

LITTLE WIND RIVER

**Coolidge
Double Ditch
Little Wind 4
Little Wind 5
Ray
Sub Agency**

DESCRIPTION AND OPERATION MEMORANDUM

COOLIDGE CANAL

USGS ID 42108 H3, 43108 A3, 43108 A5, 43108 A4 USGS Name Arapahoe NE, Riverton East, Pavillion SE
Riverton West

DIVERSION DESCRIPTION

Sliding steel gates in concrete headwall

DIVERSION LOCATION

Source: Little Wind River
N 2° 17'E, 2554' from the SW corner of Section 36, Township 1N, Range 1W, WRM

CONVEYANCE DESCRIPTION

Open dirt canal approximately 12 miles long, concrete check structures, approximately 12 major laterals, over 100 individual farm turnouts.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	6897.00		30108.87		
7/03/1868	Walton	Irr.	1637.25		7133.15		
3/18/1905	6632	Irr.	1078.20	15.36		15.36	

STORAGE RIGHTS

Washakie Reservoir
Ray Lake Reservoir

ESTIMATED CANAL LOSSES

Varies with time of year
Est. 25% at peak

IRRIGATION PRACTICES

Conventional gravity irrigation methods, open dirt sublaterals, some gated pipe, some sprinklers.

CROP TYPES / CONSUMPTIVE USE

Grass hay, alfalfa hay, small grains, occasional corn, native pasture, gardens and lawns

RETURN FLOWS

100% to Little Wind River, some directly, some via Mill Creek, some via Sharpnose Draw

OTHER OPERATIONAL INFORMATION

BIA Watermaster and ditchriders

CONTACT INFORMATION

U.S. BIA, Irrigation Dept.
Fort Washakie, WY
(307)332-2596

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													
1974													
1975													
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990													
1991													
1992				0	5,770	7,890	6,610	3,920	2,750				26,940
1993													
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
Total				0	5,770	7,890	6,610	3,920	2,750				26,940

Monthly Summary (cfs)

Year	Discharge (cfs)												Average
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973													
1974													
1975													
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990													
1991													
1992				0	94	133	107	64	46				74
1993													
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
Average				0	94	133	107	64	46				74

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

DOUBLE DITCH

DIVERSION DESCRIPTION

One 3' screwtype rectangular gate covering a 65 foot long buried oval culvert.

DIVERSION LOCATION

Source: Little Wind River

N 65° W, 1573' from the SE corner Section 23, Township 1S, Range 3E, WRM, and is in the SW 1/4 SE 1/4 Section 23.

CONVEYANCE DESCRIPTION

Open dirt ditch 3 3/4 miles long serving approximately 760 acres and one user. Two big electric pumps lift water to permitted lands above ditch. Ditch capacity ~ 25 c.f.s.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
12/11/1914	13401	Irr.	284.90	4.08		4.08	
12/29/1922	4340E	Dom.,Irr.,Stk.	169.62	2.42		6.50	
3/30/1978	6681E	Irr.	301.00	4.30		10.80	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

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

IRRIGATION PRACTICES

Conventional flood and sideroll sprinkler irrigation practices.

CROP TYPES / CONSUMPTIVE USE

Alfalfa hay, native hay, pasture, occasional small grain.

RETURN FLOWS

Minimal

OTHER OPERATIONAL INFORMATION

Efficiently operated ditch.

CONTACT INFORMATION

Griffin Brothers, Inc.
Riverton, WY
(307) 856-2030

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

DESCRIPTION AND OPERATION MEMORANDUM

LITTLE WIND RIVER DITCH NO. 4

DIVERSION DESCRIPTION

One 3' screwtype sliding rectangular gate in concrete headwall, headgate rebuilt 1997.

DIVERSION LOCATION

Source: Little Wind River
S 40° 30' W, 704' from the center of Section 31, Township 1N, Range 2E, WRM, and is in the NE 1/4 SW 1/4 Section 31.

CONVEYANCE DESCRIPTION

Open dirt ditch 2 1/2 miles long serving 509 acres. Ditch capacity ~ 15 c.f.s.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	72.80		377.76		
5/05/1905	6604	Irr.	298.14	4.26		4.26	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

Varies with the time of year, estimated 30-35% at peak.

IRRIGATION PRACTICES

Conventional flood irrigation methods, some use of irrigation pipe.

CROP TYPES / CONSUMPTIVE USE

Pasture, yards, hay.

RETURN FLOWS

Some to Little Wind River

OTHER OPERATIONAL INFORMATION

CONTACT INFORMATION

Earl Givens
Arapahoe, WY
(307)856-2190

Shoshone and Arapahoe Tribes
Ft. Washakie, WY
(307) 332-3164

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

DESCRIPTION AND OPERATION MEMORANDUM

LITTLE WIND RIVER DITCH NO. 5

DIVERSION DESCRIPTION

One 36" pipe in concrete headwall with metal slide.

DIVERSION LOCATION

Source: Little Wind River
S 78° 29' W, 553' from the center of Section 4, Township 1S, Range 2E, WRM, and is in the NE 1/4 SW 1/4 Section 4.

CONVEYANCE DESCRIPTION

Open dirt ditch 3 1/2 miles long serving approximately 300 acres. Ditch capacity ~ 14 c.f.s.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	330.40		1714.85		
7/03/1868	Walton	Irr.	217.90		1064.79		
5/05/1905	6605	Irr.	40.00	0.57		0.57	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

Varies with the time of year; estimated 35-40% at peak.

IRRIGATION PRACTICES

Conventional flood irrigation methods, some use of gated pipe.

CROP TYPES / CONSUMPTIVE USE

Alfalfa hay, native hay, pasture, occasional small grain.

RETURN FLOWS

Some to Little Wind River

OTHER OPERATIONAL INFORMATION

CONTACT INFORMATION

Floyd Collins Arapahoe, WY (307)856-2924	Shoshone and Arapahoe Tribes Ft. Washakie, WY (307) 332-3164
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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

DESCRIPTION AND OPERATION MEMORANDUM

RAY CANAL

DIVERSION DESCRIPTION

Sliding steel gates in concrete headwall.

DIVERSION LOCATION

Source: South Fork Little Wind River and North Fork Little Wind River via supply canal
N 30° 0'E, 1283' from SW Corner Section 6, Township 1S, Range 1 W, WRM

CONVEYANCE DESCRIPTION

Open dirt canal with screw type turnouts into 12 main laterals. Main canal approximately 11 miles long, over 150 individual turnouts. Concrete check and drop structures.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	9258.00		43061.13		
7/03/1868	Walton	Irr.	1692.26		7869.01		
3/18/1905	6633 9080	Irr.	1598.30	21.15		21.15	

STORAGE RIGHTS

Washakie Reservoir
Ray Lake Reservoir

ESTIMATED CANAL LOSSES

Varies with time of year
Est. 10-15% at peak

IRRIGATION PRACTICES

Conventional flood irrigation practices, some concrete delivery ditches, some gated pipe, some sprinklers.

CROP TYPES / CONSUMPTIVE USE

Pasture, hay, small grains, some corn, lawns, and gardens.

RETURN FLOWS

Some back to Little Wind River via Trout Creek, some via Mill Creek, and some to North Fork Popo Agie River

OTHER OPERATIONAL INFORMATION

BIA Watermaster and ditchriders

CONTACT INFORMATION

U.S. BIA
Fort Washakie, WY
(307)332-3164

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													
1974													
1975													
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989				2,825	10,653	12,369	14,138	10,130	6,456				56,571
1990				1,651	8,870	19,012	16,893	9,229	8,714				64,369
1991				804	1,307	5,271	14,238	10,040	8,356				40,016
1992				0	11,840	14,700	6,760	9,810	2,620				45,730
1993				0	3,460	6,780	13,470	13,480	8,520				45,710
1994				0	9,230	16,660	10,910	4,680	2,270				43,750
1995				1,300	1,600	1,760	14,670	14,820	4,740				38,890
1996				216	6,637	18,252	17,631	11,193	3,443	1,045			57,372
1997					9,031	14,085	15,642	12,252	9,912	4,503			60,921
1998				110	6,820	10,060	16,410	13,130	9,300				55,830
1999				610	1,120	10,460	17,180	8,860	5,650				43,880
2000													
2001													
Total				751	6,415	11,764	14,358	10,693	6,362	2,774			50,345

Monthly Summary (cfs)

Year	Discharge (cfs)												Average
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973													
1974													
1975													
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989				47	173	208	230	165	108				155
1990				28	144	320	275	150	146				177
1991				14	21	89	232	163	140				110
1992				0	193	247	110	160	44				126
1993				0	56	114	219	219	143				125
1994				0	150	280	177	76	38				120
1995				22	26	30	239	241	80				106
1996				4	108	307	287	182	58				157
1997					147	237	254	199	167	17			201
1998				2	111	169	267	214	156	73			153
1999				10	18	176	279	144	95				120
2000													
2001													
Average				13	104	198	234	174	107	45			125

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

SUB AGENCY CANAL

DIVERSION DESCRIPTION

Sliding steel grates in concrete headwall

DIVERSION LOCATION

Source: Little Wind River
SW 1/4 NW 1/4 Section 11, Township 1S, Range 2E, WRM

CONVEYANCE DESCRIPTION

Open Dirt canal approximately 8 miles long, with 10 major laterals, concrete drops and check structures. Over 60 individual delivery turnouts.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	3045.00		14144.00		
7/03/1868	Walton	Irr.	901.35		4146.21		
5/05/1905	6582	Irr.	835.00	11.91		11.91	

STORAGE RIGHTS

Washakie Reservoir
Ray Lake Reservoir

ESTIMATED CANAL LOSSES

Varies with time of year
Est. 15-20% at peak

IRRIGATION PRACTICES

Conventional flood irrigation practices - some concrete delivery ditches, gated pipe, some sprinklers.

CROP TYPES / CONSUMPTIVE USE

Pasture, hay, corn, small grain, lawns, and gardens.

RETURN FLOWS

Some directly to Little Wind River via constructed drains. Some to Big Wind River via tail end of lefthand ditch.

OTHER OPERATIONAL INFORMATION

BIA watermaster and ditchriders

CONTACT INFORMATION

U.S. BIA
Fort Washakie, WY
(307)332-2596

PHOTO LOG

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DIVERSION RECORD

Monthly Summary (ac-ft)

Year	Discharge (ac-ft)												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973													
1974													
1975													
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990													
1991													
1992				470	6,100	4,840	7,150	6,140	4,270				28,970
1993													
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
Total				470	6,100	4,840	7,150	6,140	4,270				28,970

Monthly Summary (cfs)

Year	Discharge (cfs)												Average
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973													
1974													
1975													
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990													
1991													
1992				8	99	81	116	100	72				79
1993													
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
Average				8	99	81	116	100	72				79

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.