

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

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STATE ENGINEER



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

CROP INVENTORY

CALENDAR YEAR 2018

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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 2018. **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 2018, the permitted and certificated groundwater rights for irrigation purposes totaled 10,086 acres with a total duty of 38,784 acre-feet within Big Smoky Valley–Northern Part. An estimated **3,642 acres** were irrigated and **14,111 acre-feet** pumped during 2018.

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
BASIN DESIGNATION STATUS	DESIGNATED
DENIALS BASED UPON WATER AVAILABILITY	3293 , IRR DEN, 12/19/1985
ESTIMATED IRRIGATION PUMPAGE 2018 (ACRE-FEET)	14,111*

STATE ENGINEER'S ORDERS

[NO. 827 – DESIGNATION OF BASIN](#)
[NO. 852 – AMENDED DESIGNATION](#)
[NO. 1233 – MINE DEWATERING](#)

OCTOBER 24, 1983
APRIL 4, 1985
DECEMBER 20, 2013

COMMITTED GROUNDWATER RESOURCE FOR IRRIGATION PURPOSES: 38,784 ACRE-FEET
DATE: DECEMBER 2018

NOTE: Committed groundwater resource data are accurate for December 2018. 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 2018.

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 NDWR, and also reported by other entities. Data for active monitoring well sites (Figure 2) can be found on NDWR’s website at <http://water.nv.gov/WaterLevelData.aspx>, or via the Nevada Hydrology Data Mapping Application, accessible at <http://water.nv.gov/mapping.aspx>. Groundwater level data are also collected by the U.S. Geological Survey (USGS) and may be accessed through their website at <https://waterdata.usgs.gov/nv/nwis/gw>.

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 began in 2014; 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	2014	2015	2016	2017	2018
Acres Irrigated	3,028	3,305	3,419	2,432	3,642
Acre-Foot Pumped	11,343	11,195	11,032	9,685	14,111

FIGURES

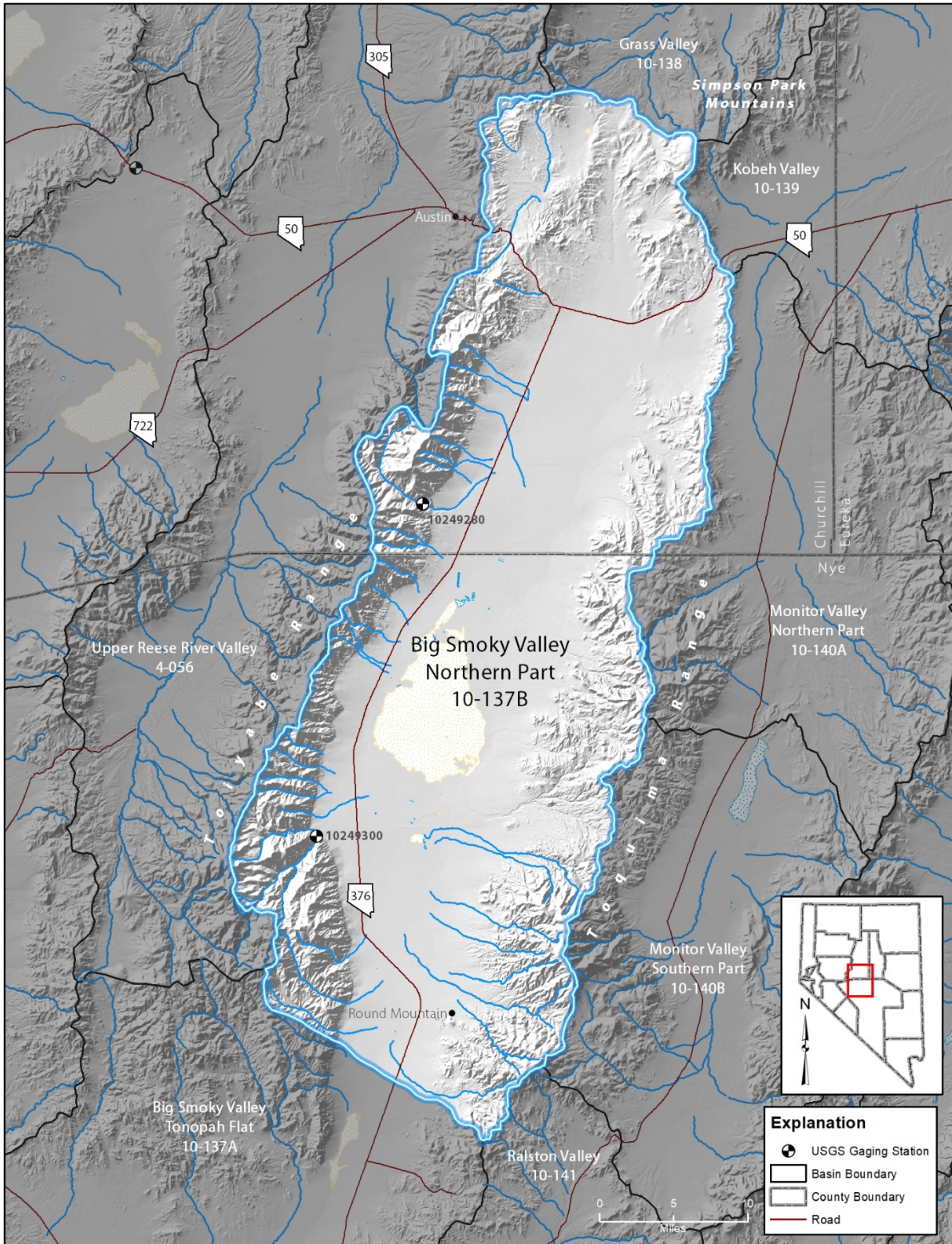


Figure 1. Physiographic map of Big Smoky Valley–Northern Part (Hydrographic Basin 10-137B).

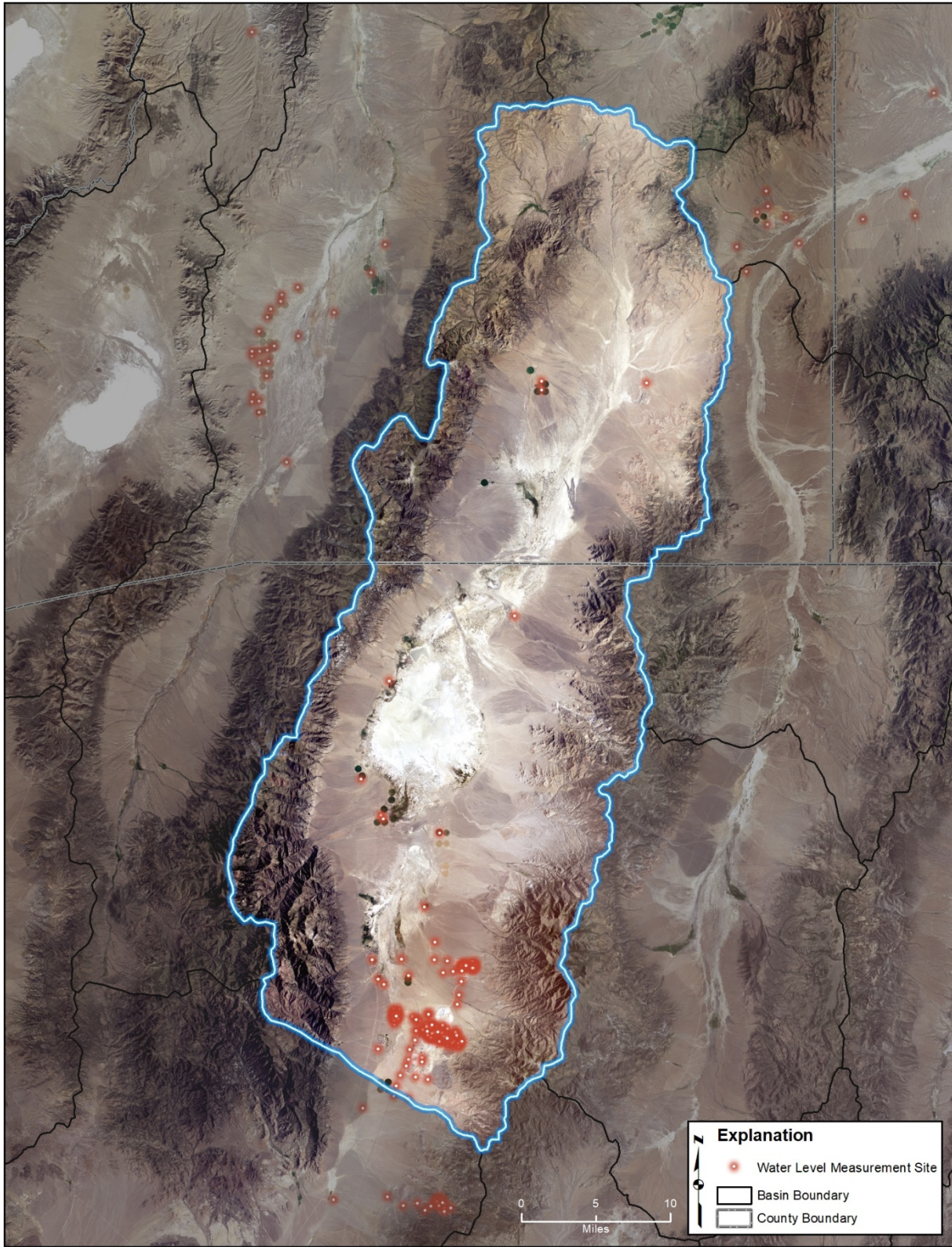


Figure 2. Map showing Big Smoky Valley–Northern Part irrigated acreage and water level monitoring sites. Due to the high density of well sites within the southern portion of the basin, site names were omitted from this map.

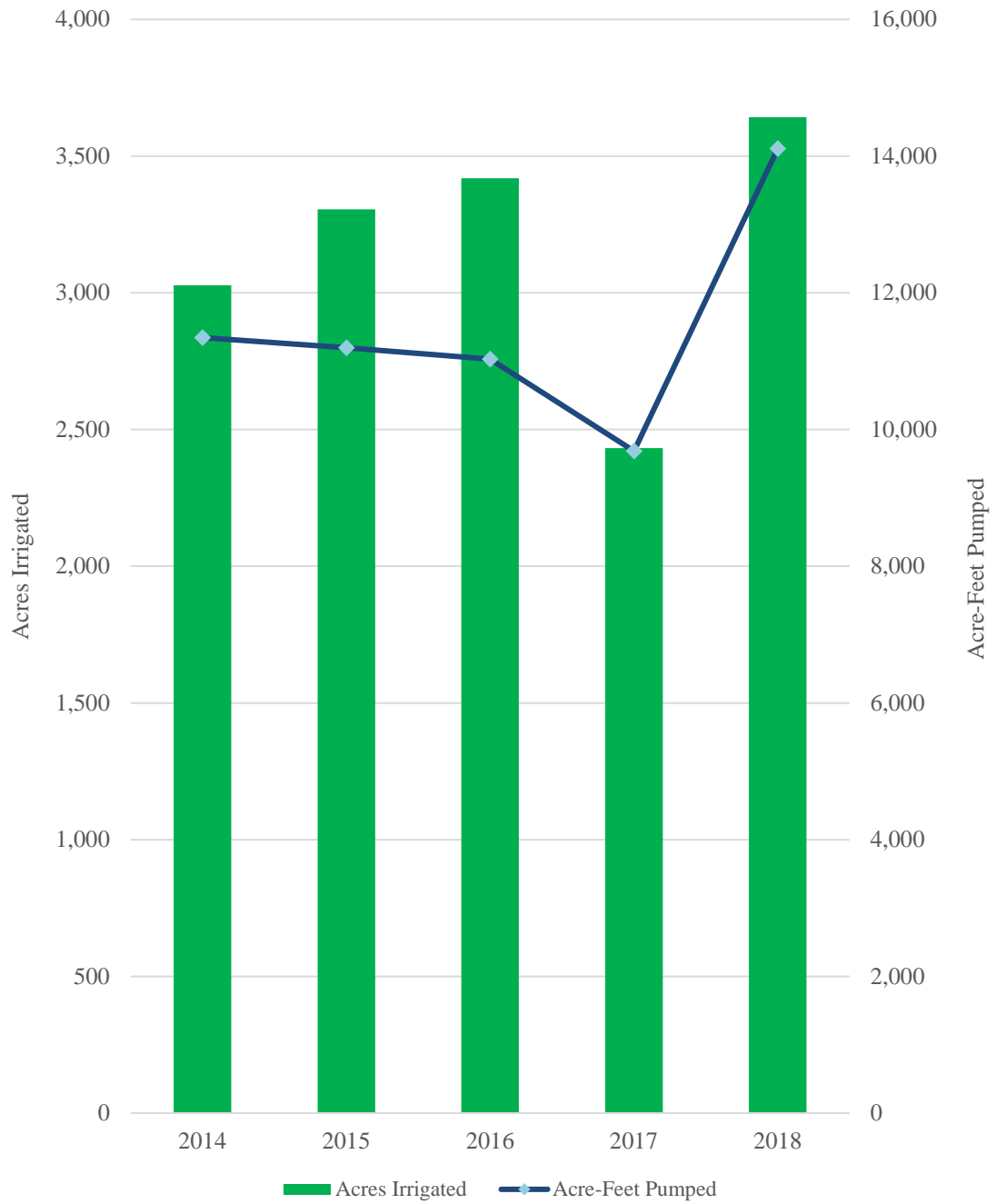


Figure 3. Graph showing Big Smoky Valley–Northern Part historical irrigated acreage and pumpage.

APPENDIX A. 2018 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.
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).

NIWR (ft)	Net Irrigation Water Requirement, defined to be equal to the annual crop evapotranspiration less the effective precipitation entering the root zone that is available for evaporation or transpiration.
Irrigation Method	The method by which the water is applied to the crop and ground (e.g. pivot).
Irrigation Efficiency	The estimated efficiency of the desired irrigation method used.
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	NIWR (ft)	Irrigation Method	Irrigated Acres	Acreage Estimation Method	Irrigation Efficiency	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	Footnote 1	781.87	5,120.00	3,127.50	20,480.00	BTAZ NEVADA, LLC	Alfalfa, Grass		Pivot	781.30	F		3,125.20	D
14015	CER	SW	SE	8	12N	43E	Y	Footnote 1	969.66		487.80		BTAZ NEVADA, LLC	Alfalfa, Grass		Pivot	--	F		--	N
16847	CER	SW	NE	28	14N	43E	Y	Footnote 2	1.25	87.92	5.00	351.68	MCLEOD RANCH & FISHERY LLC	Alfalfa	3.6	Wheel Lines	1.25	F	75%	6.00	N
16848	CER	NW	SE	28	14N	43E	Y	Footnote 2	20.47		81.88		MCLEOD RANCH & FISHERY LLC	Alfalfa	3.6	Wheel Lines	--	F		--	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			3.12	3.12	12.48	12.48	CARVER, RICHARD L. AND MARGARET A.	None		None	0.00	N/A		0.00	
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	3.6	Pivot	41.00	F	85%	173.65	N
27213	CER	SE	NE	11	11N	43E	Y	Footnote 4	14.69	280.00	58.76	1,120.00	KNIEFEL, RICHARD & TWILA	Alfalfa	3.6	Pivot	14.69	F	85%	62.22	N
30130	CER	NW	SE	4	12N	43E	Y	Footnote 1	198.50		794.00		BTAZ NEVADA, LLC	Alfalfa, Grass		Pivot	--	F		--	N
31271	CER	NE	NE	19	11N	43E	Y	Footnote 5	204.07	204.07	150.70	450.95	BTAZ NEVADA, LLC	Meadow Hay	3.5	Flood	10.20	F	60%	59.50	N
32420	PER	SW	NW	9	12N	43E	Y	Footnote 1	960.00		3,840.00		BTAZ NEVADA, LLC	Alfalfa, Grass		Pivot	--	F		--	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	Footnote 2	47.00		179.07		MCLEOD RANCH & FISHERY LLC	Alfalfa		Wheel Lines	47.00	F	75%	179.07	D
44373	PER	NW	SE	4	12N	43E	Y	Footnote 1	1,120.00		486.00		BTAZ NEVADA, LLC	Alfalfa, Grass	3.6	Pivot	--	F		--	N
44374	PER	SW	SE	4	12N	43E	Y	Footnote 1	1,000.00		4,000.00		BTAZ NEVADA, LLC	Alfalfa, Grass	3.6	Pivot	--	F		--	N
45528	PER	SE	SE	9	12N	43E	Y	Footnote 1	1,160.00		1,280.00		BTAZ NEVADA, LLC	Alfalfa, Grass	3.6	Pivot	--	F		--	N
45529	PER	NW	SE	33	13N	43E	Y	Footnote 1	1,520.00		1,280.00		BTAZ NEVADA, LLC	Alfalfa, Grass		Pivot	--	F		--	
45530	PER	SE	NW	33	13N	43E	Y	Footnote 1	1,520.00		1,280.00		BTAZ NEVADA, LLC	Alfalfa, Grass		Pivot	--	F		--	
46219	CER	NW	NW	2	10N	43E			157.62	157.62	630.48	630.48	BTAZ NEVADA, LLC	Grass	3.5	Pivot	139.11	F	85%	572.81	N
46687	CER	NW	NW	2	10N	43E			78.38	78.38	313.52	313.52	BTAZ NEVADA, LLC	Grass	3.5	Pivot	62.09	F	85%	255.66	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	F		501.44	D
52194	CER	NE	NE	19	11N	43E	Y	Footnote 5	204.07		150.12		BTAZ NEVADA, LLC	Meadow Hay		Flood	--	F		--	N
52730	CER	NE	NE	19	11N	43E	Y	Footnote 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	F		27.44	D
54495	CER	SE	NW	10	14N	43E		Footnote 6	10.13	10.13	40.52	40.52	WALTERS, GORDON C	None		Sprinkler	0.00	F		0.00	
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	F		131.16	D
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		292.08	D
56192	PER	NW	SE	9	12N	43E	Y	Footnote 1	1,160.00		4,343.82		BTAZ NEVADA, LLC	Alfalfa, Grass		Pivot	--	F		--	N
56678	PER	NW	SW	3	12N	43E	Y	Footnote 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	4.76	F		11.82	D
59759	PER	NE	NE	9	12N	43E	Y	Footnote 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	3.6	Pivot	110.00	F		465.88	N
64181	PER	SW	SW	28	10N	43E	Y	54911, 54912	105.81		64.00		ROUND MTN GOLD CORP	Grass		Sprinkler	31.69	F		126.76	M
66537	PER	NW	SE	18	17N	45E			320.00	320.00	960.00	960.00	YOUNG, RALPH	Alfalfa		Pivot	240.00	F		720.00	D
66538	PER	NW	NE	18	17N	45E			320.00	320.00	960.00	960.00	YOUNG, PATRICIA	Alfalfa		Pivot	240.00	F		720.00	D
70212	PER	NW	NE	15	14N	43E	Y	Footnote 7	100.00	200.00	400.00	800.00	HASTIE, MICHAEL C.	Pasture	2.8	Flood	100.00	F		233.33	N
73563	PER	SW	NW	19	12N	44E			300.00	300.00	1,200.00	1,200.00	BTAZ NEVADA, LLC	Alfalfa	3.6	Pivot	252.00	F	85%	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	3.6	Pivot	252.00	F	85%	1,067.29	N

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	NIWR (ft)	Irrigation Method	Irrigated Acres	Acreage Estimation Method	Irrigation Efficiency	Acre-Feet Pumped	Pumpage Estimation Method	
73565	PER	NW	SE	30	12N	44E			300.00	300.00	1,200.00	1,200.00	BTAZ NEVADA, LLC	Alfalfa	3.6	Pivot	252.00	F	85%	1,067.29	N	
76073	PER	SW	SE	7	13N	43E	Y	Footnote 8	130.75	130.75	422.71	422.71	BERG, RONALD L & GLENDA G	Pasture		Flood	130.75	F		422.71	D	
76664	PER	SE	NE	11	11N	43E	Y	Footnote 4	160.00		640.00		KNIEFEL, RICHARD & TWILA	Alfalfa	3.6	Pivot	55.31	F	85%	234.25	N	
76978	PER	SW	W	1	11N	43E	Y	Footnote 4	240.00		960.00		KNIEFEL, RICHARD & TWILA	Alfalfa		Pivot	--	F		--	N	
77047	PER	SW	SW	9	11N	43E	Y	Footnote 9	8.14	31.27	32.56	125.07	BERG, WILLIAM A., JR.	Meadow Hay	2.8	Wheel Line	8.14	F	75%	30.39	N	
77048	PER	SW	SW	9	11N	43E	Y	Footnote 9	8.81		35.23		BERG, WILLIAM A., JR.	Meadow Hay	2.8	Flood	6.86	F	60%	32.01	N	
77049	PER	SW	SW	9	11N	43E	Y	Footnote 9	7.82		31.28		BERG, WILLIAM A., JR.	None		None	0.00	F		0.00		
77220	PER	NW	SW	20	15N	44E	Y	Footnote 10	480.00	480.00	1,560.00	1,560.00	BTAZ NEVADA, LLC	None		None	0.00	F		0.00		
77641	PER	NE	NE	21	16N	44E		Footnote 11	320.00	320.00	1,280.00	1,280.00	YOUNG BROTHERS	Alfalfa	3.6	Pivot	124.00	F	85%	525.18	N	
82643	PER	NW	SW	5	11N	43E	Y	Footnote 12	302.10	302.10	1,208.40	1,208.40	BERG, RUSSEL	Grass		Flood	302.00	F	60%	1,208.40	D	
82671	PER	NE	NE	2	14N	43E	Y	Footnote 13	117.40	117.40	469.60	469.60	CHAMBERS, TODD AND MEGAN	None		None	0.00	F		0.00		
83146	PER	SE	NE	28	14N	43E	Y	Footnote 2	85.60		342.40		MCLEOD RANCH & FISHERY LLC	Alfalfa	3.6	Wheel Lines	24.96	F	75%	119.81	N	
83147	PER	SW	NE	28	14N	43E	Y	Footnote 2	38.60		147.07		MCLEOD RANCH & FISHERY LLC	Alfalfa	3.6	Wheel Lines	3.28	F	75%	15.74	N	
83814	PER	SW	SW	9	11N	43E	Y	Footnote 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	Footnote 14	80.00	80.00	320.00	320.00	MCLEOD RANCH & FISHERY LLC	None		None	0.00	F		0.00		
84278	PER	NW	NE	10	14N	43E	Y	Footnote 7	100.00		400.00		HASTIE, MICHAEL C.	Grass	3.5	Pivot	41.00	F	85%	84.41	N	
85899	PER	NW	NW	18	18N	45E	Y	Footnote 15	56.30	56.30	225.20	225.20	BLACKBIRD RANCH, LLC									
86513	PER	SW	NW	29	11N	43E	Y	Footnote 3	18.10	98.00	72.40	392.00	CARVER, RICHARD W. AND DENISE R.	Alfalfa	3.6	Wheel Lines	18.10	F	75%	86.88	N	
86514	PER	SW	NW	29	11N	43E	Y	Footnote 3	13.58		54.3		CARVER, RICHARD W. AND DENISE R.	Alfalfa	3.6	Wheel Line/Pivot	13.58	F	85% & 75%	61.11	N	
86515	PER	SW	NW	29	11N	43E	Y	Footnote 3	12.67		50.68		CARVER, RICHARD W. AND DENISE R.	Alfalfa	3.6	Pivot	12.67	F		53.66	N	
86516	PER	SE	NW	29	11N	43E	Y	Footnote 3	96.88		387.52		CARVER, RICHARD W. AND DENISE R.	Alfalfa	3.6	Pivot	58.65	F	85%	248.40	N	
86517	PER	SE	NW	29	11N	43E	Y	Footnote 3	25.00		100		CARVER, RICHARD W. AND DENISE R.	Alfalfa			--	F				
V02427	VST	SW	NE	28	14N	43E	Y	Footnote 2	5.00		25.00		MCLEOD RANCH & FISHERY LLC	Alfalfa	3.6	Wheel Lines	5.00	F	75%	24.00	N	
V02428	VST	NW	SE	28	14N	43E	Y	Footnote 2	20.47		102.35		MCLEOD RANCH & FISHERY LLC	Alfalfa	3.6	Wheel Lines	20.47	F	75%	98.26	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														Total Irrigated Acreage		3,641.89						
Total Supplementally Adjusted Permitted/Certificated Duty														Total Estimated Pumpage		14,111.12						

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 86513, 86514, 86515, 86516 AND 86517 HAVE A TOTAL COMBINED DUTY NOT TO EXCEED 392.0 ACRE-FEET FOR THE IRRIGATION OF 98.0 ACRES

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 204.07 ACRES, 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 SUPPLEMENTAL TO THE WATERS OF SOUTH AIKEN CREEK UNDER PERMIT 25481, CERTIFICATE 7440.

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	NIWR (ft)	Irrigation Method	Irrigated Acres	Acreage Estimation Method	Irrigation Efficiency	Acre-Feet Pumped	Pumpage Estimation Method
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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.

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 SUPPLEMENTAL 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.