

BIG WIND RIVER

Aragon

Green

Hurtado

Johnstown

LeClair

Lefthand

Lowerwind

Riverton Valley

Upper Wind

Wyoming Canal

DESCRIPTION AND OPERATION MEMORANDUM

ARAGON DITCH

DIVERSION DESCRIPTION

Open intake to river, controlled by river surface elevation and spill gate down-ditch

DIVERSION LOCATION

Source: Big Wind River

S 70° 15'W, 1830' from 1/4 corner common to Sections 32 and 33, Township 3N, Range 1E, WRM

CONVEYANCE DESCRIPTION

Open dirt ditch 4+ miles long, some screw type turnouts; including Kinnear ditch, capacity is ~ 35 c.f.s. serving 1150 acres.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	1969.68		407.30		
7/03/1868	Walton	Irr.	611.00		2986.90		
5/05/1905	6598	Irr.	410.63	5.85		5.85	
5/05/1905	1366E	Irr.	280.00	4.00		9.85	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

Varies with time of year

Est. 15-20% at peak

IRRIGATION PRACTICES

Conventional flood irrigation practices, some gated pipe, some sprinklers.

CROP TYPES / CONSUMPTIVE USE

Pasture, native hay, alfalfa hay, small grains, gardens and lawns

RETURN FLOWS

100% to Big Wind River

OTHER OPERATIONAL INFORMATION

Private Ditch, approximately 10 users

CONTACT INFORMATION

Clyde Woolery

Kinnear, WY

(307)856-6167

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

GREEN DITCH

DIVERSION DESCRIPTION

One 8' screwtype sliding steel gate in concrete headwall.

DIVERSION LOCATION

Source: Big Wind River
N 60° W, 1520' from the east 1/4 corner of Section 30, Township 42N, Range 107W, and is in the SW 1/4 NE 1/4 Section 30.

CONVEYANCE DESCRIPTION

Open dirt ditch 4 1/2 miles long delivering water to approximately 950 acres and 65 users. Entire area is heavily subdivided and serves dozens of small parcels, a golf course, and only one larger ranch. Ditch capacity is ~ 25 c.f.s.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
10/26/1899	2331	Irr.	399.00	5.69		5.69	
7/17/1905	1406E	Irr.	328.00	4.67		10.36	
5/11/1906	1538E	Irr.	36.00	0.51		10.87	
12/17/1909	2162E	Irr.	13.00	0.18		11.05	
12/07/1914	3077E	Irr.,Stk.	75.00	1.07		12.12	
6/14/1961	6014E	Irr.,Stk.	98.00	1.40		13.52	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

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

IRRIGATION PRACTICES

Conventional flood irrigation practices, numerous pumps, some pipe.

CROP TYPES / CONSUMPTIVE USE

Alfalfa hay, grass hay, pasture, yards.

RETURN FLOWS

Minimal, all to Big Wind River.

OTHER OPERATIONAL INFORMATION

CONTACT INFORMATION

Parker Land and Cattle Co.
Dubois, WY
(307) 455-3969

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

HURTADO DITCH

DIVERSION DESCRIPTION

Open intake to river controlled by river surface elevation and spill gate downditch approximately 1/4 mile.

DIVERSION LOCATION

Source: Big Wind River

S 16°38'E 2879' from NE corner Section 20, Township 3N, Range 1W, WRM

CONVEYANCE DESCRIPTION

Open dirt 4 miles long, some screw type turnouts into laterals. Ditch capacity ~ 18 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.	205.00		973.75		
7/03/1868	Walton	Irr.	162.00		769.50		
5/05/1905	6600	Irr.	184.00	2.62		2.62	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

Varies with time of year
Approximately 25% at peak

IRRIGATION PRACTICES

Gravity surface irrigation.

CROP TYPES / CONSUMPTIVE USE

Hay, pasture, some small grains

RETURN FLOWS

100% to Big Wind River

OTHER OPERATIONAL INFORMATION

Private ditch

CONTACT INFORMATION

Vern Wickstrom
Kinnear, WY
(307)857 - 2969

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

JOHNSTOWN CANAL

DIVERSION DESCRIPTION

Sliding metal gates in concrete headwall against stable rock cliff, spill gate down ditch approximately 3/4 mile

DIVERSION LOCATION

Source: Big Wind River
S 45° 40'W, 2305' from 1/4 corner common to Sections 13 and 14, Township 2N, Range 1E, WRM

CONVEYANCE DESCRIPTION

Dirt canal 5 miles long with screw type headgates for turnouts into sublaterals, some concrete check structures, some wooden dividers on-farm. Three major sublaterals with approximately 25 individual farm turnouts. Capacity approximately 30 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.	668.00		3841.00		
7/03/1868	Walton	Irr.	202.00		1222.10		
3/18/1905	6631	Irr.	405.00	5.79		5.79	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

Varies with time of year, 25% at peak

IRRIGATION PRACTICES

Flood irrigation by gravity methods below canal, some moveable pipe. Sprinkler irrigation above canal

CROP TYPES / CONSUMPTIVE USE

Native pasture, grass and alfalfa hay, small grains, gardens

RETURN FLOWS

100% to the Big Wind River

OTHER OPERATIONAL INFORMATION

BIA watermaster and ditchrider

CONTACT INFORMATION

U.S. Bureau of Indian Affairs, 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					475	1,093	1,742	1,311	818				5,438
1992				50	1,400	1,420	780	1,590	960				6,200
1993				0	770	1,070	1,430	1,220	650				5,140
1994				0	1,610	1,770	1,750	1,300	1,420				7,850
1995				0	130	680	1,250	1,550	1,020				4,630
1996				0	650	1,010	1,640	1,820	1,460				6,580
1997				0	770	980	1,850	1,200	1,100				5,900
1998				0	380	1,470	1,380	1,650	1,180				6,060
1999				0	430	2,000	2,010	2,060	1,620				8,120
2000													
2001					1,391	1,946	1,991	1,884	1,757				8,970
Total				6	801	1,344	1,582	1,559	1,199				6,490

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					8	18	28	21	14				18
1992				1	23	24	13	26	16				17
1993				0	13	18	23	20	11				14
1994				0	26	30	28	21	24				22
1995				0	2	11	20	25	17				13
1996				0	11	17	27	30	25				18
1997				0	13	16	30	20	18				16
1998				0	6	25	22	27	20				17
1999				0	7	34	33	34	27				22
2000													
2001					23	33	32	31	30				30
Average				0	13	23	26	25	20				18

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

LECLAIR – RIVERTON #2 CANAL

USGS ID 44108 H3, 44108 A3, 44108 A4, 44108 A5 USGS Name Arapahoe NE, Riverton East, Pavillion SE, Riverton West

DIVERSION DESCRIPTION

Gear driven slide gates in concrete headwall. Stable headgate location against sandrock cliff on river bend spill gate approximately 2 miles down ditch from HG. Low concrete dam.

DIVERSION LOCATION

Source: Big Wind River
N 80° 20' W, 983' from 1/4 corner between Sections 32 and 33, Township 2N, Range 2E, WRM

CONVEYANCE DESCRIPTION

Open Ditch, 450 c.f.s capacity, 31 miles long. Dirt canal with screw type diversion gates into sublaterals, numerous buried pipe main laterals.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	1252.90		6002.96		
7/03/1868	Walton	Irr.	1978.40		9496.32		
5/05/1905	6601	Irr.	545.21	7.78		7.78	
8/07/1906	7300	Irr.	10932.63	156.10		163.88	
4/03/1975	6574E	Irr.	2.00	0.03		163.91	

STORAGE RIGHTS

Boysen Reservoir by contract with U.S. Bureau of Reclamation 14,400 a.f. per year by exchange

ESTIMATED CANAL LOSSES

Varies with time of year
approximately 20% at peak

IRRIGATION PRACTICES

Gravity Irrigation by standard surface methods, some concrete lined ditches, some underground pipe, considerable use of gated pipe, some sprinklers, row crops.

CROP TYPES / CONSUMPTIVE USE

Cultivated pasture, hay, small grain, corn, beans, sugar beets, lawns and gardens.

RETURN FLOWS

Approximately 30% to Riverton Valley Canal, 70% to Big Wind River

OTHER OPERATIONAL INFORMATION

Serves municipal water to City of Riverton during summer months, serves Riverton Country Club and Mountain Veiw Cemetery. Delevery to numerous residential subdivisions.

CONTACT INFORMATION

Johnnie Hubenka
462 S Federal Blvd, Ste. A
Riverton, WY 82501
(307) 856-3327

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					5,207	19,478	15,564	17,496	2,202				59,946
1974					14,218	22,290	21,862	18,101	10,762				87,233
1975					867	13,827	22,733	16,427	11,393				65,246
1976					12,881	15,531	21,888	13,208	11,937				75,443
1977					5,823	14,779	14,830	11,070	8,846				55,349
1978					1,619	14,753	17,865	15,021	10,512				59,770
1979				0	2,257	18,573	20,714	14,753	11,762	4,255			68,059
1980													
1981				173	8,470	12,980	18,360	12,980	7,180				60,143
1982				0	0	5,306	19,880	19,520	8,541				53,247
1983				0	0	20,400	22,660	18,560	14,680				76,300
1984				0	6,140	19,720	21,510	17,670	13,500				78,540
1985				2,060	18,080	18,180	18,610	14,630	11,470				83,030
1986				805	12,870	21,020	21,950	19,311	12,490				88,446
1987				1,310	17,440	16,890	20,480	17,250	11,590				84,960
1988				2,740	15,900	22,180	18,190	14,690	9,720				83,420
1989				4,660	12,960	12,220	20,380	18,440	13,410				82,070
1990				1,490	10,970	19,560	19,150	17,350	11,780				80,300
1991				1,690	4,340	11,820	21,430	14,380	12,880				66,540
1992				2,780	0	13,850	15,870	17,580	13,800				63,880
1993				370	8,320	11,080	20,140	17,900	17,140				74,950
1994				3,600	15,030	14,110	14,820	16,030	12,630				76,220
1995				1,750	4,000	8,370	18,860	18,100	13,510				64,590
1996				0	13,320	16,010	20,740	18,680	12,680				81,430
1997				1,400	15,060	14,860	23,210	13,390	13,050				80,970
1998				220	10,510	9,720	24,370	13,120	10,150				68,090
1999				1,570	5,670	16,800	23,340	20,710	10,470				78,560
2000				4,590	15,990	18,210	19,920	15,950	12,150				86,810
2001				1,111	14,571	15,509	13,589	13,880	9,935				68,595
Total				1,469	9,018	15,644	19,747	16,293	11,435	4,255			73,605

Monthly Summary (cfs)

Year	Discharge (cfs)												Average
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973					85	327	253	285	37				197
1974					231	375	356	294	181				287
1975					14	232	370	267	191				215
1976					209	261	356	215	201				248
1977					95	248	241	180	149				183
1978					26	248	291	244	177				197
1979				0	37	312	337	240	198	69			187
1980													
1981				3	138	218	299	211	121				165
1982				0	0	89	323	317	144				146
1983				0	0	343	369	302	247				210
1984				0	100	331	350	287	227				216
1985				35	294	306	303	238	193				228
1986				14	209	353	357	314	210				243
1987				22	284	284	333	281	195				233
1988				46	259	373	296	239	163				229
1989				78	211	205	331	300	225				225
1990				25	178	329	311	282	198				221
1991				28	71	199	349	234	216				183
1992				47	0	233	258	286	232				176
1993				6	135	186	328	291	288				206
1994				60	244	237	241	261	212				209
1995				29	65	141	307	294	227				177
1996				0	217	269	337	304	213				223
1997				24	245	250	377	218	219				222
1998				4	171	163	396	213	171				186
1999				26	92	282	380	337	176				216
2000				77	260	306	324	259	204				238
2001				19	237	261	221	226	167				188
Average				25	147	263	321	265	192	69			183

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

LEFT HAND CANAL (ALSO KNOWN AS BIG WIND RIVER DITCH)

DIVERSION DESCRIPTION

Sliding metal gates in concrete headwall.

DIVERSION LOCATION

Source: Big Wind River
At the section corner common to Sections 27,28,33 and 34 in Township 1N, Range 3E. WRM

CONVEYANCE DESCRIPTION

Dirt canal, 5 miles long with screw type headgates for turnouts into sublaterals, concrete drops and check structures in main canal and laterals, same wooden divider boxes on-farm. Six major sublaterals with approximately 60 individual turnouts to farm fields. Capacity is approximately 45 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.	7267.00		1205.00		
7/03/1868	Walton	Irr.	69.87		421.32		
3/18/1905	6634	Irr.	570.20	4.35		4.35	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

Varies with season
Estimated 25% at peak

IRRIGATION PRACTICES

Flood irrigation by gravity methods, some moveable pipe on-farm.

CROP TYPES / CONSUMPTIVE USE

Native pasture, cultivated pasture, grass and alfalfa hay, small grains, lawns and gardens, and occasional corn.

RETURN FLOWS

Approximately 65% to the Big Wind River, and 35% to the Little Wind River.

OTHER OPERATIONAL INFORMATION

Some co-mingling of water from Sub Agency Ditch possible. Tail end of canal could be used to transport Little Wind River water to the Big Wind River via Sub Agency Canal.

CONTACT INFORMATION

U.S. Bureau of Indian Affairs, Irrigation Department
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					1,283	1,448	1,793	1,878	1,357				7,759
1992				0	2,170	1,480	1,870	1,520	1,390				8,430
1993				0	1,240	2,360	1,190	1,650	1,890				8,330
1994				0	1,300	2,100	2,740	2,930	2,550				11,620
1995					469	760	1,289	1,710	1,092				5,320
1996				0	520	890	1,520	1,450	1,100				5,480
1997				0	1,360	1,490	1,560	990	1,270				6,670
1998				0	850	1,220	1,640	540	870				5,120
1999				0	250	990	1,530	1,210	620				4,600
2000													
2001					1,445	2,475	2,503	2,009	2,289				10,722
Total				0	1,089	1,521	1,764	1,589	1,443				7,405

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					21	24	29	31	23				26
1992				0	35	25	30	25	23				23
1993				0	20	40	19	27	32				23
1994				0	21	35	45	48	43				32
1995					8	13	21	28	18				18
1996				0	8	15	25	24	18				15
1997				0	22	25	25	16	21				18
1998				0	14	21	27	9	15				14
1999				0	4	17	25	20	10				13
2000													
2001					24	42	41	33	38				35
Average				0	18	26	29	26	24				20

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

LOWER WIND RIVER A CANAL

DIVERSION DESCRIPTION

Manually operated sliding gates in concrete rectangle.

DIVERSION LOCATION

Source: Big Wind River/Dry Creek
SE 1/4 NE 1/4 Section 32, Township 5N, Range 4W, WRM
Rediversion of Big Wind River flows co-mingled with natural flows of Dry Creek

CONVEYANCE DESCRIPTION

Open dirt ditch 3 1/2 miles long with concrete check structures and screw type delivery gates to individual fields and sublaterals.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	1177.00		10683.00		
4/27/1905	6625	Irr.	315.03	4.49		4.49	
12/08/1905	1462E	Irr.	1.00	0.01		4.50	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

Varies with time of year, estimated 40% at peak

IRRIGATION PRACTICES

Conventional wild flooding practices through dirt ditches, some gated pipe.

CROP TYPES / CONSUMPTIVE USE

Native hay, alfalfa hay, pasture, some small grains, lawns and gardens.

RETURN FLOWS

100% to Big Wind River, directly and via Dry Creek and Cottonwood Draw.

OTHER OPERATIONAL INFORMATION

BIA management with local user group, BIA employs ditch rider

CONTACT INFORMATION

U.S. Bureau of Indian Affairs, Irrigation Dept.
Fort Washakie, WY
(307)332-2596

Tim Schell
Crowheart, WY
(307)486-2203

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													
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1991													
1992													
1993													
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
Total													0

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													
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1990													
1991													
1992													
1993													
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
Average													ERR

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

RIVERTON VALLEY CANAL

DIVERSION DESCRIPTION

Manually operated sliding steel gates in concrete headwall. Gravel diversion dam, spill gate 1 1/2 miles down ditch.

DIVERSION LOCATION

Source: Big Wind River
S 43° 45' W, 831' from the SE corner of Section 27, Township 1N, Range 3E. WRM
Type: Manual Gates 185 c.f.s. capacity

CONVEYANCE DESCRIPTION

Open dirt canal, some open concrete lining, some closed pipe lining ditch, canal, and pipe. 185 c.f.s. capacity, 28 miles long screw type headgates for delivery into sublaterals, some piped laterals.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
8/07/1906	7300	Irr.	8890.00	127.00			

STORAGE RIGHTS

Boysen contract for 9000 acre feet per year by exchange

ESTIMATED CANAL LOSSES

Varies with season
Estimated 10% at peak

IRRIGATION PRACTICES

Open dirt laterals, concrete lined ditches, underground pipe, sprinklers. 8,033 irrigated acres, 610 users. Includes delivery to various subdivisions within Riverton city limits, small lawn pumps

CROP TYPES / CONSUMPTIVE USE

Pasture, hay, small grains, corn, beans, sugar beets, gardens, and lawns.

RETURN FLOWS

100% to Big Wind / Big Horn River, some directly, some via Madden Draw, and some via constructed drains.

OTHER OPERATIONAL INFORMATION

Receives considerable inflows from LeClair Canal return flows.

CONTACT INFORMATION

Robert Rein
420 East Washington
Riverton, WY 82501
(307) 856-3103

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					2,836	7,740	6,345	6,077	577				23,576
1974					5,726	7,025	7,892	5,328	3,646				29,617
1975					1,061	6,942	8,924	6,149	4,772				27,848
1976					5,056	6,645	8,771	5,423	4,951				30,845
1977					4,520	7,942	6,536	4,106	3,043				26,146
1978					1,313	7,886	8,539	5,732	3,352				26,822
1979				0	1,400	9,178	9,632	4,826	4,673				29,709
1980													
1981				0	4,120	7,510	7,810	5,940	3,630				29,010
1982				0	8,281	6,839	8,906	4,758	2,321				31,105
1983				0	2,130	8,480	8,290	5,780	4,030				28,710
1984				0	4,240	7,910	9,170	5,810	4,730				31,860
1985				3,210	8,640	8,010	8,150	6,080	5,760				39,850
1986				1,440	7,940	7,600	8,050	6,150	4,310				35,490
1987				940	8,090	7,390	7,390	5,610	4,710				34,130
1988				1,910	9,020	9,690	8,860	7,620	4,820				41,920
1989				3,640	7,080	5,010	8,990	7,030	4,330				36,080
1990				1,370	6,650	9,050	9,150	7,510	6,080				39,810
1991				1,390	4,410	7,070	10,270	7,420	5,740				36,300
1992				1,610	8,600	5,000	6,820	7,360	5,490				34,880
1993				540	5,520	4,870	8,990	7,110	6,900				33,930
1994				1,740	9,030	7,730	8,210	7,740	5,450				39,900
1995				780	2,130	3,640	8,430	8,370	5,200				28,550
1996				740	8,410	6,430	9,350	7,330	5,990				38,250
1997				1,210	6,890	4,490	8,767	7,230	6,250				34,837
1998				0	6,560	4,520	8,220	5,300	5,690				30,290
1999				660	3,530	6,390	6,680	6,850	4,830				30,940
2000				2,930	6,860	6,730	8,180	6,790	4,090				35,580
2001				526	8,152	6,276	7,410	7,160	2,940				32,464
Total				1,120	5,650	6,928	8,383	6,378	4,582				33,042

Monthly Summary (cfs)

Year	Discharge (cfs)												Average
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973					46	130	103	99	10				78
1974					93	118	128	87	61				97
1975					17	117	145	100	80				92
1976					82	112	143	88	83				102
1977					74	133	106	67	51				86
1978					21	133	139	93	56				88
1979				0	23	154	157	78	79				82
1980													
1981				0	67	126	127	97	61				80
1982				0	135	115	145	77	39				85
1983				0	35	143	135	94	68				79
1984				0	69	133	149	94	79				87
1985				54	141	135	133	99	97				110
1986				24	129	128	131	100	72				97
1987				16	132	124	120	91	79				94
1988				32	147	163	144	124	81				115
1989				61	115	84	146	114	73				99
1990				23	108	152	149	122	102				109
1991				23	72	119	167	121	96				100
1992				27	140	84	111	120	92				96
1993				9	90	82	146	116	116				93
1994				29	147	130	134	126	92				109
1995				13	35	61	137	136	87				78
1996				12	137	108	152	119	101				105
1997				20	112	75	143	118	105				96
1998				0	107	76	134	86	96				83
1999				11	57	107	141	111	81				85
2000				49	112	113	133	110	69				98
2001				9	133	105	121	116	49				89
Average				19	92	116	136	104	77				91

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

UPPER WIND RIVER A CANAL

DIVERSION DESCRIPTION

Manually operated sliding gates in concrete headwall.

DIVERSION LOCATION

Source: Big Wind River
N 4° 45' E, 4818, from the SW corner Section 14, Township 5N, Range 5W, WRM

CONVEYANCE DESCRIPTION

Open dirt ditch 4 1/2 miles long with concrete check structures and screw type delivery gates to individual fields and sublaterals. Capacity ~ 75 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.	1177.00		10683.00		
4/27/1905	6625	Irr.	315.03	4.49		4.49	
12/08/1905	1462E	Irr.	1.00	0.01		4.50	

STORAGE RIGHTS

None

ESTIMATED CANAL LOSSES

Varies with time of year, estimated 40% at peak

IRRIGATION PRACTICES

Conventional wild flooding practices through dirt ditches, some gated pipe.

CROP TYPES / CONSUMPTIVE USE

Native pasture, native hay, alfalfa hay, some small grains, lawns and gardens.

RETURN FLOWS

100% to Big Wind River, directly and via Dry Creek.

OTHER OPERATIONAL INFORMATION

User operated under BIA oversight - BIA employs ditch rider

CONTACT INFORMATION

U.S. Bureau of Indian Affairs, Irrigation Dept.
Fort Washakie, WY
(307)332-2596

Tim Schell
Crowheart, WY
(307)486-2203

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													
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1990													
1991													
1992													
1993													
1994													
1995													
1996													
1997				0	2,700	3,600	4,020	3,700	2,540				16,560
1998				0	3,670	3,800	3,710	3,500	3,700				18,380
1999					2,296	3,243	3,039	3,279	2,635				14,491
2000													
2001				592	4,508	4,564	2,795	3,697	3,400				19,557
Total				197	3,294	3,802	3,391	3,544	3,069				17,296

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													
1993													
1994													
1995													
1996													
1997				0	44	60	65	60	43				45
1998				0	60	64	60	57	62				50
1999					37	55	49	53	44				48
2000													
2001				10	73	77	45	60	57				54
Average				3	54	64	55	58	52				48

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

WYOMING CANAL

USGS ID 43108 C4, 43108 C5, 43108 B2, 43108 B3, 43108 B4, 43108 B5, 43108 B6, 43108 C3, 43108 C6, 43108 A4
USGS Name Mexican Pass SW, Harris Bridge, Riverton West, Hidden Valley, Riverton NE
Pavillion Butte, Morton, Lost Wells Butte, Ocean Lake, Pavillion, Mexican Pass SE

DIVERSION DESCRIPTION

Concrete diversion dam across full width of river with electrically controlled radial gate openings for river by pass.

DIVERSION LOCATION

Source: Big Wind River
NE 1/4 NE 1/4 Section 23 Township 3N Range 2W

CONVEYANCE DESCRIPTION

Open dirt canal with concrete lined sections, numerous concrete drops and check structures, screw type headgates for delivery into laterals, sublaterals, and farm delivery ditches; bi-furcation works divides the system into two main canals (Pilot Canal and Wyoming Canal), lower 20 miles of Wyoming Canal is buried pipe.

WYOMING WATER RIGHTS

Priority Date	Permit Number	Permit Use	Acres	Flow(cfs)	(af)	Cumulative Flow(cfs)	Comments
7/03/1868	Wind River Tribes	Irr.	2229.00		10684.36		
7/08/1906	7300	Irr.	73775.00	1045.00		1045.00	

STORAGE RIGHTS

Bull Lake Reservoir - 152,000 A.F.
Pilot Butte - 30,000 A.F.

ESTIMATED CANAL LOSSES

Varies with time of year
Est. 30% at peak

IRRIGATION PRACTICES

Conventional flood irrigation practices. Considerable concrete lined delivery ditches, underground pipe, gated pipe, side roll, handset, and center pivot sprinklers.

CROP TYPES / CONSUMPTIVE USE

Pasture, grass hay, alfalfa hay, small grains, row crops - beans, corn and sugar beets.

RETURN FLOWS

Some to 5-mile Creek, some to Muddy Creek, some to Cottonwood Creek, some directly to Boysen Reservoir.

OTHER OPERATIONAL INFORMATION

Managed by formal irrigation istrict board abd Bureau of Reclamation

CONTACT INFORMATION

Midvale Irrigation District
Pavillion, Wy
(307)856-6359

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	0	0	5,357	18,647	38,291	93,363	69,706	58,920	20,043	1,835	0	0	304,328
1974	0	0	0	20,926	54,915	91,162	89,734	67,990	50,337	155	0	0	375,064
1975	0	0	0	11,480	21,721	72,703	92,709	80,004	55,024	103	0	0	333,643
1976	0	0	0	11,782	71,261	90,428	106,752	72,035	62,282				414,540
1977				23,542	22,769	60,616	56,591	30,250	32,884	0			226,653
1978			19,667	22,459	24,667	82,785	94,276	69,307	47,628	10	0	0	360,789
1979				5,639	37,761	84,914	85,656	69,622	36,405				319,997
1980	0	0	6,230	26,162	42,604	88,270	96,378	64,989	54,009	20	0	0	378,642
1981	0	0	15,741	19,409	48,945	75,855	93,899	68,145	55,320	9,511	0	0	377,313
1982				0	54,960	81,490	101,170	80,155	46,400				364,175
1983													
1984													
1985				25,800	74,000	78,470	72,810	66,710	61,160				378,950
1986													
1987				27,800	78,360	71,790	94,280	67,160	50,764				390,154
1988				24,640	59,220	79,160	78,150	52,740	39,520				333,430
1989				17,220	54,590	62,770	86,120	59,130	47,240				327,070
1990				15,830	50,420	99,270	84,670	59,310	59,400				368,900
1991				16,020	25,210	60,720	93,070	69,500	48,080				312,600
1992				16,980	68,170	46,470	58,500	60,390	50,930				301,440
1993				6,190	39,470	59,530	77,320	77,520	52,220				312,250
1994				17,920	65,870	65,340	61,100	51,980	16,470				278,680
1995				8,400	29,900	62,930	91,960	86,220	54,620				334,030
1996				16,310	69,260	89,630	93,500	77,750	65,260				411,710
1997				13,090	66,540	72,540	100,600	65,170	69,530				387,470
1998				10,710	61,290	67,010	98,400	77,440	63,830				378,680
1999				17,270	39,680	87,080	101,890	78,530	54,140				378,590
2000				21,640	71,136	70,846	68,910	68,880	49,475				350,887
2001				16,302	52,456	57,871	58,553	46,029	17,157				248,368
Total	0	0	6,714	16,622	50,903	75,116	84,873	66,380	48,466	1,662	0	0	349,074

Monthly Summary (cfs)

Year	Discharge (cfs)												Average
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1973	0	0	87	313	623	1,569	1,134	958	337	30	0	0	558
1974	0	0	0	352	893	1,532	1,459	1,106	846	3	0	0	688
1975	0	0	0	193	353	1,222	1,508	1,301	925	2	0	0	611
1976	0	0	0	198	1,159	1,520	1,736	1,172	1,047				759
1977				396	370	1,019	920	492	553	0			625
1978			320	377	401	1,391	1,533	1,127	800	0	0	0	850
1979				95	614	1,427	1,393	1,132	612				879
1980	0	0	101	440	693	1,483	1,567	1,057	908	0	0	0	694
1981	0	0	256	326	796	1,275	1,527	1,108	930	155	0	0	691
1982				0	894	1,369	1,645	1,304	780				999
1983													
1984													
1985				434	1,203	1,319	1,184	1,085	1,028				1,042
1986													
1987				467	1,274	1,206	1,533	1,092	853				1,071
1988				414	963	1,330	1,271	858	664				917
1989				289	888	1,055	1,401	962	794				898
1990				266	820	1,668	1,377	965	998				1,016
1991				269	410	1,020	1,514	1,130	808				859
1992				285	1,109	781	951	982	856				827
1993				104	642	1,000	1,257	1,261	878				857
1994				301	1,071	1,098	994	845	277				764
1995				141	486	1,058	1,496	1,402	918				917
1996				274	1,126	1,506	1,521	1,264	1,097				1,131
1997				220	1,082	1,219	1,636	1,060	1,168				1,064
1998				180	997	1,126	1,600	1,259	1,073				1,039
1999				290	645	1,463	1,657	1,277	910				1,041
2000				364	1,157	1,191	1,121	1,120	831				964
2001				274	853	973	952	749	288				681
Average	0	0	109	279	828	1,262	1,380	1,080	814	27	0	0	482

Notes:

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