

**SOUTH FORK SHOSHONE RIVER**

**Cody**  
**Wilson McKissack**

## DESCRIPTION AND OPERATION MEMORANDUM

### CODY CANAL

USGS Name Cody, Corbett Dam, Oregon Pass, Indian Pass, Irma Pass, Castle Rock Creek

#### DIVERSION DESCRIPTION

Cobble diversion dam, sliding steel gates in concrete diversion structure.

#### DIVERSION LOCATION

Source: South Fork Shoshone River  
Tract 107, Township 51 N, Range 103 W, 6 th PM

#### CONVEYANCE DESCRIPTION

Open earthen canal approximately 45 miles long with 20 miles of main laterals, approximately 95 main turnouts, 70 other structures including checks, drops, wasteways, siphons and underchutes, serving 12,500 acres, and 1800 users including the City of Cody. Ditch capacity is approximately 300 c.f.s.

#### WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
8/07/1895	1042	Irr.,Dom.,Stk.	9936.74	151.29		151.29	
3/23/1895	188E	Irr.,Dom.	238.10	2.89		154.18	
11/26/1913	2880E	Irr.	16.03	0.23		154.41	
5/17/1915	3194E	Irr.	3.00	0.04		154.45	
5/26/1917	3813E	Irr.	31.00	0.44		154.89	
9/12/1919	4037E	Irr.,Dom.,Stk.	16.00	0.23		155.12	
11/01/1919	4038E	Irr.,Dom.,Stk.	25.10	0.35		155.47	
5/29/1920	4105E	Irr.,Dom.,Stk.	28.00	0.40		155.87	
3/22/1930	4663E	Irr.,Dom.,Stk.	401.90	4.78		160.65	

#### STORAGE RIGHTS

None

#### ESTIMATED CANAL LOSSES

Varies with time of year; estimated 25% at peak

#### IRRIGATION PRACTICES

Approximately 1000 users own less than 5 acres. Irrigation is by conventional flood methods primarily, enhanced by concrete delivery ditches, gated pipe, buried pipe, pumps and sprinklers.

#### CROP TYPES / CONSUMPTIVE USE

Pasture, alfalfa hay, grass hay, small grains, occasional corn and sugar beets, lawns and gardens.

#### RETURN FLOWS

10% to Buffalo Bill Reservoir directly and via Marquette Creek and Diamond Creek. 90% to Shoshone River directly and via Sulfur Creek, Spring Creek, Sage Creek, Dry Creek and Penny Gulch.

#### OTHER OPERATIONAL INFORMATION

Manged by irrigation district board, employs manager and ditch riders.

#### CONTACT INFORMATION

Jerry Bales (Cody Canal Irrigation District)  
P.O. Box 1418  
Cody, WY 82414  
(307)587-6291

#### PHOTO LOG

Information collected from files available at Division 3 Office of the State Engineer Office in Riverton, WY, and from the ditch contact person when available.

#### DIVERSION RECORD

**Monthly Summary (ac-ft)**

Year	Discharge (ac-ft)												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973					11,871	21,560	19,775	13,220	9,650	3,709			76,076
1974					11,544	14,930	20,144	17,859	11,135				75,612
1975					3,993	18,506	19,369	18,902	11,098				71,867
1976					12,623	17,742	20,678	18,117	13,079				82,239
1977				2,475	12,331	11,302	10,711	10,917	8,860				56,596
1978					2,231	17,831	18,228	18,238	13,369				69,897
1979				0	9,412	19,924	20,370	13,111	8,400				71,217
1980													
1981				0	9,460	13,850	18,890	10,450	7,250				59,900
1982				0	15,960	14,090	16,770	16,550	7,272				70,642
1983				0	11,300	18,690	18,430	12,850	11,100				72,370
1984				0	8,940	19,860	19,370	16,330	9,010				73,510
1985				1,730	14,740	14,120	14,240	9,460	7,240				61,530
1986				1,910	10,470	14,350	15,240	13,960	8,450				64,380
1987				2,980	14,100	11,650	13,580	10,760	8,380				61,450
1988				3,110	105	0	11,250	7,040	5,610				27,115
1989				2,800	9,790	14,080	13,900	11,710	7,470				59,750
1990				2,340	10,150	13,910	14,020	11,000	8,560				59,980
1991				670	5,030	9,780	14,130	10,550	5,000				45,160
1992				3,430	15,330	10,810	10,450	10,140	7,860				58,020
1993				2,230	11,710	13,420	12,970	11,730	9,470				61,530
1994				0	11,680	16,360	12,550	7,170	7,290				55,050
1995				2,920	8,540	14,620	14,600	14,250	9,310				64,240
1996				1,270	9,430	14,060	14,820	13,170	8,130				60,880
1997				1,960	12,560	10,360	12,800	11,260	9,450				58,390
1998				2,489	14,561	12,921	14,404	11,361	9,997				65,733
1999				2,921	10,698	14,047	14,870	12,607	9,630				64,773
2000				4,196	12,601	14,704	14,632	8,735	6,740				61,608
2001				3,299	14,924	13,014	12,347	8,017	6,213				57,814
Total				1,858	10,574	14,303	15,483	12,481	8,751	3,709			63,451

**Monthly Summary (cfs)**

Year	Discharge (cfs)												Average
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973					193	362	322	215	162	60			251
1974					188	251	328	290	187				249
1975					65	311	315	307	186				237
1976					205	298	336	295	220				271
1977				42	201	190	174	178	149				155
1978					36	300	296	297	225				231
1979				0	153	335	331	213	141				196
1980													
1981				0	154	233	307	170	122				164
1982				0	260	237	273	269	122				193
1983				0	184	314	300	209	187				199
1984				0	145	334	315	266	151				202
1985				29	240	237	232	154	122				169
1986				32	170	241	248	227	142				177
1987				50	229	196	221	175	141				169
1988				52	2	0	183	114	94				74
1989				47	159	237	226	190	126				164
1990				39	165	234	228	179	144				165
1991				11	82	164	230	172	84				124
1992				58	249	182	170	165	132				159
1993				37	190	226	211	191	159				169
1994				0	190	275	204	117	123				151
1995				49	139	246	237	232	156				177
1996				21	153	236	241	214	137				167
1997				33	204	174	208	183	159				160
1998				42	237	217	234	185	168				180
1999				49	174	236	242	205	162				178
2000				71	205	247	238	142	113				169
2001				55	243	219	201	130	104				159
Average				31	172	240	252	203	147	60			158

Notes:

- 1 Data from SEO Hydrographers Reports, USGS Gage Data and WRDS electronic data.
- 2 Monthly summaries are summarized from daily data. Missing readings interpolated from readings immediately before and after missing data.

## DESCRIPTION AND OPERATION MEMORANDUM

### WILSON AND MCKISSACK

USGS ID 44109 D3 USGS NAME CASTLE ROCK CREEK

#### DIVERSION DESCRIPTION

Two 4' rectangular screwtype gates in concrete headwall.

#### DIVERSION LOCATION

Source: South Fork Shoshone River  
S 26° 19' E, 513.7' from th SW corner Section 7 (o.s.), Township 51N, Range 103W, and is in Tract 75  
(NE 1/4 NE 1/4 Section 18)

#### CONVEYANCE DESCRIPTION

Open dirt ditch approximately 4 1/4 miles long, serving approximately 940 acres and 30 users. Ditch capacity  
~ 35 c.f.s.

#### WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	Res.(af)	Cumulative Flow(cfs)	Comments
4/09/1892	258	Irr.	514.00	7.33		7.33	
6/28/1897	262E	Irr.	153.00	2.17		9.50	
5/25/1905	1487E	Irr.	135.00	1.92		11.42	
7/21/1908	8584	Irr.	677.80	9.68		21.10	

#### STORAGE RIGHTS

None

#### ESTIMATED CANAL LOSSES

Varies with time of year; estimated 20-30% at peak.

#### IRRIGATION PRACTICES

Conventional flood irrigation practices enhanced by irrigation pipe and ditch lining, and sprinklers.

#### CROP TYPES / CONSUMPTIVE USE

Alfalfa hay, pasture, grass hay, small grains, occasional row crops, lawns and gardens.

#### RETURN FLOWS

Minimal; some to Bear Creek, majority to South Fork Shoshone River.

#### OTHER OPERATIONAL INFORMATION

Infromal Ditch company, operates in close contact with Neff ditch.

#### CONTACT INFORMATION

Sam Tilden  
Cody, WY  
(307) 587-5615

#### PHOTO LOG

Information collected from files available at Division 3 Office of the State Engineer Office in Riverton, WY, and from the ditch contact person when available.

#### DIVERSION RECORD

Year	Measured Data
1983	
1984	
1985	
1986	5/12, 2.69 cfs; 5/21, 20.07 cfs; 5/29, 25 cfs; 6/4, 25 cfs; 7/15, 30 cfs; 8/1, 25 cfs; 10/7, 10 cfs
1995	5/9, 5.46 cfs; 5/16, 8.34 cfs; 5/23, 7.14 cfs; 6/21, 42.13 cfs; 6/28, 30.28 cfs; 7/19, 27.57 cfs; 9/20, 17.5 cfs; 9/27, 17.46 cfs
1996	5/23, 12 cfs; 6/25, 32.16 cfs; 7/9, 31.24 cfs; 7/23, 31.24 cfs; 7/30, 30.28 cfs; 8/15, 27.57 cfs; 8/30, 13.7 cfs; 9/11, 8.34 cfs; 9/18, 15.12 cfs; 9/25, 13.7 cfs
1997	5/15, 10.2 cfs; 5/29, 27.6 cfs; 6/10, Off; 6/17, 14.4 cfs; 6/24, 21.5 cfs; 7/8, 26.6 cfs; 7/22, 29.7 cfs; 8/1, 29.4 cfs; 8/12, 17 cfs; 8/19, 14.4 cfs; 8/26, 15.12 cfs; 9/10, 13.46 cfs; 9/23, 11.54 cfs
1998	6/26, 11.54 cfs; 7/9, 23.14 cfs; 7/14, 27.6 cfs; 7/21, 33.13 cfs; 7/28, 35.09 cfs; 8/18, 26.2 cfs; 8/25, 21.05 cfs; 9/24, 11.54 cfs
1999	5/12, 4 cfs; 6/30, 23.14 cfs; 7/29, 31.24 cfs; 8/19, 18.19 cfs; 9/2, 15.12 cfs; 9/10, 15.12 cfs; 9/15, 13.31 cfs; 9/23, 10.23 cfs; 9/29, 11.54 cfs
2000	4/26, Off; 5/18, 15 cfs; 6/30, 18.5 cfs; 7/12, 18.5 cfs; 7/18, 24.02 cfs; 7/27, 15.12 cfs; 8/24, 9.92 cfs; 9/14, 8.34 cfs; 9/28, 6.5 cfs
2001	6/21, 14.4 cfs; 6/28, 11.45 cfs; 7/19, 15.89 cfs; 7/26, 7.68 cfs; 8/16, 6 cfs; 8/30, 6 cfs; 9/20, 6.85 cfs

Notes:

- 1 immediately before or after the actual measurement day.
- 2 Data from SEO Hydrographers Reports for years when spot measurements taken.