STATE OF NEVADA

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WATER RESOURCES

JASON KING, P.E.
STATE ENGINEER

BIG SMOKY VALLEY - NORTHERN PART
HYDROGRAPHIC BASIN 10-137B

CROP INVENTORY

CALENDAR YEAR 2016

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ABSTRACT

This inventory represents the status and usage of all permitted and certificated groundwater rights for irrigation purposes located within Big Smoky Valley (Northern Part), Hydrographic Basin 10-137B, for the year 2016. **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 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 2016, the permitted and certificated groundwater rights for irrigation purposes totaled **10,109 acres** with a total duty of 38,977 acre-feet within Big Smoky Valley (Northern Part). An estimated **3,419 acres** were irrigated and 11,032 acre-feet pumped during 2016.

HYDROGRAPHIC BASIN SUMMARY

HYDROGRAPHIC BASIN NUMBER	137B, REGION 10
HYDROGRAPHIC BASIN NAME	BIG SMOKY VALLEY, NORTHERN PART
COUNTIES	LANDER, NYE
MAJOR COMMUNITIES	CARVERS, ROUND MOUNTAIN
DESIGNATED BASIN	DESIGNATED
DENIALS BASED UPON WATER AVAILABILITY	3293, IRR DEN, 12/19/1985
ESTIMATED IRRIGATION PUMPAGE 2016 (ACRE-FEET)	11,032*

STATE ENGINEER'S ORDERS

NO. 827 – DESIGNATION OF BASIN	OCTOBER 24, 1983
NO. 852 – AMENDED DESIGNATION	APRIL 4, 1985
NO. 1233 – MINE DEWATERING	DECEMBER 20, 2013

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 38,977 ACRE-FEET
DATE: DECEMBER 2016

NOTE: Committed groundwater resource data are accurate for December 2016. 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 manners of use 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 (NDWR), and to estimate the amount of groundwater pumped for irrigation purposes within the Big Smoky Valley - Northern Part Hydrographic Basin (10-137B), for the year 2016.

DESCRIPTION OF THE STUDY AREA

The Big Smoky Valley - Northern Part Hydrographic Basin is located in central Nevada (Figure 1), and occupies approximately 1,323 square miles within Lander and Nye Counties. The adjacent hydrographic basins are Upper Reese River Valley (04-056) to the west, Grass Valley (10-138) to the north, Kobeh Valley (10-139) to the northeast, Monitor Valley – Northern Part (10-140A) and Monitor Valley – Southern Part (10-140B) to the east, Ralston Valley (10-141) to the southeast, and Big Smoky Valley - Tonopah Flat (10-137A) to the south.

Big Smoky Valley - Northern Part is bounded on the west by the Toiyabe Range, to the north by the southern reaches of the Simpson Park Range, and to the east by the Toquima Range. The southern basin boundary is an administrative delineation just south of the town of Round Mountain. The valley is approximately 24 miles wide by 67 miles long, with elevations ranging from approximately 5,500 feet above mean sea level at the valley floor to over 11,000 feet in the surrounding mountains. Irrigation occurs at various areas throughout the lowland portion of the basin (Figure 2).

GROUNDWATER LEVELS

Depths to groundwater in Big Smoky Valley – Northern Part are measured by multiple agencies on an annual basis. Sites at which water level measurements are made by or reported to NDWR include:

137B N09 E43 01CDDC1	137B N10 E43 24DBBC1	137B N10 E44 29CDAA1
137B N09 E43 02DCBD1	137B N10 E43 24DBCC1	137B N10 E44 29CDAA2
137B N09 E43 03AAAD1	137B N10 E43 24DBCC2	137B N10 E44 30AACA1
137B N09 E43 03DBCC1	137B N10 E43 24DBCC3	137B N10 E44 30AACB2
137B N09 E43 10BDCC1	137B N10 E43 24DCAB1	137B N10 E44 30AB 1
137B N09 E43 14BCAB1	137B N10 E43 24DCBA1	137B N10 E44 30ABBB1
137B N10 E43 02B 1	137B N10 E43 24DCBA2	137B N10 E44 30ABBD1
137B N10 E43 04CA 1	137B N10 E43 24DCBD1	137B N10 E44 30ABCD1
137B N10 E43 05AA 01	137B N10 E43 24DCBD2	137B N10 E44 30ABDD1
137B N10 E43 13CABD1	137B N10 E43 24DCBD3	137B N10 E44 30ACAB1
137B N10 E43 13CABD2	137B N10 E43 24DCCA2	137B N10 E44 30ACAC1
137B N10 E43 13CABD3	137B N10 E43 24DCCD1	137B N10 E44 30ACDB1
137B N10 E43 14CDBB1	137B N10 E43 24DCCD2	137B N10 E44 30ADAC1
137B N10 E43 14DCCC1	137B N10 E43 24DDBC1	137B N10 E44 30ADBA1

137B N10 E43 14DCCC2
137B N10 E43 14DCCC3
137B N10 E43 15BCBB1
137B N10 E43 15BCCC1
137B N10 E43 15BDAB1
137B N10 E43 15CACA1
137B N10 E43 15CACA2
137B N10 E43 15CBAB1
137B N10 E43 15CBAB2
137B N10 E43 15CBBC1
137B N10 E43 15CBBC2
137B N10 E43 15CBDD1
137B N10 E43 15CBDD2
137B N10 E43 15CCCB1
137B N10 E43 15CCCB2
137B N10 E43 15CDCA1
137B N10 E43 15CDCA2
137B N10 E43 22BBBA1
137B N10 E43 22BBBA2
137B N10 E43 22BCBA1
137B N10 E43 23AABB1
137B N10 E43 23DBCD1
137B N10 E43 23DBCD2
137B N10 E43 24ACAC1
137B N10 E43 24ACBC1
137B N10 E43 24ACBD1
137B N10 E43 24ACCC1
137B N10 E43 24ACDA1
137B N10 E43 24ACDC1
137B N10 E43 24ADDC2
137B N10 E43 24BDBB3
137B N10 E43 24BDCC1
137B N10 E43 24CAAA1
137B N10 E43 24CAAA2
137B N10 E43 24CAAA3
137B N10 E43 24CAAC2
137B N10 E43 24CBCB1
137B N10 E43 24CBCB2
137B N10 E43 24CBCB3
137B N10 E43 24CCAD1
137B N10 E43 24CCAD2
137B N10 E43 24CCAD3
137B N10 E43 24CDBB1
137B N10 E43 25AACD1
137B N10 E43 25AACD2
137B N10 E43 25AACD3
137B N10 E43 25ABAD1
137B N10 E43 25ABBB1
137B N10 E43 25ABBD1
137B N10 E43 25ABCA1
137B N10 E43 25ABCA2
137B N10 E43 25ABCA3
137B N10 E43 25ABCA4
137B N10 E43 25BAAA1
137B N10 E43 26BDAD1
137B N10 E43 26CCDC1
137B N10 E43 28C_1
137B N10 E43 35CBCA1
137B N10 E43 35DAAA1
137B N10 E43 36CCBC1
137B N10 E44 05ACCA1
137B N10 E44 08ACBB1
137B N10 E44 08CDCA1
137B N10 E44 19BAAC1
137B N10 E44 19CAAB1
137B N10 E44 19CCAA1
137B N10 E44 19CCBA1
137B N10 E44 19CCBA2
137B N10 E44 19CCBB1
137B N10 E44 19CDBC1
137B N10 E44 19CDBC2
137B N10 E44 19CDCB2
137B N10 E44 19CDDA1
137B N10 E44 19CDDA2
137B N10 E44 19DBAD1
137B N10 E44 20CDBC1
137B N10 E44 20CDBC2
137B N10 E44 20CDBC3
137B N10 E44 29ACDB1
137B N10 E44 29ACDB2
137B N10 E44 29BABA1
137B N10 E44 29BACA1
137B N10 E44 29BACA2
137B N10 E44 29BBCC1
137B N10 E44 29BCBB1
137B N10 E44 29BCCC1
137B N10 E44 30ADBD1
137B N10 E44 30ADCA1
137B N10 E44 30ADCA3
137B N10 E44 30ADDC1
137B N10 E44 30BAAD1
137B N10 E44 30BCAD1
137B N10 E44 30BCDC1
137B N10 E44 30BCDC2
137B N10 E44 30BCDC3
137B N10 E44 30DBDD1
137B N11 E43 11A_1
137B N11 E43 24D_1
137B N11 E43 25DCDB1
137B N11 E43 27CD_1
137B N11 E43 29DC_1
137B N11 E44 31ABBB1
137B N11 E44 31CDBB1
137B N11 E44 31DADD1
137B N11 E44 32AACB1
137B N11 E44 32AACD1
137B N11 E44 32ACAC1
137B N11 E44 32ADBA1
137B N11 E44 32ADBA2
137B N11 E44 32ADBA3
137B N11 E44 32BADD1
137B N11 E44 32BDAD1
137B N11 E44 32BDDA1
137B N11 E44 32BDDC1
137B N11 E44 32DBCB2
137B N11 E44 33BAAD1
137B N11 E44 33BABB1
137B N11 E44 33BCDA1
137B N11 E44 33BDAB1
137B N11 E44 33BDAB2
137B N11 E44 33BDCC1
137B N11 E44 33BDCC2
137B N11 E44 33BDCC3
137B N11 E44 33BDCD1
137B N11 E44 33BDCD2
137B N11 E44 33BDDB1
137B N12 E43 09C_1
137B N12 E43 09D_1
137B N12 E44 18BCC 01

137B N10 E43 24CDCD1	137B N10 E44 29BCDB1	137B N13 E43 30D 1
137B N10 E43 24CDCD2	137B N10 E44 29CAAA1	137B N14 E43 28A 2
137B N10 E43 24CDCD3	137B N10 E44 29CAAA2	137B N15 E44 35DACD1
137B N10 E43 24CDDC1	137B N10 E44 29CAAA3	137B N17 E45 18A 1
137B N10 E43 24DACC1	137B N10 E44 29CBCC1	137B N17 E45 18C 1
137B N17 E46 06CD 1		

Additional water level measurements and site data can be obtained from the NDWR website (http://water.nv.gov). Groundwater level data have also been collected by the U.S. Geological Survey (USGS) and can be accessed through their website (http://nevada.usgs.gov).

METHODS TO ESTIMATE IRRIGATED ACREAGE

This report estimates the number of acres irrigated by the groundwater pumped under permits, certificates, and claims of vested right issued by the State Engineer. Table 1 and Figure 3 present the current and historic irrigated acreage and pumpage; Appendix A presents estimates detailed by certificate, permit, or vested claim number. 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 was not practical, aerial and/or satellite imagery were analyzed to determine acreages.

METHODS TO ESTIMATE PUMPAGE

This report estimates the amount of groundwater pumped under the permits and certificates issued by the Nevada State Engineer as well as claims of vested right in the Big Smoky Valley – Northern Part Hydrographic Basin. 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 and the use was irrigation, pumpage was estimated by multiplying the number of hours the well was operated during the past year (determined from an hour meter reading or asking the water user) by the certificated diversion rate.
- Where there were no flow meters or other reliable options for estimating pumpage and the use was irrigation, pumpage was estimated by dividing the Net Irrigation Water Requirement (NIWR) for the crop grown by the efficiency of the irrigation method used, then multiplying by the number of acres irrigated. Irrigation efficiencies associated with three types of irrigation methods are pivot at 85%, wheel line or other hand moved sprinklers at 75%, and flood at 60%. The pumpage amount estimated by this method was limited by the duty of the permit. For places where the groundwater rights were supplemental to surface water, groundwater use was estimated using the NIWR method above, but adjusted based on available surface water for the year. Evapotranspiration and NIWR data by basin can be found on the NDWR website at: http://water.nv.gov/Evapotranspiration.aspx. This approach using the NIWR to estimate pumpage was used starting in 2014; this and subsequent pumpage estimates may differ significantly from estimates of previous years.

TABLES

Table 1. Big Smoky Valley – Northern Part historical irrigated acreage and pumpage data.

Year	2012	2013	2014	2015	2016
Acres Irrigated	3,066	3,300	3,028	3,305	3,419
Acre-Feet Pumped*	10,737	11,906	11,343	11,195	11,032

* The NIWR method to estimate pumpage was used starting in 2014; estimates may differ significantly from previous years.

FIGURES

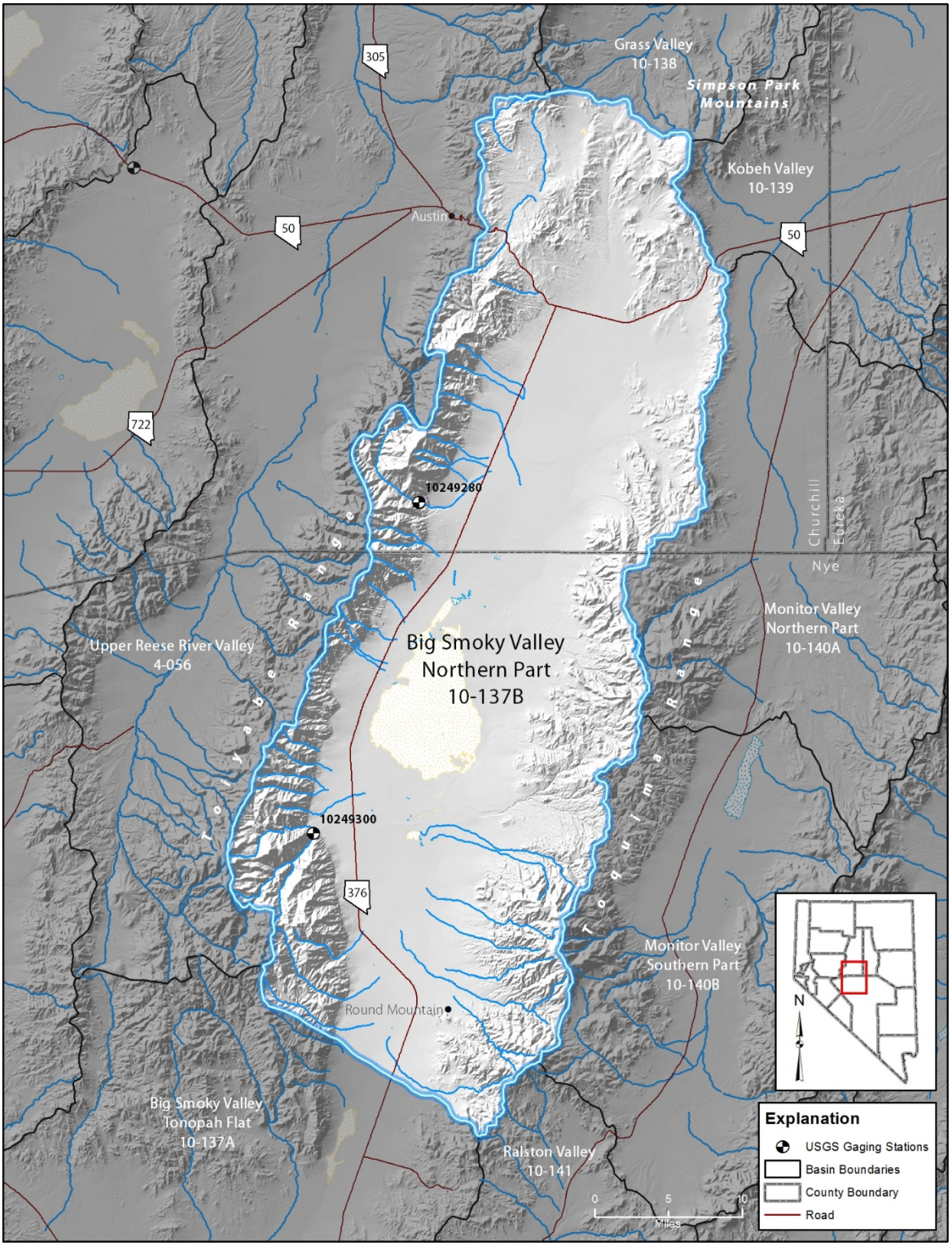

Figure 1. Physiographic map of Big Smoky Valley – Northern Part (Hydrographic Basin 10-137B).

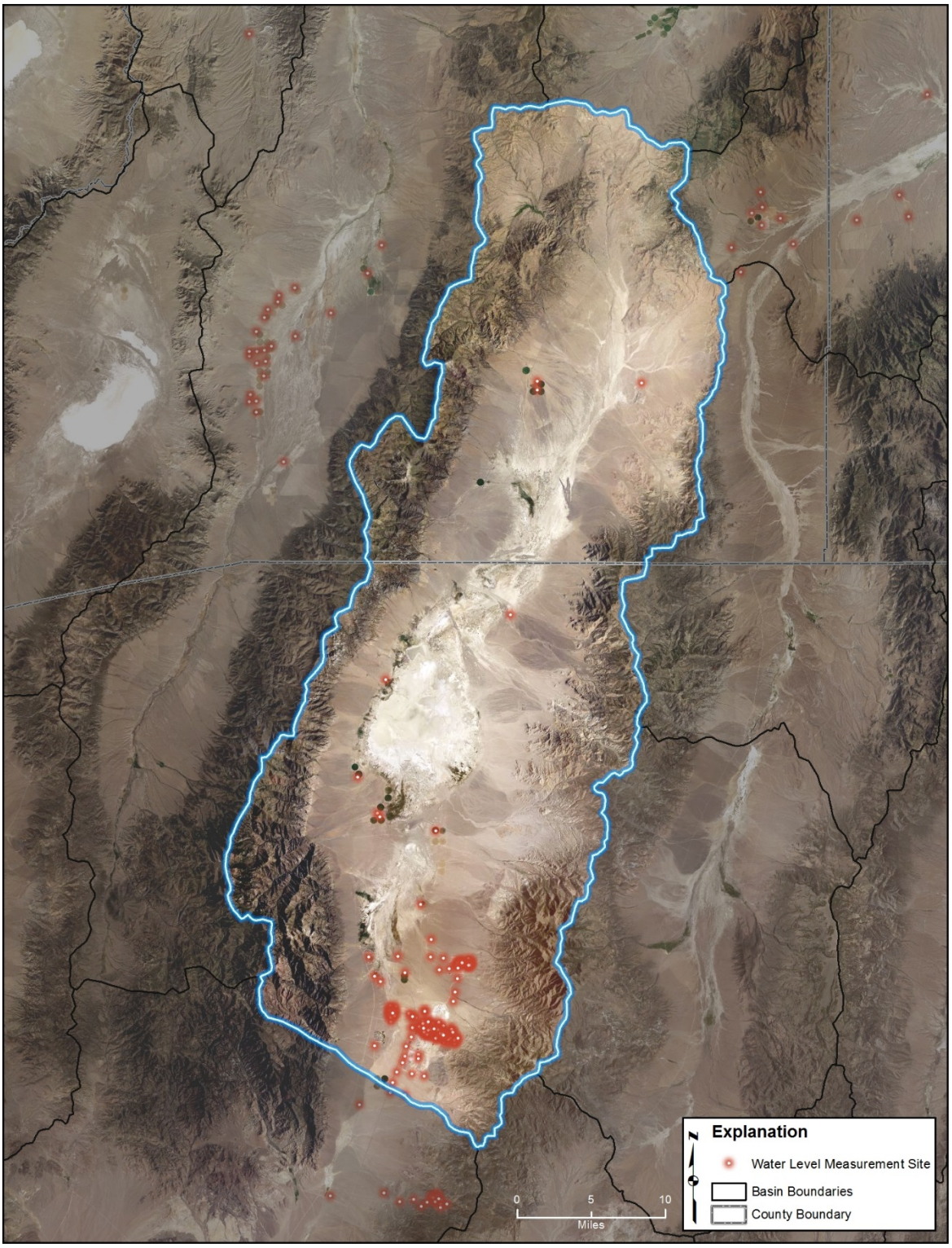

Figure 2. Map showing Big Smoky Valley – Northern Part irrigated acreage and water level monitoring sites. Due to the high density of well sites within the southern portion of the basin, site names were omitted from this map.

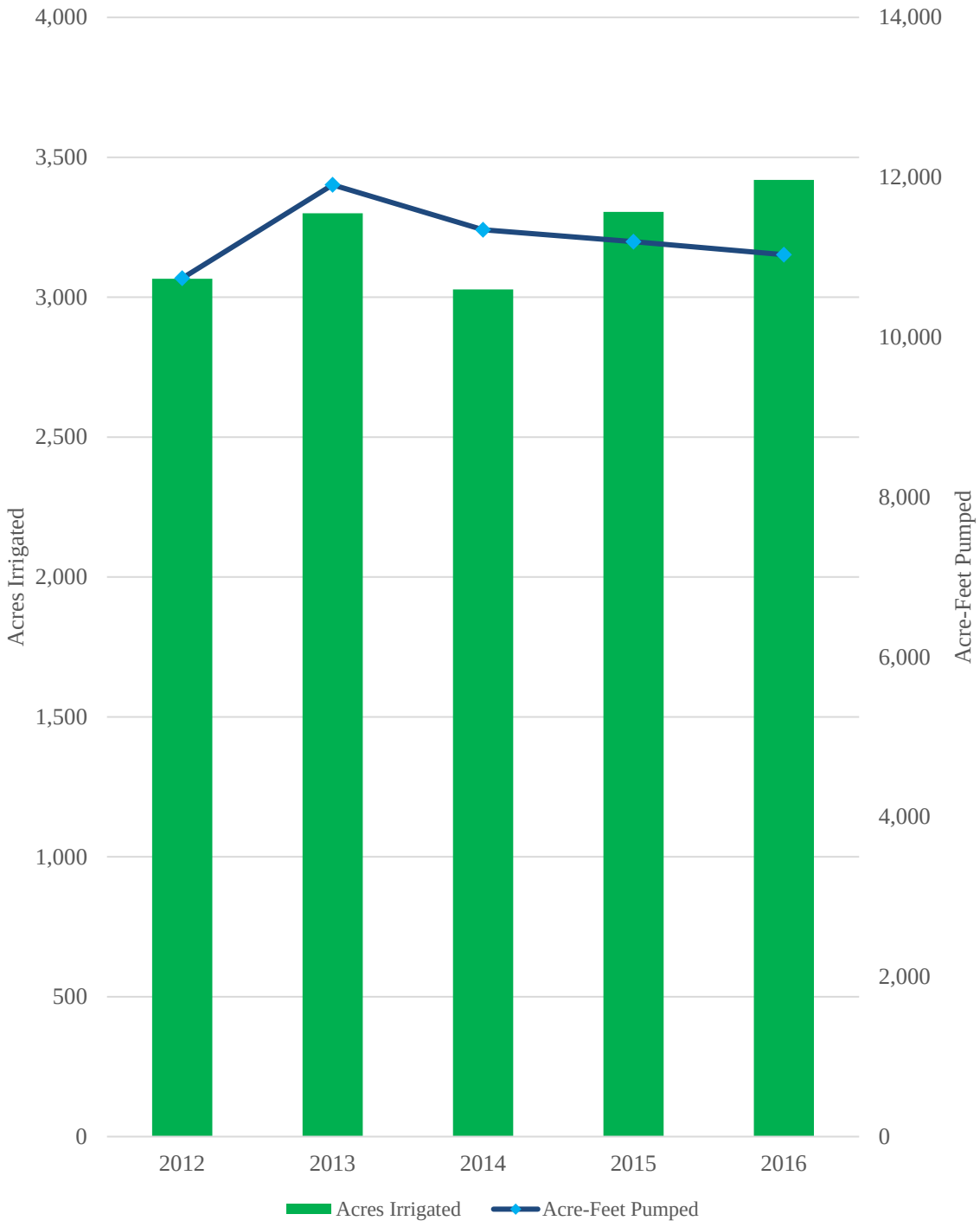

Figure 3. Graph showing Big Smoky Valley – Northern Part historical irrigated acreage and pumpage.

APPENDIX A. 2016 BIG SMOKY VALLEY - NORTHERN PART CROP INVENTORY.

EXPLANATION OF COLUMN HEADINGS

App No	The file number of the Application to Appropriate/Change Water or the Claim of Vested Right.
Status	Indicates the status of an application: Permit (PER), Certificated (CER), 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 other groundwater rights.
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 irrigated.
Supplementally Adjusted Permitted Acres	The supplementally adjusted, total number of acres that is eligible to be irrigated under a supplemental group of water rights.
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 end 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. A "-" in this field indicates that pumpage was attributed to a senior supplemental permit or certificated 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. A "-" in this field indicates that pumpage was attributed to a senior supplemental permit or certificated water right.
Pumpage Estimation Method	The method used to estimate the amount of water pumped. M – Totalizing meter readings. N – NIWR Method. D – Duty.

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
7300	CER	NE	NW	24	10N	43E			12.00	12.00	15.00	15.00	STONIER, CAROL L.			No Estimate		No Estimate	
14014	CER	NW	SW	9	12N	43E	Y	[1]	781.87	5,120.00	3,127.50	20,480.00	BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	158.80	I	224.13	N
14015	CER	SW	SE	8	12N	43E	Y	[1]	969.66		487.80		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	142.43	F	201.03	N
16847	CER	SW	NE	28	14N	43E	Y	[2]	1.25	87.92	5.00	351.68	MCLEOD RANCH & FISHERY LLC	Alfalfa	Wheel Lines	--	F	--	N
16848	CER	NW	SE	28	14N	43E	Y	[2]	20.47		81.88		MCLEOD RANCH & FISHERY LLC	Alfalfa	Wheel Lines	--	F	--	N
16866	CER	SE	NW	29	11N	43E	Y	[3]	0.00	101.20	0.00	404.48	CARVER, RICHARD W. AND DENISE R.	Alfalfa	Wheel Lines	5.36	I	25.73	N
18509	CER	NW	SW	35	19N	45E			34.70	34.70	138.80	138.80	PARSONS, CHARLES W	None	Flood	0.00	F	0.00	N
18840	CER	SE	NW	29	11N	43E	Y	[3]	100.00		400.00		CARVER, RICHARD W. AND DENISE R.	Alfalfa	Wheel Lines	22.74	I	109.15	N
22606	CER	SW	NW	33	11N	43E			15.00	15.00	60.00	60.00	STONIER, CAROL L	None	Wheel Lines	0.00	F	0.00	N
26278	CER	SW	SE	29	11N	43E			46.90	46.90	187.60	187.60	BERG, RONALD LEE	Alfalfa	Pivot	41.00	I	173.65	N
27213	CER	SE	NE	11	11N	43E	Y	[4]	14.69	280.00	58.76	1,120.00	KNIEFEL, RICHARD & TWILA	None	None	0.00	F	0.00	
30130	CER	NW	SE	4	12N	43E	Y	[1]	198.50		794.00		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	111.26	F	260.90	N
31271	CER	NE	NE	19	11N	43E	Y	[5]	204.07	204.07	150.70	450.95	BTAZ NEVADA, LLC	Meadow Hay	Flood	51.28	I	75.64	N
32420	PER	SW	NW	9	12N	43E	Y	[1]	960.00		3,840.00		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	195.46	F	288.69	N
38752	CER	NE	NE	5	10N	43E			74.92	74.92	299.68	299.68	BERG, KARL & ALICE	None	Wheel Lines	0.00	F	0.00	N
40007	CER	SW	NE	28	14N	43E	Y	[2]	47.00		179.07		MCLEOD RANCH & FISHERY LLC	Alfalfa	Wheel Lines	0.10	I	0.48	N
41150	CER	SW	NW	29	11N	43E	Y	[3]	98.00		50.68		CARVER, RICHARD W. AND DENISE R.	Alfalfa	Wheel Lines	--	I	--	N
41151	CER	SW	NW	29	11N	43E	Y	[3]	98.00		54.30		CARVER, RICHARD W. AND DENISE R.	Alfalfa	Wheel Lines	--	I	--	N
41152	CER	SW	NW	29	11N	43E	Y	[3]	98.00		72.40		CARVER, RICHARD W. AND DENISE R.	Alfalfa	Wheel Lines	--	I	--	N
44373	PER	NW	SE	4	12N	43E	Y	[1]	1,120.00		486.00		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	84.63	F	358.43	N
44374	PER	SW	SE	4	12N	43E	Y	[1]	1,000.00		4,000.00		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	--	F	--	N
45528	PER	SE	SE	9	12N	43E	Y	[1]	1,160.00		1,280.00		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	3.28	F	4.63	N
45529	PER	NW	SE	33	13N	43E	Y	[1]	1,520.00		1,280.00		BTAZ NEVADA, LLC	No Crop	None	0.00	F	0.00	
45530	PER	SE	NW	33	13N	43E	Y	[1]	1,520.00		1,280.00		BTAZ NEVADA, LLC	No Crop	None	0.00	F	0.00	
46219	CER	NW	NW	2	10N	43E			157.62	157.62	630.48	630.48	BTAZ NEVADA, LLC	Grass	Pivot	136.06	I	560.25	N
46687	CER	NW	NW	2	10N	43E			78.38	78.38	313.52	313.52	BTAZ NEVADA, LLC	Grass	Pivot	62.91	I	259.04	N
51563	CER	SW	SE	30	13N	43E			125.36	125.36	501.44	501.44	CANDEE, WILLIAM AND JOAN M.	Alfalfa	Pivot	125.36	I	501.44	D
52194	CER	NE	NE	19	11N	43E	Y	[5]	204.07		150.12		BTAZ NEVADA, LLC	Meadow Hay	Flood	--	F	--	N
52730	CER	NE	NE	19	11N	43E	Y	[5]	204.07		150.12		BTAZ NEVADA, LLC	Meadow Hay	Flood	--	F	--	N
52856	CER	NE	SW	4	10N	43E			6.86	6.86	27.44	27.44	JONES, EVERETTE E. & VIRGINIA P.	Grass	Wheel Lines	6.86	I	27.44	D
54495	CER	SE	NW	10	14N	43E		[6]	10.13	10.13	40.52	40.52	WALTERS, GORDON C	Pasture	Sprinkler	5.00	F	23.33	N
54911	CER	SW	SW	28	10N	43E	Y	54912, 64181	32.79	105.81	131.16	487.24	ROUND MOUNTAIN GOLD CORP AND KG MINING INC.	Grass	Sprinkler	32.79	I	131.16	M
54912	CER	SW	SW	28	10N	43E	Y	54911, 64181	73.02		292.08		ROUND MOUNTAIN GOLD CORP AND KG MINING INC.	Grass	Sprinkler	73.02	F	270.65	M
56192	PER	NW	SE	9	12N	43E	Y	[1]	1,160.00		4,343.82		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	78.36	F	110.60	N
56678	PER	NW	SW	3	12N	43E	Y	[1]	1,720.00		4,343.82		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	--	F	--	N
56692	CER	NE	SW	10	14N	43E			4.76	4.76	11.82	11.82	KASTEN, JOEL T. & GEORGIA L	Pasture, Trees	Sprinkler	2.45	I	11.43	N
59759	PER	NE	NE	9	12N	43E	Y	[1]	1,000.00		4,000.00		BTAZ NEVADA, LLC	Alfalfa, Grass	Pivot	--	F	--	N
62459	CER	SW	NE	30	13N	43E			127.56	127.56	510.24	510.24	CANDEE, WILLIAM AND JOAN M.	Alfalfa	Pivot	109.00	I	461.65	D

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
64181	PER	SW	SW	28	10N	43E	Y	54911, 54912	105.81		64.00		ROUND MTN GOLD CORP	Grass	Sprinkler	--	F	--	M
66537	PER	NW	SE	18	17N	45E			320.00	320.00	960.00	960.00	YOUNG, RALPH	Alfalfa	Pivot	240.00	I	720.00	D
66538	PER	NW	NE	18	17N	45E			320.00	320.00	960.00	960.00	YOUNG, PATRICIA	Alfalfa	Pivot	240.00	I	720.00	D
70212	PER	NW	NE	15	14N	43E	Y	[7]	100.00	200.00	400.00	800.00	HASTIE, MICHAEL C.	Pasture	Flood	100.00	I	400.00	D
73563	PER	SW	NW	19	12N	44E			300.00	300.00	1,200.00	1,200.00	BTAZ NEVADA, LLC	Alfalfa	Pivot	252.00	I	1,067.29	N
73564	PER	SW	NW	18	12N	44E			300.00	300.00	1,200.00	1,200.00	BTAZ NEVADA, LLC	Alfalfa	Pivot	252.00	I	1,067.29	N
73565	PER	NW	SE	30	12N	44E			300.00	300.00	1,200.00	1,200.00	BTAZ NEVADA, LLC	Alfalfa	Pivot	252.00	I	1,067.29	N
76073	PER	SW	SE	7	13N	43E	Y	[8]	153.90	153.90	615.60	615.60	BERG, RONALD L & GLENDA G	Pasture	Flood	139.40	F	615.60	D
76664	PER	SE	NE	11	11N	43E	Y	[4]	160.00		640.00		KNIEFEL, RICHARD & TWILA	None	None	0.00	F	0.00	N
76978	PER	SW	W	1	11N	43E	Y	[4]	240.00		960.00		KNIEFEL, RICHARD & TWILA	Alfalfa	Pivot	43.00	I	182.12	N
77047	PER	SW	SW	9	11N	43E	Y	[9]	8.14	31.27	32.56	125.07	BERG, WILLIAM A., JR.	None	None	0.00	F	0.00	
77048	PER	SW	SW	9	11N	43E	Y	[9]	8.81		35.23		BERG, WILLIAM A., JR.	None	None	0.00	F	0.00	
77049	PER	SW	SW	9	11N	43E	Y	[9]	7.82		31.28		BERG, WILLIAM A., JR.	None	None	0.00	F	0.00	
77220	PER	NW	SW	20	15N	44E	Y	[10]	480.00	480.00	1,560.00	1,560.00	BTAZ NEVADA, LLC	No Crop	None	59.00	F	0.00	
77641	PER	NE	NE	21	16N	44E		[11]	320.00	320.00	1,280.00	1,280.00	YOUNG BROTHERS	Alfalfa	Pivot	240.00	I	757.27	N
82643	PER	NW	SW	5	11N	43E	Y	[12]	302.10	302.10	1,208.40	1,208.40	BERG, RUSSEL	No Crop	None	0.00	F	0.00	
82671	PER	NE	NE	2	14N	43E	Y	[13]	117.40	117.40	469.60	469.60	CHAMBERS, TODD AND MEGAN	No Crop	None	0.00	F	0.00	
83146	PER	SE	NE	28	14N	43E	Y	[2]	85.60		342.40		MCLEOD RANCH & FISHERY LLC	Alfalfa	Wheel Lines	--	F	--	N
83147	PER	SW	NE	28	14N	43E	Y	[2]	38.60		147.07		MCLEOD RANCH & FISHERY LLC	Alfalfa	Wheel Lines	25.82	I	123.94	N
83814	PER	SW	SW	9	11N	43E	Y	[9]	6.50		26.00		BERG, KENNETH W. AND BARBARA L.	None	None	0.00	F	0.00	
84184	PER	SW	NE	28	14N	43E	Y	[14]	80.00	80.00	320.00	320.00	MCLEOD RANCH & FISHERY LLC	No Crop	None	0.00	F	0.00	
84278	PER	NW	NE	10	14N	43E	Y	[7]	100.00		400.00		HASTIE, MICHAEL C.	Grass	Pivot	100.00	F	100.98	N
85899	PER	NW	NW	18	18N	45E	Y	[15]	56.30	56.30	225.20	225.20	BLACKBIRD RANCH, LLC						
86489T	PER	SW	NW	29	11N	43E	Y	[3]	25.00		100.00		CARVER, RICHARD W. AND DENISE R.	Alfalfa	Wheel Lines	--	I	--	N
V02427	VST	SW	NE	28	14N	43E	Y	[2]	5.00		25.00		MCLEOD RANCH & FISHERY LLC	Alfalfa	Wheel Lines	11.09	I	53.23	N
V02428	VST	NW	SE	28	14N	43E	Y	[2]	20.47		102.35		MCLEOD RANCH & FISHERY LLC	Alfalfa	Wheel Lines	16.24	I	77.95	N
V10331	VST	SE	NE	19	13N	43E	Y	V10332, V10333	60.00	60.00	210.00	210.00	PEAVINE RANCHES			No Estimate		No Estimate	
V10332	VST	SE	NE	19	13N	43E	Y	V10331, V10333	60.00		210.00		PEAVINE RANCHES			No Estimate		No Estimate	
V10333	VST	SE	NE	19	13N	43E	Y	V10331, V10332	60.00		210.00		PEAVINE RANCHES			No Estimate		No Estimate	
V10334	VST	NE	NE	30	13N	43E			120.00	120.00	420.00	420.00	PEAVINE RANCHES			No Estimate		No Estimate	
V10335	VST	NW	NW	29	13N	43E			55.00	55.00	192.50	192.50	PEAVINE RANCHES			No Estimate		No Estimate	

Total Supplementally Adjusted Permitted/Certificated Acreage 10,109.16

Total Supplementally Adjusted Permitted/Certificated Duty 38,977.26

Total Irrigated Acreage 3,418.70

Total Estimated Pumpage 11,032.42

[1] PERMITS 14014, 14015, 30130, 32420, 44373, 44374, 45528, 45529, 45530, 56192, 56678 AND 59759 HAVE A TOTAL COMBINED DUTY OF 20,480.00 AFA FOR THE IRRIGATION OF 5,120 ACRES, OF WHICH 3,648.2 ACRES ARE SUPPLEMENTAL TO THE DECREED WATERS OF NORTH TWIN RIVER AND SOUTH TWIN RIVER AND TRIBUTARIES UNDER V02408 AND THE DECREED WATERS OF LAST CHANCE, OPHIR, WISCONSIN AND SUMMIT CREEKS.

[2] PERMITS 16847, 16848, 40007, 83146 AND 83147 AND PROOFS OF APPROPRIATION V02427 AND V02428 HAVE A TOTAL COMBINED DUTY OF 351.68 AFA. PORTIONS OF THE LAND APPURTENANT TO THE PERMITS AND PROOFS OF APPROPRIATION MAY BE SUPPLEMENTAL TO THE WATERS OF MCLEOD CREEK UNDER PROOF OF APPROPRIATION V05777.

[3] PERMITS 16866, 18840, 41150, 41151, 41152 AND 86489T HAVE A TOTAL COMBINED DUTY OF 404.48 AFA.

[4] PERMITS 27213, 76664 AND 76978 HAVE A TOTAL COMBINED DUTY OF 1,120.00 AFA. PERMITS 27213, 45395 (BARKER CREEK), 76664, 76978 AND PROOF OF APPROPRIATION V01285 (BARKER CREEK) HAVE A TOTAL COMBINED DUTY OF 1,240.00 AFA FOR THE IRRIGATION OF 320 ACRES.

[5] PERMITS 31271, 52194 AND 52730 HAVE A TOTAL COMBINED DUTY OF 450.95 AFA FOR THE IRRIGATION OF 204.07ACRES, OF WHICH 56.97 ACRES ARE SUPPLEMENTAL TO THE WATERS OF BROAD CREEK UNDER PROOF OF APPROPRIATION V01594, 147.10 ACRES ARE SUPPLEMENTAL TO THE WATERS OF BROAD CREEK AND TRIBUTARIES UNDER PROOF OF APPROPRIATION V02864 AND 204.07 ACRES ARE SUPPLEMENTAL TO THE WATERS OF DEVIL'S CANYON CREEK UNDER PROOF OF APPROPRIATION V02874.

[6] APPROXIMATELY 4.81 ACRES WITHIN THE DESCRIBED PLACE OF USE OF PERMIT 54495, CERTIFICATE 18542 ARE SUPPLMENTAL TO THE WATERS OF SOUTH AIKEN CREEK UNDER PERMIT 25481, CERTIFICATE 7440.

[7] PERMITS 70212 AND 84278 ARE SUPPLEMENTAL TO THE WATERS OF SOUTH AIKEN CREEK UNDER PERMIT 25481, CERTIFICATE 7440; ALICE GENDRON CREEK UNDER PERMIT 27731, CERTIFICATE 10499 AND DECKER CREEK UNDER PERMIT 30173, CERTIFICATE 9053.

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

[8] PERMIT 76073 IS SUPPLEMENTAL TO THE WATERS OF CLAY AND WILDCAT CREEKS UNDER PERMIT 16560, CERTIFICATE 4813; CLAY CREEK UNDER PROOF OF APPROPRIATION V05759 AND WILDCAT CREEK UNDER PROOF OF APPROPRIATION V05760, HAVING A TOTAL COMBINED DUTY OF 615.6 AFA FOR THE IRRIGATION OF 153.9 ACRES.

[9] PERMITS 77047, 77048, 77049 AND 83814 HAVE A TOTAL COMBINED DUTY OF 125.07 AFA FOR THE IRRIGATION OF 31.27 ACRES.

[10] PERMIT 77220 IS PARTIALLY SUPPLEMENTAL TO THE WATERS OF CLEAR CREEK UNDER PROOF OF APPROPRIATION V01609, HAVING A TOTAL COMBINED DUTY OF 1,560 AFA FOR THE IRRIGATION OF 480 ACRES.

[11] PERMIT 77641 IS SUPPLEMENTAL TO THE WATERS OF FRENCHMAN CREEK UNDER DECREED CLAIM V02416 AND PERMIT 13059, CERTIFICATE 3437; GILLMAN SPRINGS UNDER DECREED CLAIM V01527; KINGSTON CREEK (BIG SMOKY CREEK, BIG SMOKEY CREEK) UNDER PERMIT 26284, CERTIFICATE 8878; PERMIT 26285, CERTIFICATE 8906; PERMIT 30138, CERTIFICATE 9753; PERMIT 67295, 18771 (DECREED); PERMIT 67296, CERTIFICATE 18772 AND PERMIT 67297, CERTIFICATE 18773 (DECREED); ROCK CREEK UNDER DECREED CLAIMS V01527 AND V02414 AND PERMIT 13062, CERTIFICATE 3438; SANTA FE CREEK UNDER DECREED CLAIM V02412 AND PERMIT 13064, CERTIFICATE 3440; SHEEP CREEK UNDER DECREED CLAIMS V01527 AND V02413 AND PERMIT 13063, CERTIFICATE 3439 AND SHOSHONE CREEK UNDER DECREED CLAIM V02411 AND PERMIT 13065, CERTIFICATE 3451.

[12] PERMIT 82643 IS SUPPLEMENTAL TO THE WATERS OF BELCHER CREEK UNDER PERMIT 6366, CERTIFICATE 1971; PERMIT 13612, CERTIFICATE 5150; PERMIT 15272, CERTIFICATE 5662 AND PROOF OF APPROPRIATION V00706.

[13] APPROXIMATELY 91.1 ACRES WITHIN THE DESCRIBED PLACE OF USE OF PERMIT 82671 ARE SUPPLMENTAL TO THE WATERS OF AIKEN CREEK UNDER PERMIT 25482, CERTIFICATE 7441.

[14] PERMIT 84184 MAY BE SUPPLEMENTAL TO THE WATERS OF MCLEOD CREEK UNDER PROOF OF APPROPRIATION V05777.

[15] PERMIT 85899 IS SUPPLEMENTAL TO THE WATERS OF BLACKBIRD CREEK UNDER PERMIT 20042.