

Water Division IV

District 5

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Alford Ditch, LaBarge Creek

Diversion Description: Diversion consists of a single 4' x 4' slide gate mounted on a bridge structure. The narrowing of the creek created by the bridge assists in the diversion of water into the ditch.¹

Diversion Location:

Source: LaBarge Creek, Trib. Green River
Section, Township, Range: Lot 54, 26, 113

Conveyance Description: Open Channel Canal, approximately 2 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
05-13-1886	Terr.	Irrigation	1,030.00	14.70	14.70	
04-28-1899	413E	Irrigation	117.00	1.67	16.37	

Storage Rights: None.

Estimated Canal Losses: Typical (10%).¹

Irrigation Practices: Lands are flood irrigated.¹

Crop Types / Consumptive Use: Lands are native grass hay and pasture.¹

Return Flows: Return flows are delivered to LaBarge Creek near Phillips and Reel Ditch.²

Other Operational Information: The canal is typically turned on the first of May and off in mid-July.¹

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Interview, May 5, 2000.
2) Williams, Linda I., "A Model of the Green River Using the Wyoming Integrated River System Operation Study (WIRSOS)," M.S. Thesis, University of Wyoming, Department of Civil Engineering, December 1995.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Alford Ditch, LaBarge Creek, Diversion Data

Wateryear	May		June		July		August		September	
	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)
1980										
1981	12.55	771.67	15.85	943.14	2.71	166.63				
1982										
1983										
1984										
1985										
1986	6.59	405.20	30.70	1,826.78	14.03	862.67	2.57	158.02	0.01	0.60
1987	8.58	527.56	5.78	343.93						
1988										
1989										
1990	15.75	968.43	7.86	467.70	3.07	188.77				
1991	10.03	616.72	22.81	1,357.29	13.99	860.21	3.07	188.77	7.65	455.21
1992	14.21	873.74	9.32	554.58	5.84	359.09	2.64	162.33	0.17	10.12
1993	10.76	661.56	18.97	1,128.90	8.03	493.51	0.09	5.61	3.11	185.30
1994			11.11	660.81	3.73	229.27				
1995					16.97	1,043.44	1.60	98.38		
1996	1.47	90.39	29.39	1,748.83	24.88	1,529.81	0.00	0.00		
1997	1.75	107.60	17.60	1,047.27	16.06	987.49	2.24	137.73		
1998					17.01	1,045.90				

Averages:

9.08	558.10	16.94	1,007.92	11.48	706.07	1.74	107.26	2.74	162.81
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Blank cells are due to missing/insufficient data.

Average = Average Flow for ENTIRE month. Monthly Total = Total Volume used during month.

See Methodology section for explanations.

Spot data readings used in calculating averages in table on following pages.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Alford Ditch, LaBarge Creek, Diversion Data

Data:

1980: 5/14, 7 cfs; 5/30, 10 cfs; 6/13, 40 cfs.

1981: 4/17, 5 cfs; 5/11, 10 cfs; 6/12, 23 cfs; 7/21, 3 cfs; 8/10, off; 10/2, 5 cfs.

1986: 4/17, off; 5/6, 2 cfs (est); 5/19, 1 cfs (est); 6/2, 28.0 cfs; 6/18, 35 cfs (est); 7/14, 15 cfs (est); 7/31, 5 cfs (est); 9/3, off.

1987: 4/27, 10 cfs (est); 5/25, 8 cfs (est); 6/23, 5 cfs (est); 7/14, 4 cfs (est).

1989: 7/21, 8/21, off.

1990: (all est): 4/17, 12.0, 5/16, 18.0 cfs; 6/14, 7.5 cfs; 8/8, off.

1991: 5/6, 9.5 cfs (est); 5/21, 10.6 cfs; 6/10, 25 cfs (est); 7/9, 20.2 cfs; 8/5, off; 9/25, 12.5 cfs (est).

1992: 4/23, 12.0 cfs (est); 5/7, 16.0 cfs (est); 5/27, 12.8 cfs; 6/16, 9.0 cfs (est); 7/15, 6.0 cfs (est); 9/11, off.

1993: 5/11, 15.0 cfs (est); 5/25, 16.0 cfs (est); 6/21, 21.0 cfs (est); 7/12, 11.0 cfs (est); 7/30, 8/17, 8/26, off; 9/30, 5.5 cfs (est).

1994: 5/23, 12.0 cfs (est); 6/3, 12.0 cfs (est); 6/20, 11.5 cfs (est); 7/29, off; 8/30, off.

1995: 4/27, 5/12, 5/28, off; 6/26, 23 cfs; 7/7, 22 cfs; 7/25, 13.3 cfs; 8/11, 0.5 cfs (est); 9/12, off.

1996: 5/9, 5/16, 5/24, off; 6/7, 20 cfs (est); 6/12, 25 cfs (est); 6/28, 43.3 cfs; 7/10, 40 cfs (est); 7/30, 8/16, off.

1997: 4/17, off; 5/21, 0.5 cfs; 6/24, 24 cfs; 7/18, 15 cfs (est); 7/24, 15 cfs; 8/14, 1 cfs (est).

1998: 4/30, off; 6/12, 40 cfs (est); 7/10, 20 cfs (est); 7/24, 17 cfs (est); 7/31, off; 8/31, 0.5 cfs (est).

Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, slightly below average; 1986, average; 1987, average; 1988, below average; 1989, below average; 1990, below average; 1991, slightly below average; 1992, below average; 1993, average; 1994, below average; 1995, slightly above average; 1996, average; 1997, average; 1998, slightly above average.

Source: State Engineer's Office, Annual Hydrographers' Reports.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Anderson and Howard Ditch, LaBarge Creek

Diversion Description: Diversion consists of two 5' wide slide gates.¹

Diversion Location:

Source: LaBarge Creek, Trib. Green River
Section, Township, Range: 4, 26, 114

Conveyance Description: Open Channel Canal, approximately 15 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
05-01-1879	Terr.	Irrigation	100.00	1.32	1.32	POD/MOC change from a portion of Miller, Baker, and Burdick Ditch
06-01-1880	Terr.	Irrigation	250.00	3.56	4.88	POD/MOC change from a portion of Miller No. 1 Ditch
03-15-1894	669	Irrigation	927.35	13.23	18.11	Supplementary Supply for 60.0 acres with Original supply from Muddy Creek
10-04-1898	370E	Irrigation	160.00	2.28	20.39	
10-04-1898	371E	Irrigation	160.00	2.28	22.67	
09-21-1899	464E	Irrigation	360.00	5.14	27.81	
09-04-1900	583E	Irrigation	175.00	2.49	30.30	
04-01-1901	643E	Irrigation	40.00	0.57	30.87	POD/MOC change from a portion of Baker, Miller & Burdick Ditch
09-02-1901	722E	Irrigation	40.00	0.57	31.44	POD/MOC change from a portion of Bushnell Ditch
10-06-1952	5655E	Irrigation	741.06	10.58	42.02	
04-22-1970	6369E	Irrigation	210.00	3.00	45.02	

Storage Rights: None.

Estimated Canal Losses: Greater than typical (up to 60%) losses are experienced in the first few miles of the ditch. Losses then gradually reduce to typical (10%)¹

Irrigation Practices: Approximately 10 acres are irrigated by a sprinkler line; remaining lands are flood irrigated.¹

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Anderson and Howard Ditch, LaBarge Creek

Crop Types / Consumptive Use: Approximately 10 acres are alfalfa hay; remaining lands are native grass hay and pasture.¹

Return Flows: Approximately 50% of return flows are delivered to Muddy Creek above Fontenelle Reservoir, and 50% are delivered to LaBarge Creek near Alford Ditch.²

Other Operational Information: The canal is typically turned on the first of May and off in mid-July.¹

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Interview, May 5, 2000.
2) Williams, Linda I., "A Model of the Green River Using the Wyoming Integrated River System Operation Study (WIRSOS)," M.S. Thesis, University of Wyoming, Department of Civil Engineering, December 1995.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Anderson and Howard Ditch, LaBarge Creek, Diversion Data

Wateryear	May		June		July		August		September	
	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)
1980										
1981	4.84	297.60	7.51	446.88	7.91	486.37	8.00	491.90	8.00	476.03
1982										
1983										
1984										
1985										
1986	44.02	2,706.68	87.85	5,227.44	30.70	1,887.67				
1987	21.32	1,310.84	21.09	1,254.92						
1988										
1989							7.66	470.91		
1990			27.14	1,615.14	20.91	1,285.65				
1991	10.44	641.93	44.46	2,645.55	38.80	2,385.72	14.14	869.43	3.39	201.72
1992	42.36	2,604.61	42.88	2,551.54	18.38	1,130.14	12.42	763.68	3.49	207.67
1993							8.03	493.75		
1994	46.37	2,851.01	34.94	2,079.31						
1995	37.42	2,300.87	77.67	4,621.69	73.34	4,509.50	40.47	2,488.40	13.75	818.18
1996	37.56	2,309.47	113.90	6,777.52	77.62	4,772.67	48.15	2,960.63	10.91	649.19
1997					62.72	3,856.50				
1998										

Averages:	30.54	1,877.88	50.83	3,024.44	41.30	2,539.28	19.84	1,219.81	7.91	470.56
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Blank cells are due to missing/insufficient data.

Average = Average Flow for ENTIRE month. Monthly Total = Total Volume used during month.

See Methodology section for explanations.

Spot data readings used in calculating averages in table on following pages.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Anderson and Howard Ditch, LaBarge Creek, Diversion Data

Data:

1981: 5/11, 7 cfs; 7/21, 8 cfs; 8/10, 8 cfs; 10/2, 8 cfs.

1986: 4/17, off; 5/6, off; 6/2, 109.0 cfs; 6/13, 95 cfs (est); 7/14, 36.9 cfs; 7/31, off.

1987: 4/27, 4 cfs (est); 5/25, 30 cfs (est); 6/23, 28 cfs (est).

1989: 7/21, 20.0 cfs (est); 8/21, 8.0 cfs (est).

1990: (all est): 5/16, 30.0 cfs; 6/14, 28.0 cfs; 8/8, 16.0.

1991: 5/21, 23.5 cfs (est); 6/10, 45.0 cfs (est); 7/9, 48.6 cfs; 8/5, 18.0 cfs (est); 9/25, off.

1992: 5/7, 56.0 cfs (est); 5/27, 50.4 cfs; 6/16, 46.0 cfs (est); 7/15, 15.5 cfs (est); 9/11, 10.0 cfs (est).

1993: 5/25, 35.0 cfs (est); 7/12, 36.0 cfs (est); 7/30, 35.0 cfs (est); 8/17, 8/26, off.

1994: 5/11, 41.7 cfs (arrive), 70.7 cfs (depart); 5/23, 70 cfs; 6/3, 60 cfs (est); 6/20, 49 cfs (est).

1995: 5/12, 50 cfs (est); 6/26, 86 cfs (est); 7/7, 86.1 cfs; 8/16, 35.5 cfs; 9/12, 38 cfs (est).

1996: 5/9, 26 cfs; 5/24, 54.1 cfs; 6/12, 131.8 cfs; 6/17, 124.6 cfs; 7/10, 84.5 cfs; 7/30, 61 cfs; 8/16, 46 cfs; 9/9, 39.9 cfs.

1997: 4/17, off; 6/24, 79.8 cfs; 7/24, 56.2 cfs; 8/14, 52.2 cfs.

1998: 4/30, off; 7/10, 70.2 cfs; 7/24, 45.6 cfs; 7/31, 46.5 cfs; 9/18, 29.6 cfs.

Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, slightly below average; 1986, average; 1987, average; 1988, below average; 1989, below average; 1990, below average; 1991, slightly below average; 1992, below average; 1993, average; 1994, below average; 1995, slightly above average; 1996, average; 1997, average; 1998, slightly above average.

Source: State Engineer's Office, Annual Hydrographers' Reports.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

LaBarge Number 2 Ditch, LaBarge Creek

Diversion Description: Diversion consists of a single 36" slide gate mounted on a piece of CMP.¹

Diversion Location:

Source: LaBarge Creek, Trib. Green River
Section, Township, Range: 19, 26, 112

Conveyance Description: Open Channel Canal, approximately 2 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
07-06-1889	Terr.	Irrigation	119.00	1.70	1.70	POD/MOC change from a portion of Phillips & Reel Ditch
08-01-1889	Terr.	Irrigation	292.00	4.17	5.87	
05-01-1891	Terr.	Irrigation	480.00	6.85	12.72	
07-01-1969	6341E	Irrigation	196.00	2.80	15.52	

Storage Rights: None.

Estimated Canal Losses: Typical (10%)¹

Irrigation Practices: Lands are flood irrigated.¹

Crop Types / Consumptive Use: Lands are native grass hay and pasture.¹

Return Flows: Return flows are delivered to LaBarge Creek at Green River.²

Other Operational Information: The canal is typically turned on the first of May and off in mid-July.¹

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Interview, May 5, 2000.
2) Williams, Linda I., "A Model of the Green River Using the Wyoming Integrated River System Operation Study (WIRSOS)," M.S. Thesis, University of Wyoming, Department of Civil Engineering, December 1995.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

LaBarge Number 2 Ditch, LaBarge Creek, Diversion Data

Wateryear	May		June		July		August		September	
	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)
1980										
1981										
1982										
1983										
1984										
1985										
1986			24.00	1,428.10	4.78	293.91	4.12	253.33		
1987	27.85	1,712.43	16.40	975.87						
1988										
1989							3.84	236.10		
1990			25.83	1,536.99	11.74	721.86				
1991			9.22	548.63	8.34	512.81	1.50	92.23	3.67	218.38
1992	12.26	753.84	13.55	806.28	6.50	399.67	2.64	162.33		
1993							2.58	158.64	1.60	95.21
1994					3.97	244.11	2.55	156.79		
1995					35.19	2,163.75	26.11	1,605.44		
1996	34.54	2,123.78	38.61	2,297.45	8.02	493.13				
1997	12.82	788.27	28.90	1,719.67	29.27	1,799.74	14.52	892.80		
1998	26.81	1,648.48	45.99	2,736.60	12.96	796.88	25.21	1,550.10		

Averages:	22.86	1,405.36	25.31	1,506.20	13.42	825.10	9.23	567.53	2.64	156.79
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Blank cells are due to missing/insufficient data.

Average = Average Flow for ENTIRE month. Monthly Total = Total Volume used during month.

See Methodology section for explanations.

Spot data readings used in calculating averages in table on following pages.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

LaBarge Number 2 Ditch, LaBarge Creek, Diversion Data

Data:

1986: 5/26, 42 cfs (est); 7/14, off; 7/31, 8 cfs (est); 9/3, 10 cfs (est).
1987: 4/27, 25 cfs (est); 5/25, 30 cfs (est); 6/23, 12 cfs (est); 7/14, off.
1989: 7/21, 9.0 cfs (est); 8/21, 4.5 cfs (est).
1990: 5/16, 25.0 cfs (est); 6/14, 28.7 cfs; 8/8, off.
1991: 5/21, 4.5 cfs (est); 6/10, 8.5 cfs (est); 7/9, 12.4 cfs; 8/5, off; 9/25, 6.0 cfs (est).
1992: 4/23, off; 5/7, 12.0 cfs (est); 6/16, 15.0 cfs (est); 7/15, 6.0 cfs (est); 9/11, off.
1993: 5/11, 6.0 cfs (est); 7/30, off; 8/17, 3.0 cfs (est); 8/26, 4.0 cfs (est); 9/30, off.
1994 (all est): 6/20, 6.0 cfs; 7/29, 3.0 cfs; 8/30, 2.5 cfs.
1995: 7/5, 45 cfs; 8/18, 30 cfs (est); 8/28, 20 cfs (est).
1996: 5/3, 30 cfs (est); 5/23, 40.6 cfs; 6/24, 40 cfs (est); 7/15, off; 8/12, 12 cfs (est).
1997 (all est): 4.17, 1.5 cfs; 4/30, 4 cfs; 6/27, 35 cfs; 7/31, 25 cfs; 8/19, 25 cfs.
1998: 4/28, 4.8 cfs; 6/5, 50 cfs (est); 6/24, 45.8 cfs; 7/21, off; 8/19, 30 cfs (est); 9/10, 35 cfs (est).

Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, slightly below average; 1986, average; 1987, average; 1988, below average; 1989, below average; 1990, below average; 1991, slightly below average; 1992, below average; 1993, average; 1994, below average; 1995, slightly above average; 1996, average; 1997, average; 1998, slightly above average.

Source: State Engineer's Office, Annual Hydrographers' Reports.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Red Gap Ditch, LaBarge Creek

Diversion Description: Diversion consists of a single 24" slide gate mounted on a piece of CMP.¹

Diversion Location:

Source: LaBarge Creek, Trib. Green River
Section, Township, Range: Lot 54, 26, 113

Conveyance Description: Open Channel Canal, approximately 1 mile in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
05-31-1900	2629	Irrigation	345.00	4.92	4.92	Permitted Name: Gap Ditch
05-13-1920	15761	Irrigation	178.00	2.54	7.46	

Storage Rights: None.

Estimated Canal Losses: Typical (10%)¹

Irrigation Practices: Lands are flood irrigated.¹

Crop Types / Consumptive Use: Lands are native grass hay and pasture.¹

Return Flows: Return flows are delivered to LaBarge Creek near Phillips and Reel Ditch.²

Other Operational Information: The canal is typically turned on the first of May and off in mid-July.¹

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Interview, May 5, 2000.
2) Williams, Linda I., "A Model of the Green River Using the Wyoming Integrated River System Operation Study (WIRSOS)," M.S. Thesis, University of Wyoming, Department of Civil Engineering, December 1995.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Red Gap Ditch, LaBarge Creek, Diversion Data

Wateryear	May		June		July		August		September	
	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)
1980										
1981										
1982										
1983										
1984										
1985										
1986	10.85	667.14	24.55	1,460.83	4.91	301.90	0.00	0.00		
1987	7.34	451.32	7.90	470.08						
1988										
1989										
1990	14.80	910.02	11.69	695.60	7.27	447.01				
1991	6.86	421.80	14.19	844.36	10.24	629.63				
1992	10.63	653.61	6.66	396.30	0.76	46.73				
1993	6.13	376.92	13.13	781.29	5.26	323.42	0.00	0.00	0.00	0.00
1994			6.58	391.54	1.95	119.90	0.00	0.00		
1995	4.16	255.79	22.29	1,326.35	21.55	1,325.06	2.19	134.66		
1996	1.89	116.21	17.99	1,070.48	28.68	1,763.46	5.61	344.95		
1997	1.85	113.75	19.14	1,138.91	22.38	1,376.09				
1998	13.43	825.78	32.28	1,920.79	32.63	2,006.34	16.39	1,007.78		

Averages:	7.79	479.23	16.04	954.23	13.56	833.96	4.03	247.90	0.00	0.00
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Blank cells are due to missing/insufficient data.

Average = Average Flow for ENTIRE month. Monthly Total = Total Volume used during month.

See Methodology section for explanations.

Spot data readings used in calculating averages in table on following pages.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Red Gap Ditch, LaBarge Creek, Diversion Data

Data:

1986: 4/17, 2 cfs (est); 5/6, 2 cfs (est); 5/19, 13.6 cfs; 6/2, 21.6 cfs; 6/18, 30 cfs (est); 7/14, 3 cfs (est); 7/31, 9/3, off.

1987 (all est): 4/27, 6 cfs; 5/25, 8 cfs; 6/23, 8 cfs; 7/14, 6 cfs.

1989: 7/21, 8/21, off.

1990 (all est): 4/17, 11.0 cfs; 5/16, 16.0 cfs; 6/14, 12.0 cfs; 8/8, 4.0 cfs.

1991: 5/6, 6.0 cfs (est); 5/21, 8.0 cfs (est); 6/10, 14.5 cfs; 7/9, 15.0 cfs (est); 8/5, 9/25, off.

1992: 4/23, 8.0 cfs (est); 5/7, 12.0 cfs (est); 5/27, 10.0 cfs (est); 6/16, 7.0 cfs (est); 7/15, 9/11, off.

1993: 5/11, 6.5 cfs (est); 5/25, 10.0 cfs (est); 6/21, 15.0 cfs (est); 7/12, 7.0 cfs (est); 7/30, 8/17, 8/26, 9/30, off.

1994 (all est): 5/23, 10.5 cfs; 6/3, 8.5 cfs; 6/20, 6.0 cfs; 7/29, 8/30, off.

1995: 4/27, 5/12, off; 6/26, 29 cfs; 7/7, 29 cfs (est); 7/25, 15.9 cfs; 8/11, 1 cfs (est); 9/12, off.

1996: 5/9, off; 5/16, 3 cfs (est); 6/7, 3 cfs (est); 6/28, 36.5 cfs; 7/10, 30 cfs (est); 7/30, 25 cfs (est); 8/16, 1 cfs (est).

1997: 4/17, off; 5/21, 0.5 cfs (est); 6/24, 25.7 cfs; 7/18, 25 cfs (est); 7/24, 20 cfs (est); 8/14, off.

1998 (all est): 4/30, off; 6/12, 35 cfs; 7/10, 30 cfs; 7/24, 35 cfs; 7/31, 35 cfs; 8/31, off.

Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, slightly below average; 1986, average; 1987, average; 1988, below average; 1989, below average; 1990, below average; 1991, slightly below average; 1992, below average; 1993, average; 1994, below average; 1995, slightly above average; 1996, average; 1997, average; 1998, slightly above average.

Source: State Engineer's Office, Annual Hydrographers' Reports.

Green River Basin, Wyoming; Key Structures and Diversions
Description and Operation Memorandum

Steed Ditch, LaBarge Creek

Diversion Description: Diversion consists of a single 24" slide gate mounted on a piece of CMP.¹

Diversion Location:

Source: LaBarge Creek, Trib. Green River
Section, Township, Range: Lot 41, 26, 113

Conveyance Description: Open Channel Canal, approximately 1 mile in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
05-01-1889	Terr.	Irrigation	240.00	3.43		
08-01-1889	Terr.	Irrigation	28.00	0.40		POD/MOC change from a portion of LaBarge No.2 Ditch
05-18-1898	414E	Irrigation	543.38	7.77		
07-17-1953	5695E	Irrigation	91.75	1.31		
07-01-1969	6340E	Irrigation	10.75	0.15		

Storage Rights: None.

Estimated Canal Losses: Typical (10%)¹

Irrigation Practices: Lands are flood irrigated.¹

Crop Types / Consumptive Use: Lands are native grass hay and pasture.¹

Return Flows: Return flows are delivered to Green River at LaBarge Creek.²

Other Operational Information: The canal is typically turned on the first of May and off in mid-July.¹

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Interview, May 5, 2000.
2) Williams, Linda I., "A Model of the Green River Using the Wyoming Integrated River System Operation Study (WIRSOS)," M.S. Thesis, University of Wyoming, Department of Civil Engineering, December 1995.

Green River Basin, Wyoming; Key Structures and Diversions
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Steed Ditch, LaBarge Creek

Wateryear	May		June		July		August		September	
	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)	Average (cfs)	Monthly Total (AF)
1980	5.50	338.18								
1981										
1982										
1983										
1984										
1985										
1986										
1987										
1988										
1989							1.77	108.77		
1990			8.55	508.76	5.25	322.81				
1991			10.60	630.74	9.75	599.50				
1992	9.59	589.67	9.09	540.89	3.52	216.44				
1993	7.01	431.40					2.02	120.20		
1994					1.57	96.25	1.02	62.91		
1995					5.49	337.57	14.49	862.21		
1996	0.82	50.42	13.71	815.80	5.51	338.80				
1997					10.96	673.90	0.14	8.33		
1998	0.49	30.13	19.66	1,169.85	22.70	1,395.77	7.01	417.12		

Averages:	4.68	287.96	12.32	733.21	8.09	497.63	4.41	263.26		
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Blank cells are due to missing/insufficient data.

Average = Average Flow for ENTIRE month. Monthly Total = Total Volume used during month.

See Methodology section for explanations.

Spot data readings used in calculating averages in table on following pages.

Green River Basin, Wyoming; Key Structures and Diversions
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Steed Ditch, LaBarge Creek

Data:

1980: 5/14, 10 cfs; 5/30, 9 cfs; 6/13, 12 cfs.

1986: 5/2, 36 cfs (est); 7/14, 7/31, 9/3, off.

1989: 7/21, 8.5 cfs (est); 8/21, off.

1990 (all est): 5/16, 14.0 cfs; 6/14, 8.5 cfs; 8/8, 3.0 cfs.

1991: 5/21, 4.0 cfs (est); 6/10, 9.8 cfs; 7/9, 14.5 cfs (est); 8/5, 9/25, off.

1992: 4/23, off; 5/7, 10.0 cfs (est); 6/16, 10.0 cfs (est); 7/15, 3.0 cfs (est); 9/11, off.

1993: 5/11, 6.0 cfs (est); 5/25, 8.5 cfs (est); 7/30, off; 8/17, 3.5 cfs (est); 8/26, 3.5 cfs (est).

1994: 6/20, 4.8 cfs (est); 7/29, off; 8/30, 2.0 cfs (est).

1995 (all est): 5/12, 30 cfs; 7/5, off; 8/18, 20 cfs; 8/28, 15 cfs.

1996: 5/3, 5/23, off; 6/24, 20 cfs (est); 7/15, off; 8/12, 15 cfs (est).

1997 (all est): 4/17, 2 cfs; 4/30, 2 cfs; 6/27, 25 cfs; 7/31, 0.5 cfs; 8/19, off.

1998: 4/28, off; 6/5, 1 cfs (est); 6/24, 35.8 cfs; 7/21, 20 cfs; 8/19, 4 cfs; 9/10, 5 cfs.

Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, slightly below average; 1986, average; 1987, average; 1988, below average; 1989, below average; 1990, below average; 1991, slightly below average; 1992, below average; 1993, average; 1994, below average; 1995, slightly above average; 1996, average; 1997, average; 1998, slightly above average.

Source: State Engineer's Office, Annual Hydrographers' Reports.