



# **Ouray County Water Rights Application 19CW3098**

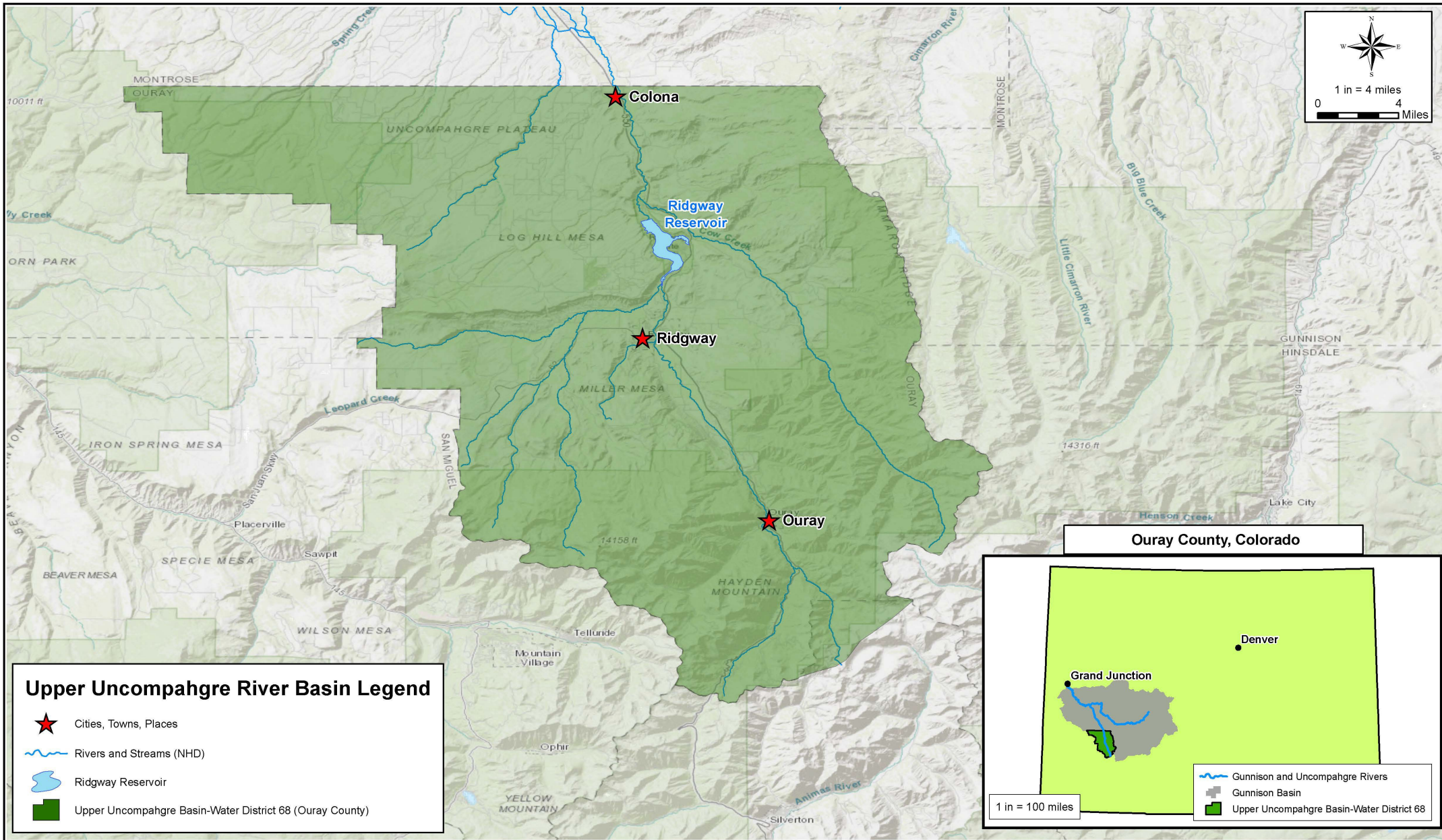
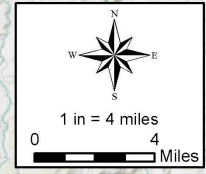
## **Ram's Horn Reservoir**

**Presented by Peter Foster, PE**





**Wright Water Engineers, Inc.  
March 16, 2022**

# Overview of Presentation

1. Upper Uncompahgre River Hydrology
2. Upper Uncompahgre River Historical Dry Year Administration
3. Summary of Ram's Horn Reservoir






**Upper Uncompahgre River Basin Legend**

-  Cities, Towns, Places
-  Rivers and Streams (NHD)
-  Ridgway Reservoir
-  Upper Uncompahgre Basin-Water District 68 (Ouray County)

**Ouray County, Colorado**

1 in = 100 miles

-  Gunnison and Uncompahgre Rivers
-  Gunnison Basin
-  Upper Uncompahgre Basin-Water District 68

Date: 2/14/2020 Document Path: P:\151-032 Ouray County - UUB\Mapping\Stream Management Plan Maps\Map 1-UUB Location Map.mxd

User Name: bolver

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**OURAY COUNTY, COLORADO**  
**UPPER UNCOMPAHGRE BASIN-WATER DISTRICT 68**  
 UPPER UNCOMPAHGRE BASIN (OURAY COUNTY)

PROJECT NO.  
151-032.021

1. San Juan Mountains and the western U.S. are experiencing longer and deeper droughts.
2. Generally peak runoff from the San Juan Mountains is occurring earlier in the spring.
3. Resulting calls from downstream senior water rights are placed more often, are becoming longer, and deeper into the priorities.
4. Water projects today call for a wider variety of uses to meet multiple objectives.

**Selected Gage Station Summary**  
**Upper Uncompahgre Basin (Ouray County)**  
All Values in AF/ year

Gage Station	Station Name	Gage Station Discharge		Dry Year Percent of Average
		2002	2002-2012	
		1		2
USGS 9146200	Uncompahgre River near Ridgway	54,429	116,248	47%
USGS 9147000	Dallas Creek near Ridgway	10,640	22,556	47%
* CDWR COWCRKCO	Cow Creek near Ridgway Dam	16,777	47,612	35%
USGS 9147500	Uncompahgre River at Colona	84,033	170,756	49%

Notes:

(1) Gage Station Data

(2) (2002 Gage Station Discharge)/ (2002-2012 Gage Station Discharge)

\* COWCRKCO Gage Station has a shortened period of record from 2008-2012



# 2002 Administrative Call Depth Summary for Dallas Creek continued

VALIANT DITCH	8800768	5/11/1942	5/11/1890	29554.14368	55	4
DALLAS DITCH	8800543	5/11/1942	11/1/1890	29554.14915	596	17.75
LISCHKE DITCH FIRST POINT OF DIVERSION	8800640	5/11/1942	11/15/1896	29554.17121	62	4
LISCHKE DITCH SECOND POINT OF DIVERSION	8800641	5/11/1942	11/15/1896	29554.17121	62	0
LISCHKE DITCH THIRD POINT OF DIVERSION	8801520	5/11/1942	11/15/1896	29554.17121	62	0
BEAR GULCH DITCH	8800507	5/11/1942	6/1/1908	29554.21336	72	5
REED OVERMAN DITCH	8800703	4/14/1961	6/1/1910	33733.22066	5	13
BROWN DITCH NO 271	8800817	4/14/1961	7/1/1920	33733.25749	10	5
HARRIS BROS DITCH NO 1	8800593	4/14/1961	6/1/1923	33733.26814	11	1.5
HARRIS BROS DITCH NO 2	8800594	4/14/1961	6/1/1923	33733.26814	12	2
MAYOL SIBSON DITCH	8800653	4/14/1961	5/1/1930	33733.29340	16	4.25
JOHNSON DITCH NO 79	8800622	4/14/1961	7/15/1933	33733.30511	17	4
BOULEVARD DITCH	8800786	4/14/1961	9/2/1938	33733.32355	19	5
HENRY TRENCHARD DITCH	8800603	4/14/1961	6/1/1939	33733.32658	20	1
HENRY TRENCHARD DITCH	8800603	4/14/1961	5/11/1942	33733.33733	21	2
SHERBINO DITCH	8800727	4/14/1961	7/1/1942	33784.00000	22	4
DOC WADE DITCH	8800559	4/14/1961	6/15/1943	34133.00000	23	4.75
TRENCHARD DITCH	8800763	4/14/1961	7/1/1944	34515.00000	24	5
MAYOL SIBSON DITCH	8800653	4/14/1961	6/1/1946	35215.00000	27	3.75
REED OVERMAN DITCH	8800703	4/14/1961	6/1/1946	35215.00000		5
CRONENBERG DITCH	8800538	4/14/1961	7/1/1946	35245.00000	29	10
WILLOW CREEK DITCH	8800780	4/14/1961	7/1/1946	35245.00000	28	5
RUFFE WADE DITCH	8800721	4/14/1961	7/15/1949	36355.00000	33	1
MIKE CLIDDIGAN DITCH	8800663	4/14/1961	4/1/1950	36615.00000	35	0.5
MAYOL LATERAL DITCH	8800652	4/14/1961	6/1/1951	37102.00000	39	9.25
BARKER DITCH	8800506	4/14/1961	6/1/1955	38502.00000	42	4
HARRIS DITCH NO 1	8800595	4/14/1961	5/29/1957	39230.00000	50	51
HARRIS DITCH NO 2	8800596	4/14/1961	5/29/1957	39230.00000	52	0
RUFFE WADE DITCH	8800721	4/14/1961	9/6/1958	39664.00000	60	0
LONE PINE DITCH	8800642	9/13/1971	9/6/1907	40646.17385	2	0.5
HARRISON NO 1 DITCH	8800597	9/13/1971	7/20/1900	40646.18463	2	4.5
HARRISON NO 2 DITCH	8800598	9/13/1971	7/20/1900	40646.18463	4	5
CARROLL DITCH	8800519	9/13/1971	6/10/1902	40646.19153		2
WIG DITCH	8800779	9/13/1971	6/1/1903	40646.19509	7	2
CARROLL DITCH	8800519	9/13/1971	1/10/1920	40646.25576	10	2
SWYHART DITCH	8800753	9/13/1971	8/10/1962	41129.00000	68	2
DALLAS FEEDER CANAL	8800544	9/13/1971	2/13/1963	41316.00000	74	0
LOG HILL MESA CANAL	8801324	9/13/1971	2/13/1963	41316.00000	75	0
PLEASANT VALLEY CANAL	8800693	9/13/1971	2/13/1963	41316.00000	76	0
JUDITH D & WATER SUPPLY	8800626	9/13/1971	6/9/1963	41432.00000	82	83
MCCLELLAN DITCH & WTR S	8800834	9/13/1971	6/9/1963	41432.00000	80	81
PHILLIPS D & WTR SUPPLY	8800689	9/13/1971	6/10/1963	41433.00000	84	0.8
BOGGY D & WTR SUPPLY	8800613	9/13/1971	6/16/1963	41439.00000	86	87
PHILLIPS D & WTR SUPPLY	8800689	9/13/1971	8/3/1963	41487.00000	85	0
ANDREW DITCH & WATER SUP	8800799	9/13/1971	10/15/1969	43752.00000	213	214
DALE PL & WTR SUPPLY	8800843	9/13/1971	10/15/1969	43752.00000	223	224
ELWOOD DITCH & WTR SUP	8800569	9/13/1971	10/15/1969	43752.00000	219	220
KELLY SPG & DITCH	8800628	9/13/1971	10/15/1969	43752.00000	211	212A
MARY PL AND DITCH	8800648	9/13/1971	10/15/1969	43752.00000	221C	222C
MAX EGGER D & WTR SUPPLY	8800650	9/13/1971	10/15/1969	43752.00000	215C	216C
PAUL DITCH AND WTR SUP	8800686	9/13/1971	10/15/1969	43752.00000	217	218
RIGHTWAY DITCH & WTR SUP	8800713	9/13/1971	10/15/1969	43752.00000	225	226
W HARRIS UP PAST SPG #1D	8800954	9/13/1971	11/1/1969	43769.00000	233	0.65
WIG DITCH	8800779	9/13/1971	11/2/1969	43770.00000	236	0
AUSTIN SPRING	8800801	12/31/1972	6/1/1890	44559.14762		0.13
PASTURE SPRING DITCH	8800909	12/31/1972	5/31/1907	44559.20969		0.12
DALLAS PARK CEM DRAIN D	8800844	12/31/1972	5/21/1910	44559.22055		0.25
NORLANDER DITCH	8801037	12/31/1976	7/1/1975	46020.45837		0.25
PRESIDENTS LATERAL	8801043	12/31/1977	5/1/1885	46386.12905		5
BURKHART EDDY DITCH	8800514	12/31/1978	6/1/1950	46751.36676		2
VON HAGEN DALLAS DITCH	8800770	12/31/1978	6/1/1950	46751.36676		2
LEOPARD CR COTTONWOOD DV	8801218	12/31/1986	10/1/1877	49673.10136		3
COTTONWOOD DIVERSION OF THE LITSCHKE DITCH	8801219	12/31/1986	5/1/1879	49673.10713		2
LEWIS DIVERSION	8801278	12/31/1995	6/1/1928	52960.28641		0.5
LEWIS COLLECTION SYSTEM	8801289	12/31/1995	12/31/1973	52960.45290		2
HOSNER ROWELL DITCH	8800610	12/31/1997	4/1/1882	53691.11779		2.65
DALLAS DITCH	8800543	12/31/1997	3/1/1950	53691.36584		1.5
DALLAS PLACER DITCH	8800545	12/31/1997	5/8/1907	53819.00000		0.1
HYDE SNEVA DITCH	8800613	12/31/1998	9/30/1967	54056.43006		2
JAMES STEWART DITCH	8800619	12/31/1998	11/1/1980	54056.47787		0.5
P J NASH DITCH	8800684	12/31/1998	11/1/1980	54056.47787		0.5
DOC WADE DITCH	8800559	12/31/1998	9/30/1982	54056.48485		1.5
REED OVERMAN DITCH	8800703	12/31/1998	9/30/1982	54056.48485		1.5
MAYOL SIBSON DITCH	8800653	12/31/1998	9/30/1986	54056.49946		1.5
DECKER-WOLFORD WW DITCH	8801412	12/31/2000	6/1/1950	54786.36676		0.12
WOOD FERRY DITCH	8800781	12/31/2000	6/1/1985	54786.49460		0.15
DECKERWISE WSTWTR DITCH	8801410	12/31/2000	8/30/1992	54786.52107		1
DALLAS DITCH	8800543	12/31/2001	7/30/1998	55152.54267		0
DALLAS DITCH	8800543	12/31/2001	8/1/2000	55152.55000		0.675
CG SALUNDERS DITCH	8801427	12/31/2002	6/1/1970	55517.43981		0.38
WISE WW DITCH 1	8801441	12/31/2003	9/1/2001	55882.55396		0
WISE WW DITCH 2	8801442	12/31/2003	9/1/2001	55882.55396		0
SNEFFELS DITCH NO 1	8801039	12/31/2003	11/12/2002	55882.55833		0.5
SNEFFELS DITCH NO 2	8801065	12/31/2003	11/13/2002	55882.55834		0
SNEFFELS DITCH NO 3	8801070	12/31/2003	11/13/2002	55882.55834		0
CAMPBELL WASTEWATER DITCH	8801521	12/31/2019	4/25/2019	61841.00000		0.61



# 2002 Administrative Call Depth Summary for Upper Uncompahgre

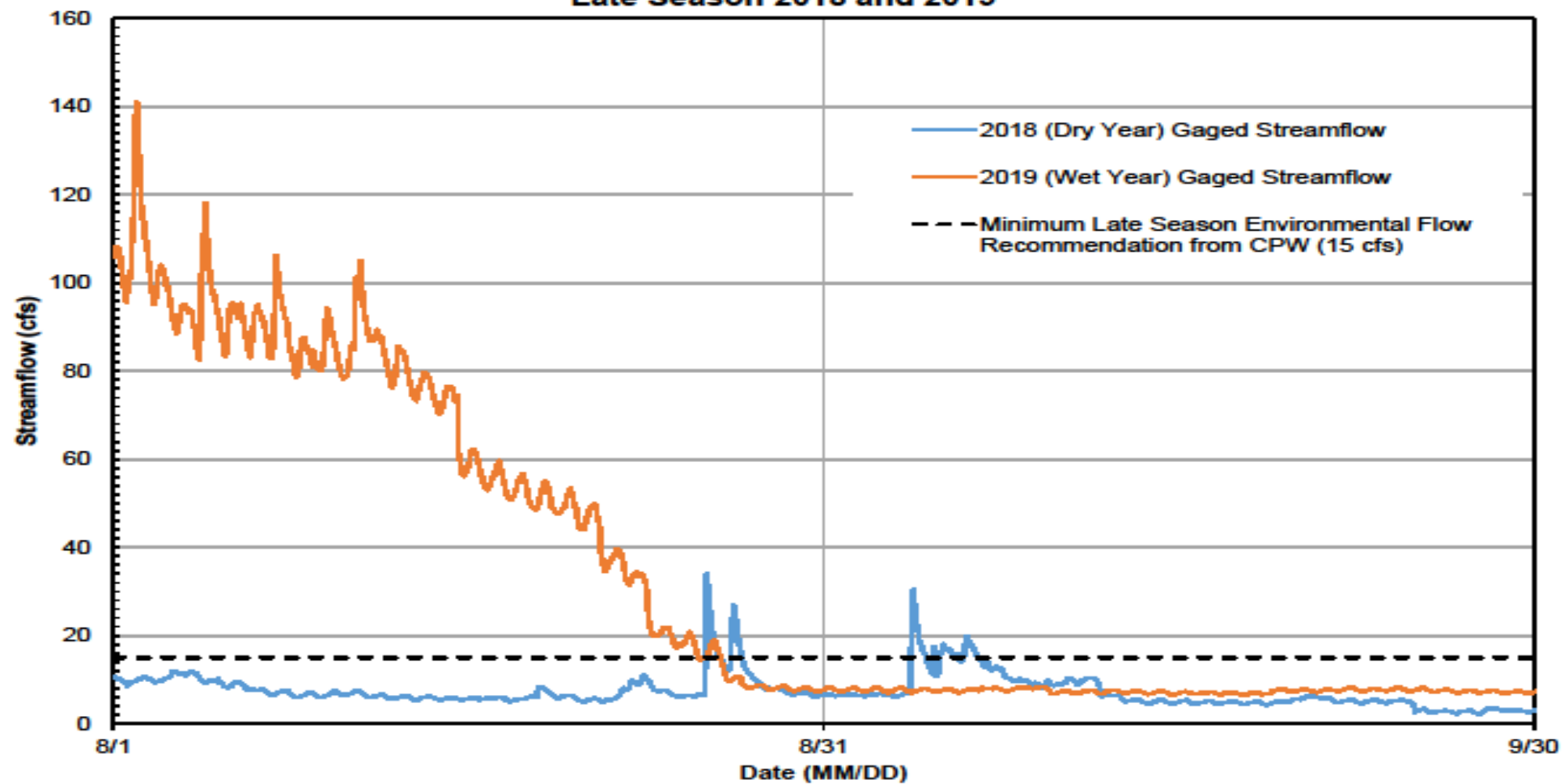
Water Right Name	WROD	Adjudication Date	Appropriation Date	Administration Number	Priority/Case No.	Decreased Rate Absolute (cfs)	Date of Call									
							4/26 - 5/15	5/16 - 6/3	6/4 - 6/17	6/18 - 6/24	6/25 - 7/1	7/2 - 7/11	7/12 - 9/2			
PORTLAND DITCH	8800897	5/15/1897	5/1/1876	9618.00000	2	0.532										
MORRISON DITCH	8800871	5/15/1897	5/2/1876	9622.00000	3	0.628										
MCDONALD CLODDIGAN DITCH	8800885	5/15/1897	5/10/1876	9627.00000	6	0.60										
HOSNER BROWNARD DITCH	8800603	5/15/1897	6/1/1876	9649.00000	5, 7	3										
CHARLEY LOGAN DITCH	8800526	5/15/1897	6/1/1876	9649.00000	7	7.5										
MILLER BRANCH D ALT PT	8800970	5/15/1897	5/1/1877	9663.00000	14	0										
Q W HANLEY DITCH	8800693	5/15/1897	5/1/1877	9663.00000	12	0										
WIDOLE MILLER DITCH	8800693	5/15/1897	5/1/1877	9663.00000	15	0.13										
STRAYER DITCH	8800791	5/15/1897	5/1/1877	9663.00000	13	0.28										
WEST MILLER DITCH	8800774	5/15/1897	5/1/1877	9663.00000	16	0.256										
MILLER BRANCH DITCH	8800684	5/15/1897	5/1/1877	9663.00000	14	1										
BIGREE DITCH	8800609	5/15/1897	5/1/1877	9663.00000	10, 12	1.26										
Q W HANLEY NO 2 DITCH	8800693	5/15/1897	5/1/1877	9663.00000	16	0										
STOUGH DITCH	8800730	5/15/1897	6/1/1877	10014.00000	19	2.26										
JOHNSON DITCH	8800621	5/15/1897	6/1/1877	10076.00000	20	2.97										
HYDE DITCH	8800812	5/15/1897	5/1/1878	10346.00000	24	0										
INDEPENDENCE DITCH	8800646	5/15/1897	5/1/1878	10346.00000	25	0										
BROWNARD NO 1 DITCH	8800624	5/15/1897	5/1/1878	10346.00000	23	0.26										
BROWNARD NO2 DITCH	8800624	5/15/1897	5/1/1878	10346.00000	27	0.628										
MOODY DITCH	8800698	5/15/1897	5/1/1878	10346.00000	26	1.75										
REWALT PLUMMER DITCH	8800707	5/15/1897	5/13/1878	10380.00000	28	0.208										
PHILLIPS DITCH	8800690	5/15/1897	5/13/1878	10380.00000	26	1										
MOODY NO1 DITCH	8800698	5/15/1897	5/15/1878	10392.00000	30	0										
BROWNARD NO 3 DITCH	8800736	5/15/1897	5/15/1878	10392.00000	29	0.36										
MCDONALD DITCH	8800696	5/15/1897	10/1/1878	10621.00000	32	2.26										
SMITH DITCH	8800737	5/15/1897	4/1/1879	10663.00000	0	0.88										
PLUMMER D NOS 1 & 2	8800694	5/15/1897	4/1/1879	10663.00000	34	0.75										
REWALT DITCH	8800706	5/15/1897	5/1/1879	10713.00000	37	0.26										
PARK DITCH	8800695	5/15/1897	5/1/1881	11444.00000	48	6										
WEHAWKEN CREEK SPRING & PIPELINE & NEW RESERVOIR	8800773	1/26/1904	10/1/1881	11567.00000	1	0										
<b>M&amp;D Canal</b>	9501890	1/26/1904	1/26/1881	11495.00000	3	12.14										
<b>M&amp;D Canal</b>	9501890	1/27/1882	1/17/1880	11716.00000	6	0.86										7/11
KEYSTONE DITCH	8800620	5/15/1897	6/1/1882	11840.00000	70	0										
STANTON DITCH	8800747	5/15/1897	6/1/1882	11840.00000	69	1.26										
RODWAY DITCH	8800711	5/15/1897	6/1/1882	11840.00000	72	2										
COTTONWOOD DITCH	8800636	5/15/1897	4/1/1883	12744.00000	75	0										
<b>M&amp;D Canal</b>	9501890	4/27/1884	4/27/1884	12442.00000	43	17.37										
<b>M&amp;D Canal</b>	9501890	4/27/1884	1/26/1880	12618.00000	48	100										
CHIPETA CUTLER DITCH	8800627	5/15/1897	6/1/1887	13686.00000	0	0										
JACKSON DITCH	8800817	5/15/1897	6/1/1887	13686.00000	112	0										
<b>M&amp;D Canal</b>	9501890	11/14/1885	11/14/1885	14196.00000	102	306.77										
JONES DITCH	8800626	5/15/1897	5/1/1882	14386.00000	0	0.15										
WEHAWKEN CREEK SPRING & PIPELINE & NEW RESERVOIR	8800774	1/26/1904	7/1/1889	14427.00000	2	3.816										
TIDWELL DITCH	8800796	5/15/1897	4/15/1890	14715.00000	127	0.375										
ISRAEL DITCH	8800847	2/1/1905	5/15/1890	20063.11093	40A	0										
CEDAR CREEK DITCH	8800522	2/1/1905	1/1/1890	20063.14611	124A	0.5										
CEDAR CREEK DITCH	8801090	2/1/1905	1/1/1890	20063.14611	124A	0.5										
PAKES DITCH	8800692	2/1/1905	6/21/1890	20063.14686	134B	0										
WEIS DITCH	8800791	2/1/1905	9/27/1890	20063.14686	134B	0.26										
WARD DITCH	8800771	6/16/1905	5/15/1897	20130.17332	144A	0.3016										
HILDRETH HOPKINS DITCH	8800606	2/29/1900	6/1/1901	24444.18779	4	0										
ORVIS DITCH	8800907	2/29/1900	5/1/1904	24444.19844	6	4										
MIDDLETON LATERAL DITCH	8800692	2/29/1900	5/1/1905	24444.21670	8	0										
MUSKIE LAKE DITCH	8800611	2/29/1900	7/6/1911	24444.22492	15	0.496										
DRY CREEK DITCH	8800693	2/29/1900	8/21/1911	24444.22622	16	1.6										
HEATH DITCH	8800602	6/9/1904	3/21/1890	29623.14671	141A	1.126										
LENORE DITCH	8800636	6/9/1904	1/1/1922	26208.00000	21A, 23A	3										
RADIUM DITCH AND PIPE LINE NO. 222 AP #1	8801285	6/19/1926	7/14/1877	27194.10097	0	0										
RADIUM DITCH AND PIPE LINE NO. 222 AP #2	8801281	6/19/1926	7/14/1877	27194.10097	0	0										
RADIUM DITCH & PIPE LINE NO. 222	8800702	6/19/1926	7/14/1877	27194.10097	0	0										
CHURCH DITCH NO.1	8800628	6/19/1926	4/6/1895	27194.12683	2	0										
CHURCH DITCH NO.2	8800629	6/19/1926	4/6/1895	27194.12683	2	1										
WRAFFT DITCH	8800632	12/1/1930	1/1/1919	27628.23332	146C	1.5										
<b>M&amp;D Canal</b>	9501890			29684.00616	5											
WEST PHILLIPS DITCH	8800775	5/1/1942	6/10/1876	29684.00696	5	2										
STANTON SLOUGH DITCH	8800748	5/1/1942	6/13/1876	29684.10292	13	2.5										
ALDER DITCH	8800600	5/1/1942	5/1/1890	29684.11079	16	2										
GIBSON DITCH	8800687	5/1/1942	10/15/1884	29684.12707	37	10										
BIRKSON DITCH	8800670	5/1/1942	6/26/1887	29684.13693	50	4										
KEYSTONE FEEDER DITCH	8800630	5/1/1942	6/1/1889	29684.14397	56	2										
GLACIER & WATER RIGHT	8800681	5/1/1942	4/21/1895	29684.18973	6	41										
CAMP RIND DITCH RIGHT	8800618	5/1/1942	6/13/1887	29684.17422	0	0										
POCAHONTAS WTR RIGHT	8800695	5/1/1942	10/27/1898	29684.17632	10	0										
DEADWOOD WATER RIGHT	8800684	5/1/1942	6/16/1901	29684.18797	11	0										
STADLER-THARP DITCH	8800746	5/1/1942	6/1/1917	29684.24623	75A	0										
SYRACUSE DITCH	8800932	5/1/1942	6/26/1924	29684.27296	14	0.5										
MINERAL FARM WTR P-L	8800696	1/1/1926	3/1/1926	31390.00000	17	0.26										
CHARLES DITCH	8800626	4/14/1961	6/1/1912	33733.22797	8	1.5										
FISHER DEVELOPED DITCH	8800676	4/14/1961	5/15/1945	35196.00000	25	1.5										
FISHER DRAIN DITCH	8800676	4/14/1961	5/15/1947	35663.00000	30, 30C	0.5										
PEROTTI DITCH & PIPELINE	8800698	4/14/1961	4/1/1950	36615.00000	34	0.126										
TRUETT DITCH	8800764	4/14/1961	7/6/1955	36826.00000	43	6.75										
SLAFFER DITCH	8800736	4/14/1961	6/16/1955	36842.00000	88, 89	1										
CASBY DITCH	8800617	4/14/1961	6/21/1955	36995.00000	91	0										
GILBERT WELL	8800609	1/23/1972	5/1/1960	40298.00000	0	0.0667										
ZENA NO 2 SPRING	8800871	6/13/1971	1/19/1914	40646.23364	9	0.15										
DISMANT SPG NO 7 P	8800696	6/13/1971	6/1/1945	40646.36027	27	1.8										
COYOTE DITCH	8800637	6/13/1971	1/21/1955	40646.45193	82, 83	3										
GENIVA OUTLET CANAL	8800739	6/13/1971	2/13/1963	41316.00000	77	0										
MIDDLETON D & WTR SUPPLY	8800681	6/13/1971	6/21/1964	41791.00000	89, 90	0.15										
WAYLAND D & WTR SUPPLY	8800772	6/13/1971	6/20/1964	41806.00000	91, 92	0.15										
LULU DITCH & WTR SUPPLY	8800644	6/13/1971	7/1/1964	41820.00000	93	0.06										
KINTON D & WTR SUPPLY	8800631	6/13/1971	7/10/1964	41826.00000	94, 95	0.26										
L BROWN D & WTR SUPPLY	8800630	6/13/1971	7/20/1964	41842.00000	96, 97	0.2										
FIONWILL D & WTR SUPPLY	8801033	6/13/1971	6/7/196													







**Figure 1. Gaged Cow Creek Streamflow  
Late Season 2018 and 2019**



1. Ouray County, Ouray County Water Users, Tri-County Water Conservancy District, The Colorado River District and the Uncompahgre Valley Water Users have signed a no call agreement.
2. Ouray County, Ouray County Water Users, Tri-County Water Conservancy District, and the Colorado River District have applied for a water right to add uses to the Rams Horn Reservoir conditional water right.

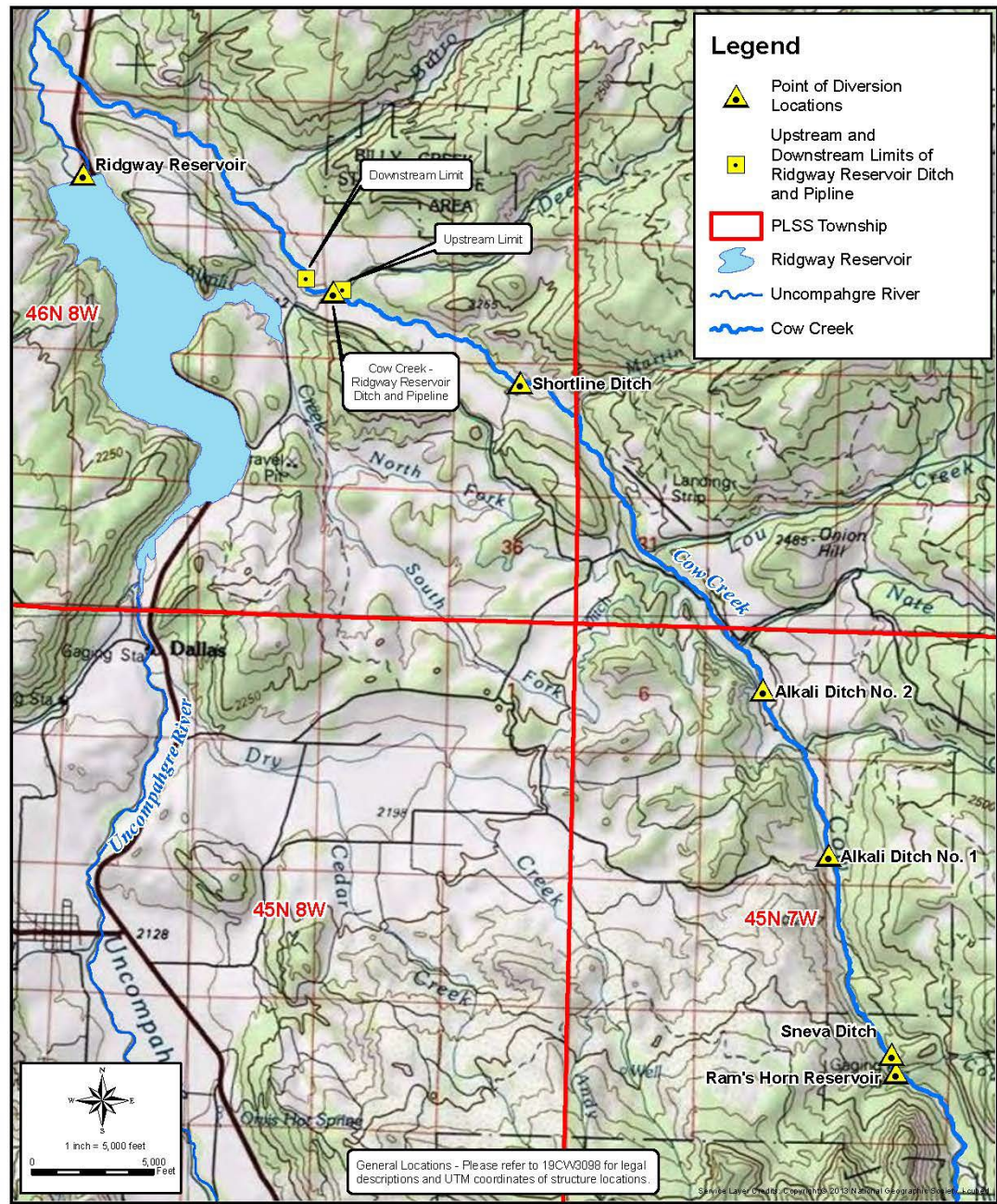
# Ram's Horn Reservoir Use Enlargement

## Existing

- Ram's Horn Reservoir was conditionally decreed for 25,349.15 Acre-Feet (AF) of storage in Civil Action No. 2440 on April 14, 1961 and its uses included:
  - Irrigation
  - Domestic
  - Municipal
  - Industrial
  - Flood control

## Proposed

- Applicants identified the following uses for Ram's Horn Reservoir to benefit Ouray County water users:
  - Flow stabilization
  - Augmentation
  - Exchange
  - Aquifer recharge
  - Reuse
  - Stream flow enhancement and augmentation for aquatic life including improving water quality for aquatic habitat
  - Piscatorial



Date: 12/9/2021 Document Path: P:\151-032 Ouray County - U08022 Water Rights Application\Mapping\Exhibit B - Structure Locations Amended Dec 2021.mxd User Name: T Downing



OURAY COUNTY, CO  
**STRUCTURE LOCATIONS**  
 OURAY COUNTY

PROJECT NO.  
 151-032.022

Questions?