
	76240		9/7/07	PER	UG	SE	NE	2	41N	32E	Y			228.66	AFA	HU						
	76243		9/7/07	PER	UG	SE	NE	2	41N	32E	Y			162.8	AFA	HU						
												Sup. Total	765.9	3063.6	AFA							
29	76237		9/7/07	PER	UG	NE	SE	2	41N	32E	Y			587.87	AFA	HU	Happy Creek Inc.	Y	ALF	Pivot	40	210.36
	76244		9/7/07	PER	UG	NE	SE	2	41N	32E				476	AFA	HU	Happy Creek Inc.	Y	Grain	Pivot	41	252.87
												Sup. Total	765.9	3063.6	AFA							
29	76238		9/7/07	PER	UG	NE	SE	35	42N	32E	Y			913.6	AFA	HU	Happy Creek Inc.	Y	ALF	Flood	75	800
												Sup. Total	765.9	3063.6	AFA			ALF	Pivot	125		
29	76241		9/7/07	PER	UG	SE	SE	35	42N	32E	Y			483.6	AFA	HU	Happy Creek Inc.	Y	ALF	Flood	125	500
												Sup. Total	765.9	3063.6	AFA							
29	16744	5640	9/20/55	CER	UG	NE	NW	11	42N	31E	Y	13421 Quinn River	460.3 Harv. 225.1 Past.	1814.45	AFS	HU	Quinn River Crossing	Y	Past	Flood	80	160
29	16745	5641	9/20/55	CER	UG	NW	NE	30	43N	32E	Y	13420 Bilk Creek	274.1 Harv. 356.7 Past.	1535.2	AFS	HU	Quinn River Crossing	Y	Past.	Flood	225	622.42
29	16746	5642	9/20/55	CER	UG	NE	NE	20	43N	32E	Y	13421	455.5	809.23	AFS	HU	Quinn River Crossing	Y	ALF	Flood	114	456
29	79457		2/1/10	PER	UG	SW	NE	20	43N	32E			0	1050	AFA	Quinn River Crossing	Y	ALF	Flood	61	244	
	79459		2/1/10	PER																		
29	79456		2/1/10	PER	UG	SE	NE	20	43N	32E			0	1050	AFA	Quinn River Crossing	Y	ALF	Flood	65	260	
	79460		2/1/10	PER								Quinn River										
29	18432	5638	11/18/59	CER	UG	NW	NW	29	43N	32E	Y	13421 Quinn River	522 Harv. 33.1 Past.	2154.2	AFA	HU	Quinn River Crossing	Y	G-Hay	Flood	96	384

**2012 PINE FOREST VALLEY CROP INVENTORY**

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Sup	Supplemental	Permitted Acres	Duty	Units	County	Owner of Record	Crop	Type	Irrigation	Irr Acre	A/F Pumped
												Permit No										
29	18433	5639	11/18/59	CER	UG	NE	SW	20	43N	32E	Y	13421 Quinn River	604.2 Harv. 33.1 Past.	2483	AFA	HU	Quinn River Crossing	Y	ALF	Flood	87	348
29	24257	8354	12/4/67	CER	UG	SW	NW	30	43N	32E	Y	13420 Bilk Creek	201.91	807.64	AFA	HU	Quinn River Crossing	Y	Past.	Flood	215	860
29	79461		2/1/10	PER	UG	SE	SE	17	43N	32E	Y	13420 Bilk Creek	200.56	802.24	AFA	HU	Quinn River Crossing	Y	ALF	Flood	191	764
29	79462		2/1/10	PER	UG	NE	NE	17	43N	32E	Y	13420 Bilk Creek	257.55	1030.2	AFS	HU	Quinn River Crossing	Y	ALF	Flood	127	508
29	26218	9174	7/19/71	CER	UG	SE	NE	16	42N	32E	Y	13421 Quinn River	221.41	771.89	AFS	HU	Quinn River Crossing	N				
29	23690	6620	2/13/67	CER	UG	SW	SW	12	43N	30E	N		43.52	174.08	AFA	HU	Nuffer, Delia W.	Y	ALF	Pivot	36.3	145.2
29	63559		11/12/97	PER	UG	NW	NW	24	43N	30E	Y			320	AFA	HU	Nuffer, Delia W.	N	Alf	Pivot	42	168
29	38540	10164	7/10/79	CER	UG	NW	NE	25	44N	30E	N		282.7	1130.8	AFA	HU	Big Creek Ranch LLC	Y	Grain	Pivot	268	1072
29	44420	11788	9/14/81	CER	UG	NW	SE	24	44N	30E	N		262.7	1050.8	AFA	HU	Big Creek Ranch LLC	Y	Grain	Pivot	269	1076
29	38542	10165	7/10/79	CER	UG	NW	NE	36	44N	30E	N		260.3	1041.2	AFA	HU	Nilson Wallace F.	Y	ALF	Pivot	260.3	1041.2
29	28089	9628	2/8/74	CER	UG	NE	NW	36	44N	30E	Y	B-29 Big, Pass Creek	251.36 251.36	1005.44 1005.44	AFA AFA	HU	Nilson Wallace F.	Y	ALF	Pivots	247	988
29	46283	11611	10/29/82	CER	UG	NW	SE	3	43N	31E	Y	46281-46285 Sup Total	310 717.3	1240 2869.2	AFA AFA	HU	Dufferrena Lands LLC	Y	Grain	Pivot	118	472
29	46285	11613	10/29/82	CER	UG	NW	SE	3	43N	31E	Y	46281-46285 Sup Total	488.68 717.3	1954.72 2869.2	AFA AFA	HU	Dufferrena Lands LLC	Y	ALF	Pivot	124	496

## 2012 PINE FOREST VALLEY CROP INVENTORY

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Sup	Supplemental	Permitted Acres	Duty	Units	County	Owner of Record	Crop	Type	Irrigation	Irr Acre	A/F Pumped
												Permit No										
29	46284	11612	10/29/82	CER	UG	SE	SE	3	43N	31E	Y	46281-46285	103	412	AFA	HU	Duferrena Lands LLC	Y	Past.	Pivot	125	500
												Sup Total	717.3	2869.2	AFA							
29	46282	11610	10/29/82	CER	UG	SW	NW	35	44N	31E	Y	46281-46285	160	640	AFA	HU	Duferrena Lands LLC	N				
												Sup Total	717.3	2869.2	AFA							
29	46281	11609	10/29/82	CER	UG	SW	SW	35	44N	31E	Y	46281-46285	160	640	AFA	HU	Duferrena Lands LLC	Y	Past.	Pivot	117	468
												Sup Total	717.3	2869.2	AFA							
29	46717	13313	3/11/83	CER	UG	NE	SW	27	44N	31E	Y	46722, 46723 46726-46728 46734, 50996 50997, 50998	1914.62	1665.13 7658.48	AFA AFA	HU	Egger Enterprises, LLC	Y	Grain	Pivots	152	608
29	31052		1/31/77	CAN	UG	NW	NW	3	43N	31E						HU	Moore, Craig	Y	ALF	Pivot	125	500
29	46721	11794	3/11/83	CER	UG	SW	SE	34	44N	31E	Y	46724, 46725 46729-46733 45190	1960.6	1136 7842.4	AFA AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivot	142	568
29	46722	13314	3/11/83	CER	UG	NW	NE	28	44N	31E	Y	46717, 46723 46726-46728 46734, 50996 50997, 50998	1914.62	3901.85 7658.48	AFA AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivot	253	1012
29	46723	13315	3/11/83	CER	UG	SW	NW	27	44N	31E	Y	46717, 46722 46726-46728 46734, 50996 50997, 50998	1914.62	3011.72 7658.48	AFA AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivot	159	636
29	50998	13322	6/4/87	CER	UG	SW	NW	27	44N	31E	Y	46717, 46722, 46723, 46734, 46726-46728 50996, 50997	1914.62	1505.86 7658.48	AFA AFA	HU	Egger Enterprises, LLC	Y				

## 2012 PINE FOREST VALLEY CROP INVENTORY

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Twn	Rng	Sup	Supplemental	Permitted Acres	Duty	Units	County	Owner of Record	Crop	Type	Irrigation	Irr Acre	A/F Pumped
												Permit No										
29	46724	11795	3/11/83	CER	UG	SE	NE	33	44N	31E	Y	46721, 46725		1280	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivots	128	512
	46732	11800	3/11/83	CER								46729-46733										
												45190	1960.6	7842.4	AFA							
29	46725	11796	3/11/83	CER	UG	NE	SW	4	43N	31E	Y	46721, 46724		1264	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivot	254	1016
												46729-46733										
												45190	1960.6	7842.4	AFA							
29	46726	13316	3/11/83	CER	UG	NW	SW	28	44N	31E	Y	46717, 46722	Same POD as	1272	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivots	129	516
	46727	13317	3/11/83	CER								46723, 46727,	<b>26727</b>									
												46728, 46734										
												50996-50998		1914.62	7658.48	AFA						
29	46728	13318	3/11/83	CER	UG	NW	NW	28	44N	31E	Y	46717, 46722,		1272	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivots	130	520
												46723, 46726,										
												46727, 46734,										
												50996-50998		1914.62	7658.48	AFA						
29	46729	11797	3/11/83	CER	UG	SW	SW	33	44N	31E	Y	46721, 46724		1280	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivots	129	516
												45190, 46725										
												46730-46733		1960.6	7842.4	AFA						
29	46730	11798	3/11/83	CER	UG	NW	NW	34	44N	31E	Y	46721, 46724		1280	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivots	248	992
												46725, 45190										
												46729										
												46731-46733		1960.6	7842.4	AFA						
29	46731	11799	3/11/83	CER	UG	NE	SW	33	44N	31E	Y	46721, 46724	Same POD as	1232	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivots	258	1032
	46733	11801	3/11/83	CER	UG	NE	SW	33	44N	31E	Y	46725, 45190	<b>46733</b>									
												46729, 46730										
												46732, 46733		1960.6	7842.4	AFA						
29	69361		12/4/02	PER	UG	SW	NW	33	44N	31E	Y	46721, 46724		1955	AFA	HU	Carol J. Egger Living Trust	Y	ALF	Pivots	130	520
												46725, 45190										

### 2012 PINE FOREST VALLEY CROP INVENTORY

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Tw	Rng	Sup	Supplemental Permit No	Permitted Acres	Duty	Units	County	Owner of Record	Crop	Type	Irrigation	Irr Acre	A/F Pumped
46729-46733																						
29	46734	13319	3/11/83	CER	UG	NW	SW	21	44N	31E	Y	46717, 46722, 46723 46726-46728 50996-50998	1914.62	1280 7658.48	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivots	127	508
29	75949		6/26/07	PER	UG	NW	SW	22	44N	31E	Y	46717, 46722, 46723, 46726, 46727, 46728, 46734, 50998, 69361, 75949, 75950, 82273	1914.62		AFA	HU	Egger Living Trust	Y	Grain	Pivots	130	466.16
	75950		6/26/07	PER	UG							75950	1914.62	7658.48	AFA							
29	45190	11790	1/11/1982	CER	UG	SW	NE	4	43N	31E	Y	25228, 27563, 45190, 46721, 46724, 46725, 46729, 46730, 46731, 46732, 46733, 67017, 69362		1954.72	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivots	129	516
29	25228	8444	8/2/69	CER	UG	SW	NE	2	43N	31E	Y	25228, 27563, 45190, 46721, 46724, 46725, 46729, 46730, 46731, 46732, 46733, 67017, 69362	158	632	AFA	HU	Egger Enterprises, LLC	Y	ALF	Pivot	257	1028

**2012 PINE FOREST VALLEY CROP INVENTORY**

Basin	App	Cert	File Date	Status	Source	Qtr	Qtr	Sec	Tw	Rng	Sup	Supplemental Permit No	Permitted Acres	Duty	Units	County	Owner of Record	Crop	Type	Irrigation	Irr Acre	A/F Pumped		
29	27563	8456	6/21/1973	CER	UG	SE	NW	2	43N	31E	Y	25228, 27563, 45190, 46721, 46724, 46725, 46729, 46730, 46731, 46732, 46733, 67017, 69362	160	640	AFA	HU	Egger Enterprises, LLC	N						
29	67017		12/12/00	PER	UG	NE	SE	2	43N	31E	Y	25228, 27563, 45190, 46721, 46724, 46725, 46729, 46730, 46731, 46732, 46733, 67017, 69362		640	AFA	HU	Carol J. Egger Living Trust	Y	Grain	Pivot	122	298.56		
29	69362		12/4/02	PER	UG	Lt	1	2	43N	31E	Y	25228, 27563, 45190, 46721, 46724, 46725, 46729, 46730, 46731, 46732, 46733, 67017, 69362		1955	AFA	HU	Carol J. Egger Living Trust	Y	Grain	Pivot	122	488		

**Total Acre Feet Pumped = 25,783.78**  
**Total Acres = 6,655.60**