

MEMORANDUM

TO: Scott Grosscup, Balcomb & Green, P.C.

FROM: Bailey Leppek, PE – SGM, Inc.

DATE: April 12, 2021

RE: Red Mountain Ranch Dedication to Town of Eagle for Planning Areas 1 – 6

This memo addresses the water rights dedication from Red Mountain Ranch (RMR) to the Town of Eagle (Town) for Planning Areas 1 through 6. This memo references the following previous documents:

- May 22, 2019 SGM memo (2019 SGM Memo) titled “Red Mountain Ranch Planning Areas 1 through 6 EQR Assessment”
- November 7, 2018 Wilson Water Group memo (2018 WWG Memo) titled “Red Mountain Ranch EQR Assessment and Preliminary HCU Analysis of Parcels 1 & 2”
- November 7, 2018 Balcomb & Green Memo (2018 Balcomb & Green Memo) from Scott Grosscup to Morgan Landers
- Map of historically irrigated area for Case No. 84CW659 prepared by W.W. Wheeler & Associated Inc. dated August 1984 (84CW659 Map), included as **Attachment A** to this memo

Dedication Requirement

The dedication requirement from RMR to the Town was determined to be 101.55 AF, as documented in the 2019 SGM Memo and summarized below in **Table 1**. The calculation of 93.41 AF of dedication requirement for potable service accounts for the calculated credit for raw water irrigation of residential lawns and landscaping.

All outdoor irrigation for Planning Areas 1 through 6 will use raw water, which is planned to be physically sourced from one or more pump station(s) on the Eagle River. SGM is assuming that this would legally operate as an alternate point from the Wilkinson Ditch, as identified in the 2018 WWG Memo. As such, this memo assumes that raw water irrigation dedication is sourced from RMR owned rights in the Wilkinson Ditch, as originally reported in the WWG Memo.

Conceptual plans have identified a total of 4.70 acres of outdoor irrigation for Planning Areas 1 through 6, including parks and residential lawn and landscaping. At the consumptive use (CU) credit rate of 1.73 AF/acre,¹ the 4.70 acres of proposed irrigated lands in Planning Areas 1 through 6 would require 8.13 AF, thus a total of 8.13 AF of Wilkinson Ditch water rights is proposed for dedication to the Town for raw water irrigation.

¹ Case No. 84CW659 quantified a consumptive use credit rate of 1.73 AF/acre for RMR dryup

Table 1: Dedication Requirement

Dedication Requirement		
Potable Water:	93.42	AF
Raw Water:	8.13	AF
Total Dedication Requirement:	101.55	AF

Historically Irrigated Lands Available for Dedication

SGM georeferenced the 84CW659 Map and delineated historically irrigated area shown in that map. **Figure 1** is a map showing Planning Areas 1 – 6 and the School Parcel and historically irrigated lands within those areas by ditch, with the 84CW659 Map as a background. **Figure 2** is the same map with aerial imagery background. **Table 2** below documents the lands available for dedication based on this mapping effort.

Proposed Dedication by Source

Based on the mapping of historically irrigated lands available for dry-up within the identified parcels, SGM determined that there are sufficient historically irrigated lands for dedication. **Table 2** below shows the available lands and credits, and the lands and credits proposed for dedication. **Attachment B** documents water rights ownership in the Warren and Wilkinson Ditch, and identifies water rights and consumptive use credits associated for each ditch.

Not yet quantified (Nogal Parcel) – Wilkinson Ditch

A portion of the dedication requirement will come from RMR's ownership in the Wilkinson Ditch acquired with the Nogal Parcel located on Planning Areas 1 and 2. The consumptive use from the Nogal Parcel has not yet been quantified in a Water Court decree. However, the consumptive use has been estimated in the 2018 WWG Memo to be 14.90 AF.

The 84CW659 Map shows that 12.9 acres were historically irrigated on the Nogal Ranch with water rights which were – at the time – owned by others. The Nogal Ranch and its water rights were later acquired by RMR. The 2018 WWG Memo used a study period of 1950 through 1998 for the preliminary consumptive use analysis, finding an average of 9.4 historically irrigated acres on the Nogal Parcel and an average annual consumptive use of 14.90 AF (1.59 AF/acre). Based on 2018 WWG Memo analysis, SGM recommends that RMR dedicate 14.90 AF associated with the Wilkinson Ditch use on the Nogal Parcel, requiring an estimated 9.4 acres of dry-up.

Previously Quantified in 84CW659

A portion of the dedication requirement will come from RMR's ownership of Warren and Wilkinson Ditch consumptive use credits which were quantified in Case No. 84CW659. This includes water historically used on the lands to be annexed (Planning Areas 1 – 6), and water historically used on the School Parcel (Parcel No. 193926100007, previously conveyed to the Eagle County School District, for which RMR retained the water rights).

Case No. 84CW659 quantified a consumptive use credit rate of 1.73 AF/acre for lands removed from irrigation on RMR lands.

Under the Wilkinson Ditch within Planning Areas 5 and 6, **Table 2** shows 6.15 acres historically irrigated lands which equates to 10.64 AF consumptive use requirement at the rate of 1.73 AF/acre, all of which is proposed for dedication from RMR. Therefore, the raw water dedication requirement (which is proposed to be sourced from the Wilkinson Ditch) of 8.13 AF will be covered, and the remaining 2.51 AF of consumptive use will contribute to the potable dedication requirement.

Under the Warren Ditch within Planning Areas 5 and 6 and the School Parcel, **Table 2** shows 45.46 acres of historically irrigated lands, which equates to 78.65 AF of consumptive use at the rate of 1.73 AF/acre. More credits under the Warren Ditch are available than what is required. Only 76.01 AF of credits are required to meet the 93.42 AF potable dedication requirement (after 14.90 AF and 2.51 AF of credits from the Wilkinson Ditch). SGM recommends that RMR dedicate 76.01 AF of credit from the Warren Ditch, requiring 43.94 acres of dry up within Planning Areas 5 and 6 and the School Parcel.

Table 2: Dedication & Dry-up – Comparison of Required to Available

		Quantified in 84CW659		Nogal Parcel (not yet quantified)	Total
		Warren	Wilkinson	Wilkinson	
Historically Irrigated Area Available for Dedication (acres)	Area 1	-	-	12.33	12.33
	Area 2	-	-	0.57	0.57
	Area 3	-	-	-	-
	Area 4	-	-	-	-
	Area 5	1.31	1.40	-	2.71
	Area 6	7.04	4.75	-	11.79
	School Parcel	37.11	-	-	37.11
Area - Total Available (acres)		45.46	6.15	12.90	64.51
CU credit rate (AF/acre)		1.73	1.73	1.59	NA
Credits - Available (AF)		78.65	10.64	14.90	104.19
Credits - Required and Proposed for Dedication (AF)		76.01	10.64	14.90	101.55
Area - Total Associated with Proposed Dedication (acres)		43.94	6.15	9.37	59.46

Water Rights Associated with Proposed Dedication

The water rights (and associated consumptive use credits) for each ditch by priority that are proposed for dedication are summarized in **Table 3**. A more detailed analysis of water rights, included as **Attachment B**, tracks RMR ownership in the Warren and Wilkinson Ditch by water right, including quantification in Cases No. 84CW310 and 84CW659, previous dedications and transfers, and proposed dedication to the Town.

For historical consumptive use quantified in Case No. 84CW659, the water right amounts under each priority are calculated based on the tabulation of water rights by priority on page 4 of the decree for Case No. 84CW659.

As described in the 2018 Balcomb & Green Memo, while the deed for the Nogal Parcel does not expressly describe the water rights, the rights are transferred through the appurtenance clause of the deed. Water right amounts appurtenant to the Nogal Parcel were sourced from the 2018 WWG memo, which sourced the amounts from a Zancanella and Associates memo to Scott Balcomb; re: Shapiro Property/ Nogal Parcel #2; Dated Dec 20, 1994.

Table 3: Water Rights Associated with Proposed Dedication

Water Right	Case No.	Adj. Date	Ap. Date	Admin No.	Priority	Total Absolute	Proposed Dedication					
							Potable Previously Quantified		Raw Water Previously Quantified		Potable Not Yet Quantified	
						(cfs)	(cfs)	(AF)	(cfs)	(AF)	(cfs)	(AF)
Warren Ditch	CA294	1889-12-17	1885-04-20	12894.00000	32	3.70	0.65		-		-	
	CA294	1889-12-17	1889-10-09	14527.00000	95	2.40	0.42		-		-	
	CA294	1889-12-17	1889-10-09	14527.00000	96	1.60	0.28		-		-	
	CA963	1936-10-03	1922-10-01	30894.26571	450	11.83	1.79		-		-	
	CA1193	1958-07-23	1952-04-30	38753.37375	534	15.00	2.73		-		-	
	Total Warren Ditch					34.53	5.87	76.01	-	-	-	-
Wilkinson	CA294	1889-12-17	1887-10-30	13817.00000	59	3.10	-		-		0.26	
	CA963	1936-10-03	1915-10-30	30894.24043	427	5.60	0.04		0.14		0.42	
	Total Wilkinson Ditch					8.70	0.04	2.51	0.14	8.13	0.68	14.9

Dry-up Plan

This dedication will require RMR to remove the number of acres specified in **Table 2** from irrigation on Planning Areas 1 – 6 and the School Parcel. Specific development plans are not yet finalized for Planning Areas 1 – 6 and remain conceptual at this time, so specific location of dry-up cannot be determined or mapped.

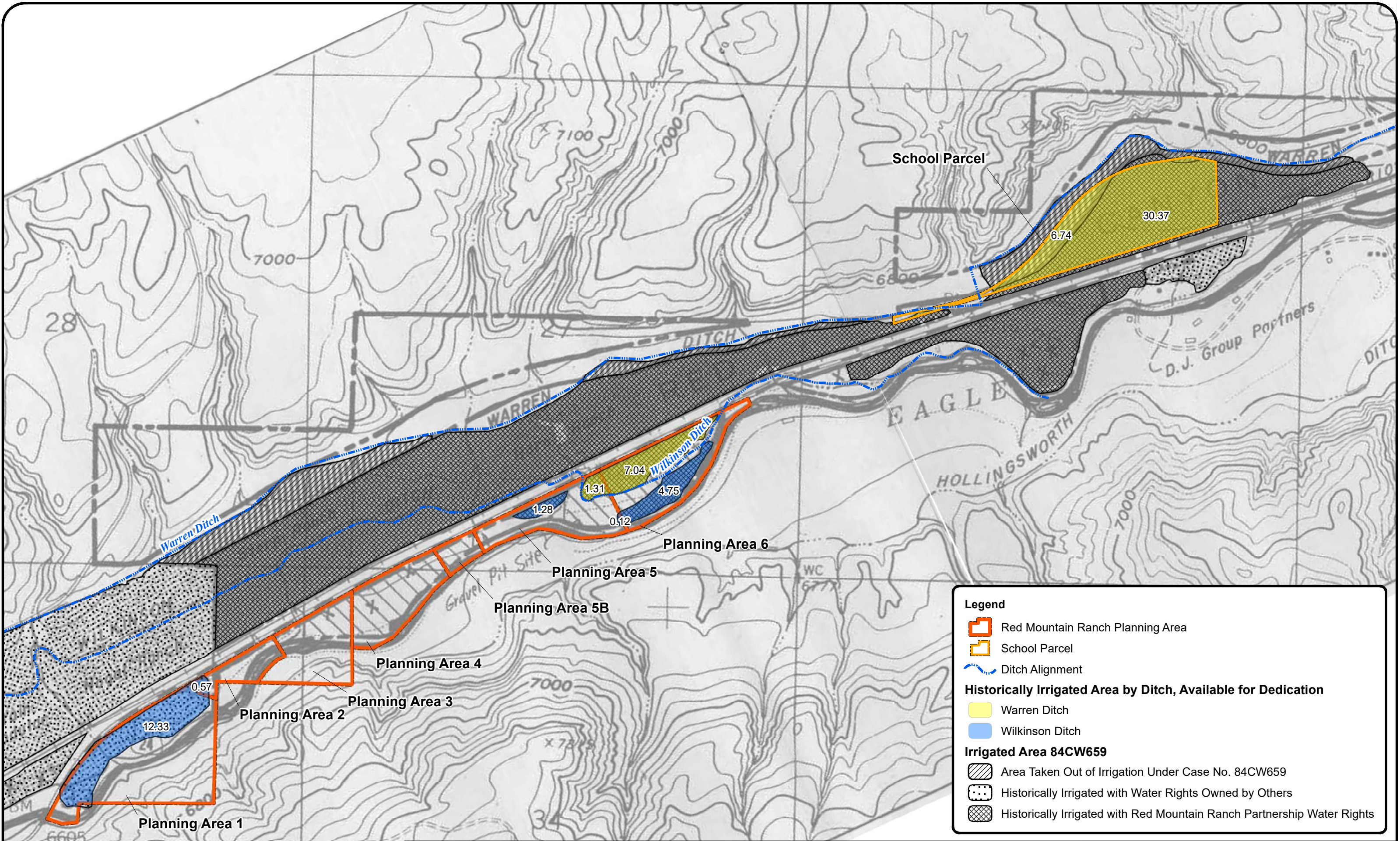
The only lands that will *not* be dried within Planning Areas 1 – 6 are the 4.70 acres (residential landscaping and parks) which will be irrigated with raw water from the Wilkinson Ditch via the 8.13 AF of Wilkinson Ditch credits dedicated to the Town. The exact location and layout of these areas to be irrigated is not yet known.

As shown in **Table 2**, a total of 15.52 acres of historically irrigated lands under the Wilkinson Ditch are associated with the 25.54 AF of Wilkinson Ditch credits proposed for dedication of potable and raw water. The Town may choose to dry up the full 15.52 acres of lands historically irrigated under

the Wilkinson Ditch, and later reirrigate the 4.70 acres with the 8.13 AF of Wilkinson Ditch credits dedicated to the Town for raw water. Alternately, when the development plans are finalized, the Town could identify the locations of the planned landscaping and parks, dry up the lands that will be developed, and retain the 8.13 AF of Wilkinson Ditch credits for raw water irrigation of landscaping and parks under their original decree. Regardless of the exact dry-up plan approach, sufficient water rights are included in the dedication and sufficient historically irrigated lands are available to be dried up.

Conclusions

The proposed dedication amounts from RMR to the Town in **Table 3** are sufficient to meet the dedication requirement of 101.55 AF (93.42 for potable and 8.13 for raw water). As shown in **Table 2** and **Figures 1 and 2**, there are enough historically irrigated lands within the lands to be annexed to achieve the dedication amounts in **Table 3**.



Legend

Red Mountain Ranch Planning Area

School Parcel

Ditch Alignment

Historically Irrigated Area by Ditch, Available for Dedication

Warren Ditch

Wilkinson Ditch

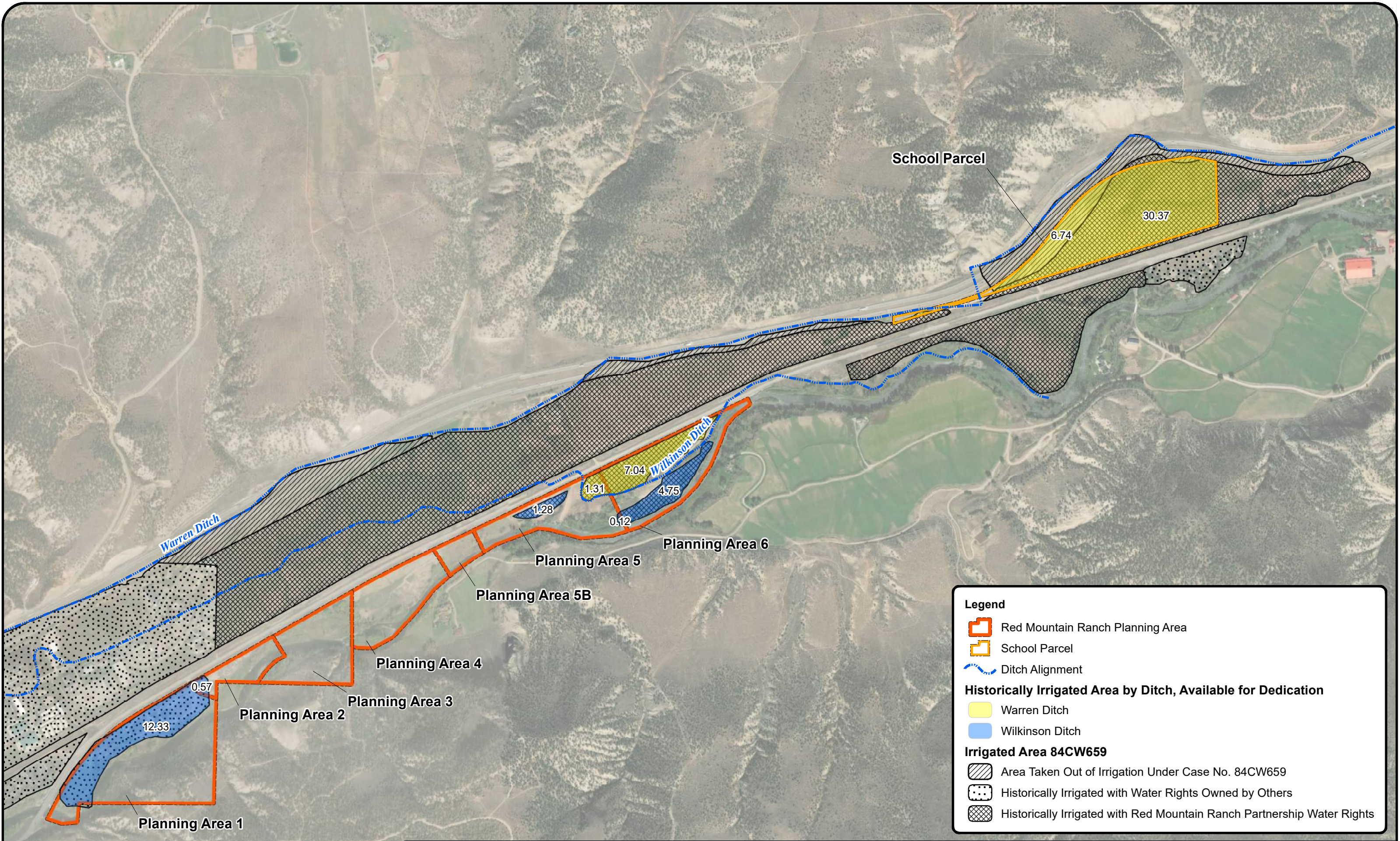
Irrigated Area 84CW659

Area Taken Out of Irrigation Under Case No. 84CW659

Historically Irrigated with Water Rights Owned by Others

Historically Irrigated with Red Mountain Ranch Partnership Water Rights

Figure 1: Historical Irrigation
Red Mountain Ranch



Legend

- Red Mountain Ranch Planning Area
- School Parcel
- Ditch Alignment

Historically Irrigated Area by Ditch, Available for Dedication

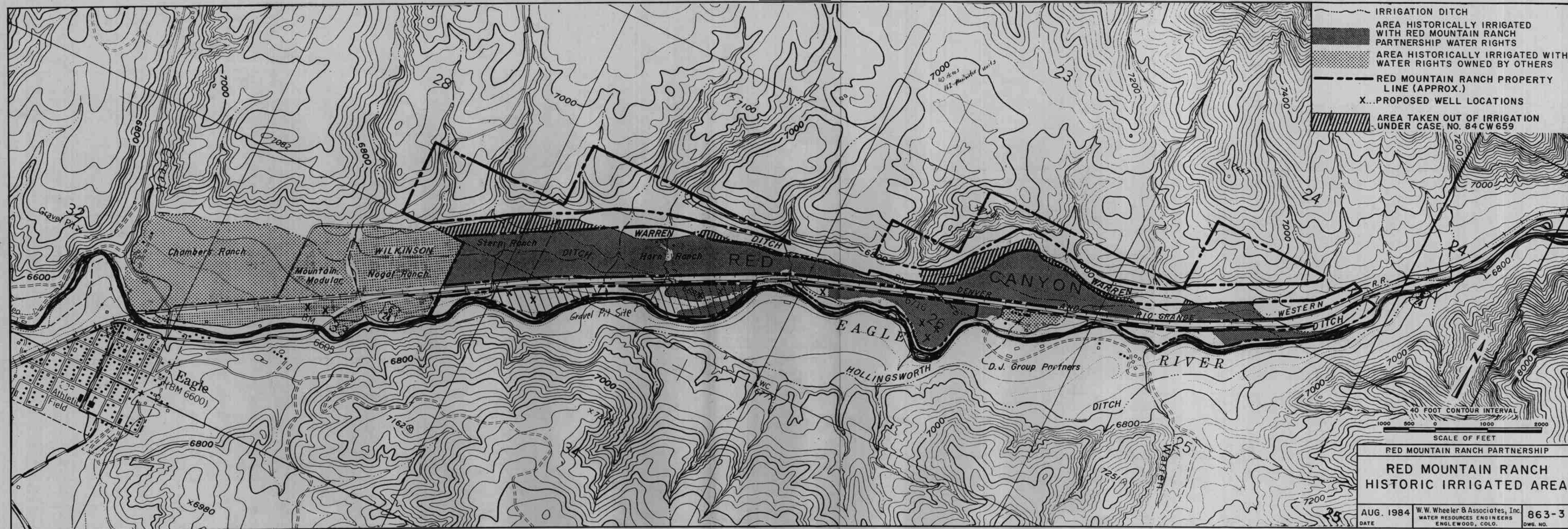
- Warren Ditch
- Wilkinson Ditch

Irrigated Area 84CW659

- Area Taken Out of Irrigation Under Case No. 84CW659
- Historically Irrigated with Water Rights Owned by Others
- Historically Irrigated with Red Mountain Ranch Partnership Water Rights

Figure 2: Historical Irrigation
 Red Mountain Ranch





Attachment B

Red Mountain Ranch Water Right Ownership in changed Warren Ditch and Wilkinson Ditch Water Rights

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)		(11)		(12)		(13)		(14)		(15)		(16)		(17)		(18)		(19)	
Water Right Name	WDID	Case No.	Adj. Date	Ap. Date	Admin No.	Priority	Total Absolute	Case No. 84CW659		Case No. 84CW310		Sub-Total (RMR Quantified Ownership)		Assigned RMR Filing 2 & 4 (Canyonwood)		2008 Quit Claim Sale to Town of Eagle		Remaining Net Total Owned by RMR		2021 TOE Potable Water Dedication		2021 TOE Raw Water Dedication		Remaining Unassigned Total		RMR Aquired Rights from Nogal Parcel		Total 2021 RMR Dedication to Town of Eagle	
							(cfs)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)	(cfs)	(af)
Warren Ditch	3700848	CA294	1889-12-17	1885-04-20	12894.00000	32	3.70	3.179		0.373		3.55		0.22		0.66		2.67		0.65		-		2.02		-		0.65	
		CA294	1889-12-17	1889-10-09	14527.00000	95	2.40	2.074		0.243		2.32		0.15		0.43		1.74		0.42		-		1.32		-		0.42	
		CA294	1889-12-17	1889-10-09	14527.00000	96	1.60	1.375		0.161		1.54		0.10		0.29		1.15		0.28		-		0.87		-		0.28	
		CA963	1936-10-03	1922-10-01	30894.26571	450	11.83	8.825		1.035		9.86		0.62		1.84		7.40		1.79		-		5.61		-		1.79	
		CA1193	1958-07-23	1952-04-30	38753.37375	534	15.00	13.425		1.575		15.00		0.94		2.79		11.27		2.73		-		8.54		-		2.73	
Total Warren Ditch							34.53	28.880	373.96	3.390	43.94	32.27	417.9	2.03	26.34	6.01	77.78	24.23	313.8	5.87	76.01	-	-	18.36	237.77	-	-	5.87	76.01
Wilkinson Ditch	3700858	CA294	1889-12-17	1887-10-30	13817.00000	59	3.10	-		-		-		-		-		-		-		-		-		0.26		0.26	
		CA963	1936-10-03	1915-10-30	30894.24043	427	5.60	0.718		-		0.72		-		0.15		0.57		0.04		0.14		0.39		0.42		0.60	
Total Wilkinson Ditch							8.70	0.720	42.04	-	-	0.72	42.0	-	-	0.15	8.74	0.57	33.3	0.04	2.51	0.14	8.13	0.39	22.66	0.68	14.90	0.86	25.54
Total Warren and Wilkinson Ditch									416.00		43.94		459.94		26.34		86.52		347.08		78.52		8.13		260.43		14.90	6.73	101.55

Notes: ToE - Town of Eagle; RMR - Red Mountain Ranch; CU - consumptive use; AF - acre-feet; ac - acre

Col 8 = Total decreed water right, absolute.

Col 9 = Identified Red Mountain Ranch water right in Case. No. 84CW659. Historical consumptive use quantified for 241.6 ac at 1.73 AF/ac, for a total of 416 AF.

Col 10 = Identified Red Mountain Ranch water right in Case. No. 84CW310. Historical CU quantified for 25.4 ac at 1.73 AF/ac, for a total of 44 AF.

Col 11 = Col 9 + Col 10

Col 12 = Red Mountain Ranch Filing 2 & 4 and Parcel L residential uses assigned demands from 84CW310. Does not include 10 acres of irrigation or pond evaporation.

Col 13 = Col 9 x 20.8%, per Warranty Deed Dated August 20, 2008 (Eagle River Station). Warranty Deed conveys 86.5 AF of CU decreed in Case No. 84CW659, including an undivided 20.8% interest in the water rights included in that decree.

Col 14 = Col 11 - Col 12 - Col 13

Col 15 = Proposed dedicated credits based on SGM May 22, 2019 memo to meet dedication requirements for the approved Planning Areas 1 through 6.

Col 16 = Proposed dedicated credits for continued raw water irrigation based on SGM May 22, 2019 memo to meet dedication requirements for the approved Planning Areas 1 through 6.

Col 17 = Col 14 - Col 15 - Col 16. Remaining unassigned 84CW310 and 84CW659 Credits

Col 18 = Water Rights associated with 14.3 acre Nogal Parcel acquired by Red Mounatin Ranch. CU of Nogal Parcel has not been quantified in a decree, but was estimated at 14.9 AF by Wilson Water Group (See 11/7/2018 Wilson Water Group Memo titled "Red Mountain Ranch EQR Assessment and Preliminary Historical Consumptive Use Analysis of Parcels 1 and 2"). Water Right amounts sourced from 2018 Wilson Water Group memo, which sourced amounts from Zancanella and Associates memo to Scott Balcomb; re: Shapiro Property/ Nogal Parcel #2; Dated Dec 20, 1994. Note, the Nogal Parcel has also been referred to as the Nogal Parcel #3 in other documents.

Col 19 = Col 15 + 16 + 18. Total to be dedicated to ToE from RMR, based on SGM May 22, 2019 memo to meet dedication requirements for the approved Planning Areas 1 through 6. Amount to be dedicated matches dedication requirement from Table 1.