Water Division IV

**District 9** 

# Charles F. Roberson Ditch, Ham's Fork River

**Diversion Description:** Diversion consists of a single 24" diameter Waterman slide gate. A small rock diversion dam exists.<sup>1</sup>

# **Diversion Location:**

Source: Ham's Fork River, Trib. Black's Fork River, Trib. Green River Section, Township, Range: 24, 21, 114

**Conveyance Description:** Open Channel Canal, approximately 4<sup>1</sup>/<sub>2</sub> miles in length.<sup>1</sup>

#### Wyoming Water Rights Summary:

Priority Date (M–D–Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
Spring 1882	Terr.	Domestic, Irrigation, Stock		6.58	6.58	
12-26-1905	1501E	Domestic, Irrigation, Stock		2.85	9.43	

Storage Rights: None.

**Estimated Canal Losses:** Slightly greater than typical (10-15%).<sup>1</sup>

Irrigation Practices: Lands are entirely flood irrigated.<sup>1</sup>

**Crop Types / Consumptive Use:** Water is used to irrigate almost entirely native grass hay and pasture.<sup>1</sup>

Return Flows: Ham's Fork River above Opal, Wyoming.

**Other Operational Information:** Conveyance losses through the Ham's Fork River channel itself are significantly high. Ditch is typically turned on in early May. As water levels in Ham's Fork decrease, water users typically practice self-regulation by rotation or reducing water taken from the river. Ditch is typically turned off in July.<sup>1</sup>

Sources: 1) John Yarbrough, State Engineer's Office, Interview, May 4, 2000.

	М	lay	Ju	ine	Jı	ıly		gust		ember
Wateryear	Average (cfs)	Monthly Total (AF)								
1980										
1981										
1982										
1983										
1984										
1985			23.85	1,419.17	17.68	1,087.10				
1986										
1987			15.49	921.72	5.13	315.43				
1988	16.76	1,030.53	20.36	1,211.50						
1989	15.43	948.75	21.61	1,285.88	16.21	996.71				
1990	7.76	476.87	22.07	1,313.26	17.74	1,090.79				
1991										
1992			9.93	590.88						
1993			19.61	1,166.88	18.88	1,160.89			6.06	360.79
1994			14.92	887.80						
1995			15.11	899.11	16.70	1,026.84	6.07	373.23		
1996			14.37	855.07	5.63	346.18				
1997	10.43	641.32	21.53	1,281.12	7.93	487.60				
1998										

 Averages:
 12.60
 774.37
 18.08
 1,075.67
 13.24
 813.94
 6.07
 373.23
 6.06
 360.79

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.

# Charles F. Roberson Ditch, Ham's Fork River, Diversion Data

### Data:

- 1985: 5/20, 16.34 cfs; 6/18, 26.64 cfs; 7/2, 21.30 cfs; 7/16, 11.52 cfs; 7/30, 24.35 cfs; 8/15, 0.0 cfs.
- 1987: 5/16, 13.00 cfs; 6/10, 16.21 cfs; 7/6, 14.28 cfs; 7/6, 10.20 cfs; 7/23, off.
- 1988: 5/3, dry; 5/19, 25.68 cfs; 6/14, 19.57 cfs; 6/27, 21.00 cfs; 7/12, off.
- 1989: 5/5, 10.20 cfs; 5/23, 21.15 cfs; 6/7, 23.28 cfs; 6/16, 15.28 cfs; 6/23, 24.16 cfs; 7/13, 28.10 cfs; 7/20, 23.20 cfs.
- 1990: 5/14, 7.34 cfs; 5/29, 17.30 cfs; 6/6, 23.92 cfs; 6/21, 23.64 cfs; 6/27, 17.84 cfs; 7/10, 18.62 cfs; 7/20, 22.85 cfs; 8/6, off.
- 1992: 5/18, 10.45 cfs; 6/23, 12.45 cfs; 6/29, off.
- 1993: 5/19, 22.80 cfs; 5/28, 19.30 cfs; 6/9, 17.50 cfs; 6/18, 20.30 cfs; 7/13, 23.10 cfs; 7/26, 19.40 cfs; 7/30, off; 9/10, 21.40 cfs; 9/27, off.
- 1994: 5/20, 12.60 cfs; 6/2, 24.73 cfs; 6/10, 22.00 cfs; 6/20, 12.00 cfs; 7/1, off.
- 1995: 6/6, 13.17 cfs; 6/23, 21.16 cfs; 7/13, 16.30 cfs; 7/26, 17.20 cfs; 8/14, dry; 8/22, 15.86 cfs; 8/25, 16.30 cfs.
- 1996: 6/6, 12.3 cfs; 6/20, 21.2 cfs; 7/25, 0 cfs.
- 1997: 5/14, 16.0 cfs; 6/18, 23.6 cfs; 7/9, 16.0 cfs; 7/16, 14.4 cfs.
- Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, 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.

## Moore and Bagley Ditch, Ham's Fork River

**Diversion Description:** Diversion consists of a single 3' x 3' slide gate.<sup>1</sup>

#### **Diversion Location:**

Source: Ham's Fork River, Trib. Black's Fork River, Trib. Green River Section, Township, Range: 15, 19, 112

**Conveyance Description:** Open Channel Canal, approximately 15 miles in length.<sup>1</sup>

## Wyoming Water Rights Summary:

Priority Date (M–D–Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
09-03-1903	5593	Irrigation	756.00	10.80	10.80	

Storage Rights: None.

**Estimated Canal Losses:** Greater than typical (20-25%).<sup>1</sup>

Irrigation Practices: Lands are entirely flood irrigated.<sup>1</sup>

**Crop Types / Consumptive Use:** Water is used to irrigate almost entirely native grass hay and pasture.<sup>1</sup>

**Return Flows:** Ham's Fork River above confluence with Black's Fork.

**Other Operational Information:** Conveyance losses through the Ham's Fork River channel itself are significantly high. Ditch is typically turned on in May. As water levels in Ham's Fork decrease, water users typically practice self-regulation by rotation or reducing water taken from the river. Ditch is typically turned off in July.<sup>1</sup>

Sources: 1) John Yarbrough, State Engineer's Office, Interview, May 4, 2000.

	M	ay	Ju	ine	Ju	ly	Aug	gust	Septe	ember
Wateryear	Average (cfs)	Monthly Total (AF)								
1980										
1981										
1982										
1983										
1984										
1985			14.46	860.43	6.29	386.76				
1986										
1987			15.36	913.98						
1988	11.72	720.63	17.29	1,028.83						
1989	15.46	950.60	21.92	1,304.33	7.95	488.83				
1990	10.62	653.00	22.14	1,317.42	4.52	277.92	4.83	296.99		
1991										
1992	6.37	391.68	9.27	551.60						
1993	10.34	635.78	7.67	456.40	15.45	949.98	0.93	57.18	10.36	616.46
1994	15.17	932.77	10.01	595.64						
1995			11.70	696.20	5.62	345.56	0.00	0.00		
1996			5.02	298.71	1.15	70.71				
1997			12.12	721.19	4.70	288.99				
1998										

Moore and Bagle	y Ditch,	Ham's Fork River,	<b>Diversion Data</b>

 Averages:
 11.61
 714.08
 13.36
 794.98
 6.53
 401.25
 1.92
 118.06
 10.36
 616.46

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.

#### Moore and Bagley Ditch, Ham's Fork River, Diversion Data

#### Data:

- 1985: 5/28, 25.27 cfs; 6/19, 10.76 cfs; 7/3, 11.57 cfs; 7/17, 6.28 cfs; 8/1, 8/15, 0 cfs.
- 1987: 6/2, 0 cfs; 6/8, 29.57 cfs; 6/15, 18.30 cfs; 6/22, 19.10 cfs; 6/29, 1.30 cfs; 7/8, off.
- 1988: 5/3, 7.50 cfs; 5/11, 8.86 cfs; 5/20, 11.92 cfs; 5/31, 21.35 cfs; 6/8, 24.00 cfs; 6/21, 31.20 cfs.
- 1989: 5/5, 11.10 cfs; 5/17, 16.30 cfs; 5/24, 22.40 cfs; 6/5, 22.50 cfs; 6/14, 23.68 cfs; 6/21, 23.24 cfs; 7/6, 12.24 cfs; 7/18, 8.20 cfs; 7/31, off.
- 1990: 5/1, 9.25 cfs; 5/7, 4.65 cfs; 5/23, 12.40 cfs; 6/4, 24.10 cfs; 6/19, 23.40 cfs; 6/26, 20.82 cfs; 7/2, 11.82 cfs; 7/16, 14.18 cfs; 7/30, off; 8/21, 13.72 cfs.
- 1992: 5/1, 7.15 cfs; 5/15, 4.66 cfs; 5/30, 8.32 cfs; 6/5, 10.50 cfs; 6/16, 12.36 cfs; 6/30, 3.82 cfs -- closed after measurement.
- 1993: 5/14, 18.45 cfs; 5/26, 18.60 cfs; 6/18, 1.68 cfs; 7/6, 17.30 cfs; 7/16, 26.40 cfs; 7/30, closed; 9/3, 1.85 cfs; 9/7, 6.40 cfs; 9/21, 10.34 cfs; 10/1, 24.35 cfs; 10/6, 18.38 cfs.
- 1994: 5/6, 12.56 cfs; 5/16, 21.40 cfs; 5/25, 18.65 cfs; 6/8, 12.81 cfs; 6/27, 6.48 cfs; 7/3, out of water.
- 1995: 5/18, 8.36 cfs; 6/1, 9.60 cfs; 6/22, 12.82 cfs; 7/10, 12.91 cfs; 7/19, 7/27, 8/14, 8/18, 8/22, dry.
- 1996: 5/21, 15.7 cfs; 5/31, 17.1 cfs; 6/19, 0 cfs; 7/24, 2.3 cfs.
- 1997: 5/20, 20.6 cfs; 6/4, 15.2 cfs; 6/17, 10.2 cfs; 7/8, 12.0 cfs; 7/15, 6.2 cfs.

Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, 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.

<sup>1998: 9/4, 4.0</sup> cfs.

# Nutria Ditch, Ham's Fork River

Diversion Description: Information not available at time of report.

#### **Diversion Location:**

Source: Ham's Fork River, Trib. Black's Fork River, Trib. Green River Section, Township, Range: 31, 21, 112

Conveyance Description: Open Channel Canal.

## Wyoming Water Rights Summary:

Priority Date (M–D–Y)	Permit Number		Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
11-12-1884	Terr.	Domestic, Irrigation, Stock	340.00	4.92	4.92	POD/MOC change from a portion of Winslow, Hallock, and Capen Ditch
06-21-1909	9279	Irrigation	912.00	13.02	17.94	Not Adjudicated

Storage Rights: None.

Estimated Canal Losses: Information not available at time of report.

Irrigation Practices: Information not available at time of report.

Crop Types / Consumptive Use: Information not available at time of report.

Return Flows: Return flows are delivered to Ham's Fork above Fabian Ditch.

	Μ	ay	Ju	ine	Ju	ly	Aug	gust	Septe	mber
Wateryear	Average (cfs)	Monthly Total (AF)								
1980										
1981										
1982										
1983										
1984										
1985					13.10	805.20				
1986										
1987										
1988	14.57	895.87	15.83	941.95						
1989			29.44	1,751.80	15.86	975.19				
1990			15.28	909.22						
1991										
1992			5.96	354.64						
1993			19.02	1,131.77	4.79	294.53				
1994			8.96	533.16						
1995			15.11	899.11	13.20	811.64	0.00	0.00		
1996			13.89	826.51	6.50	399.67				
1997	10.85	667.14	26.34	1,567.34	11.85	728.63				
1998										

Blank cells are due to missing/insufficient data.

781.51

12.71

Averages:

Average = Average Flow for ENTIRE month. Monthly Total = Total Volume used during month. See Methodology section for explanations.

10.88

669.14

0.00

0.00

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

990.61

16.65

# Nutria Ditch, Ham's Fork River, Diversion Data

#### Data:

- 1985: 6/18, 21.27 cfs; 7/2, 23.87 cfs; 7/16, 10.78 cfs; 7/30, 7.23 cfs; 8/15, 0.0 cfs.
- 1987: 6/23, 21.60 cfs; 7/6, 0.0 cfs ("not enough water in river").
- 1988: 5/5, dry; 5/19, 22.44 cfs; 6/9, 23.15 cfs; 6/21, 21.30 cfs; 7/12, off.
- 1989: 5/17, 31.50 cfs; 5/24, 26.40 cfs; 6/7, 29.16 cfs; 6/16, 30.46 cfs; 6/23, 31.40 cfs; 7/13, 16.20 cfs; 7/20, 28.60 cfs; 7/26, 0.0 cfs.
- 1990: 5/21, 22.62 cfs; 5/29, 6.20 cfs; 6/4, 15.80 cfs; 6/19, 27.00 cfs; 6/27, 15.30 cfs; 7/12, 14.00 cfs.
- 1992: 5/30, 9.63 cfs; 6/9, 10.00 cfs; 6/29, off.
- 1993: 5/20, 21.60 cfs; 5/26, 23.60 cfs; 6/18, 20.00 cfs; 7/2, 11.40 cfs; 7/26, off.
- 1994: 5/16, 20.15 cfs; 6/2, off; 6/8, 14.36; 6/27, 7.60 cfs; 7/3, off.
- 1995: 5/19, 6/2, dry; 6/22, 23.82 cfs; 7/10, 24.10 cfs; 7/26, 8/14, 8/18, 8/22, dry.
- 1996: 5/23, 20.2 cfs; 6/6, 0 cfs; 6/20, 24.5 cfs; 7/25, 0 cfs.

1997: 5/14, 0.00 cfs; 5/23, 24.6 cfs; 6/18, 27.3 cfs; 7/8, 24.0 cfs; 7/16, 24.8 cfs.

Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, 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.

# Old Mexican Ditch, Ham's Fork River

**Diversion Description:** Information not available at time of report.

#### **Diversion Location:**

<u>Source:</u> Ham's Fork River, Trib. Black's Fork River, Trib. Green River <u>Section, Township, Range:</u>

Conveyance Description: Open Channel Canal.

## Wyoming Water Rights Summary:

Priority Date (M–D–Y)			Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
06-21-1909	9278	Domestic, Irrigation	864.00	12.34	12.34	

Storage Rights: None.

Estimated Canal Losses: Information not available at time of report.

Irrigation Practices: Information not available at time of report.

Crop Types / Consumptive Use: Information not available at time of report.

Return Flows: Return flows are delivered to Ham's Fork above Fabian Ditch.

# Old Mexican Ditch, Ham's Fork River, Diversion Data

No Diversion Data.

# South Fork Ditch, South Fork Fontenelle Creek

**Diversion Description:** Information not available at time of report.

#### **Diversion Location:**

Source: South Fork Fontenelle Creek, Trib. Fontenelle Creek, Trib. Green River Section, Township, Range: 24, 25, 116

#### Conveyance Description: Open Channel Canal.

#### Wyoming Water Rights Summary:

Priority Date (M–D–Y)	Permit Number		Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
05-21-1915	13221	Domestic, Irrigation, Stock	503.00	7.17	7.17	
03-25-1921	4269E	Irrigation	39.40	0.56	7.73	
03-25-1921	4270E	Irrigation	35.00	0.50	8.23	
03-25-1921	4271E	Irrigation	23.00	0.33	8.56	
09-27-1927	4557E	Irrigation	51.80	0.74	9.30	
01-05-1931	4701E	Irrigation	106.30	1.52	10.82	

Storage Rights: None.

Estimated Canal Losses: Information not available at time of report.

Irrigation Practices: Information not available at time of report.

Crop Types / Consumptive Use: Information not available at time of report.

**Return Flows:** Approximately 60% of the return flows are delivered to Fontenelle Creek at South Fork Fontenelle Creek, and approximately 40% are delivered to Bartlett Creek.<sup>1</sup>

Other Operational Information: Information not available at time of report.

Sources: 1) 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.

South Fork Ditch, South Fork Fontenelle Creek, Diversion Data No Diversion Data Available.

# South Side Ditch, Ham's Fork River

**Diversion Description:** Information not available at time of report.

#### **Diversion Location:**

Source: Ham's Fork River, Trib. Black's Fork River, Trib. Green River Section, Township, Range: 31, 21, 114

Conveyance Description: Open Channel Canal.

#### Wyoming Water Rights Summary:

Priority Date (M–D–Y)			Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
09-27-1900	2841	Irrigation	700.00	10.00	10.00	

Storage Rights: None.

Estimated Canal Losses: Information not available at time of report.

Irrigation Practices: Information not available at time of report.

Crop Types / Consumptive Use: Information not available at time of report.

Return Flows: Return flows are delivered to Ham's Fork below Opal.

Wateryear	May		June		July		August		September	
	Average (cfs)	Monthly Total (AF)								
1980										
1981										
1982										
1983										
1984										
1985			12.19	725.36	6.18	379.99				
1986										
1987			3.54	210.64						
1988			10.32	614.06						
1989	10.20	627.17	10.17	605.16	5.51	338.80				
1990			14.22	846.15	8.54	525.10				
1991										
1992			6.20	368.93						
1993			12.98	772.36	12.54	771.05				
1994			7.72	459.37						
1995			13.13	781.29	5.34	328.34	0.00	0.00		
1996										
1997	7.84	482.06	13.16	783.07	4.57	281.00	0.21	12.91	0.48	28.56
1998										

|--|

 Averages:
 9.02
 554.62
 10.36
 616.64
 7.11
 437.38
 0.11
 6.46
 0.48
 28.56

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.

# South Side Ditch, Ham's Fork River, Diversion Data

### Data:

- 1985: 5/17, 15.30 cfs; 6/18, 10.26 cfs; 7/2, 16.08 cfs; 7/16, 4.52 cfs; 7/30, 0.0 cfs.
- 1987: 5/16, 0 cfs; 6/10, 7.66 cfs; 6/23, 0 cfs.
- 1988: 5/19, dry; 6/14, 14.34 cfs; 7/12, off.
- 1989: 5/5, 9.75 cfs; 5/23, 12.60 cfs; 6/7, 13.24 cfs; 6/16, 7.86 cfs; 6/23, 9.06 cfs; 7/13, 8.87 cfs; 7/20, 9.36 cfs.
- 1990: 5/29, 12.42 cfs; 6/6, 15.80 cfs; 6/21, 14.72 cfs; 6/27, 11.70 cfs; 7/10, 8.36 cfs; 7/20, 10.76 cfs; 8/6, off.
- 1992: 5/18, 12.60 cfs; 6/9, 11.15 cfs; 6/26, closed.
- 1993: 5/28, 20.60 cfs; 6/9, 15.38 cfs; 6/18, 8.60 cfs; 7/2, 14.00 cfs; 7/13, 16.20 cfs; 7/26, 12.18 cfs; 7/30, closed; 9/23, 9.34 cfs; 9/27, closed.
- 1994: 5/20, 13.26 cfs; 6/2, 15.05 cfs; 6/10, 10.78 cfs; 7/1, closed.
- 1995: 5/19, 11.73 cfs; 6/6, 17.00 cfs; 6/23, 10.36 cfs; 7/13, 8.60 cfs; 7/26, 8/14, 8/22, 8/25, dry.
- 1997: 5/14, 13.5 cfs; 6/18, 13.5 cfs; 7/9, 11.0 cfs; 7/16, 0.00 cfs; 7/17, 1.0 cfs (est); 7/24, 1.0 cfs (est); 7/25, 1.0 cfs (est); 7/31, 8/6, 8/13, 8/21, 0.0 cfs; 8/29, 1.0 cfs (est); 9/11, 0.0 cfs; 9/18, 1.0 cfs (est); 9/25, 1.0 cfs (est).
- Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, 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.

# Winslow, Hallock, and Capen Ditch, Ham's Fork River

Diversion Description: Information not available at time of report.

#### **Diversion Location:**

Source: Ham's Fork River, Trib. Black's Fork River, Trib. Green River Section, Township, Range: 31, 21, 112

**Conveyance Description:** Open Channel Canal.

# Wyoming Water Rights Summary:

Priority Date (M–D–Y)			Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
11-12-1884	Terr.	Domestic, Irrigation, Stock	695.00	10.05	10.05	

Storage Rights: None.

Estimated Canal Losses: Information not available at time of report.

Irrigation Practices: Information not available at time of report.

Crop Types / Consumptive Use: Information not available at time of report.

Return Flows: Return flows are delivered to Ham's Fork above Fabian Ditch.

Wateryear	May		June		July		August		September	
	Average (cfs)	Monthly Total (AF)								
1980										
1981										
1982										
1983										
1984										
1985			0.73	43.44	0.05	3.07				
1986										
1987										
1988			14.94	888.99						
1989	13.87	82.53	23.73	1,412.03	20.10	1,235.90	6.11	375.69	4.45	264.79
1990			9.09	540.89						
1991										
1992			6.25	371.90						
1993			13.92	828.30	8.70	534.94				
1994			10.58	629.55						
1995			9.84	585.52	6.00	368.93	0.00	0.00		
1996			9.05	538.51	2.60	159.87				
1997			1.46	87.15	4.44	273.04				
1998										

Winslow, Hallock, and Capen Ditch, Ham's Fork River, Diversion Data

 Averages:
 13.87
 82.53
 9.96
 592.63
 6.98
 429.29
 3.06
 187.84
 4.45

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.

264.79

# Winslow, Hallock, and Capen Ditch, Ham's Fork River, Diversion Data

## Data:

- 1985: 5/21, 2.54 cfs; 6/18, 0.41 cfs; 7/2, 0.18 cfs; 7/16, 0 cfs.
- 1987: 6/17, 11.34 cfs; 7/6, 6.30 cfs; 7/13, 0.0 cfs.
- 1988: 5/19, 20.74 cfs; 6/9, 21.23 cfs; 6/21, 11.15 cfs; 7/12, dry.
- 1989: 5/9, 8.20 cfs; 5/24, 23.60 cfs; 6/7, 24.73 cfs; 6/16, 24.14 cfs; 6/23, 22.96 cfs; 7/13, 20.82 cfs; 7/20, 21.60 cfs; 8/26, off; 9/22, 10.40 cfs.
- 1990: 5/29, 21.10 cfs; 6/4, 7.50 cfs; 6/19, 10.60 cfs; 6/27, 8.30 cfs; 7/12, off.
- 1992: 6/2, 10.23 cfs; 6/9, 10.32 cfs; 6/12, 10.00 cfs; 6/29, closed.
- 1993: 5/20, not open; 5/26, 18.30 cfs; 6/18, 10.60 cfs; 7/2, 15.60 cfs; 7/16, 12.10 cfs; 7/26, closed; 9/23, 8.96 cfs; 9/27, 6.80 cfs.
- 1994: 5/16, 0.00 cfs; 6/2, 14.10 cfs; 6/8, 12.16 cfs; 6/27, 9.00 cfs; 7/3, out of water.
- 1995: 5/19, 6/2, dry; 6/22, 16.31 cfs; 7/10, 9.80 cfs; 7/27, 8/14, 8/18, 8/22, dry.
- 1996: 5/23, 13.6 cfs; 6/6, 9 cfs; 6/20, 9.8 cfs; 7/25, 0 cfs.
- 1997: 5/14, 5/23, 6/18, 0.00 cfs; 7/8, 10.4 cfs; 7/16, 9.0 cfs.
- Supply: 1980, average; 1981, slightly below average; 1982, average; 1983, above average; 1984, above average; 1985, 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.