

Water Division IV
District 11

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

Andrus Ditch, Spring Creek

Diversion Description: Information not available at time of report.

Diversion Location:

Source: Spring Creek, Trib. Horse Creek (8-34-112), Trib. Green River
Section, Township, Range: 8, 34, 112

Conveyance Description: Open Channel Canal.

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
10-25-1897	1637	Irrigation	560.00	7.99	7.99	
07-23-1898	353E	Irrigation	277.00	3.95	11.94	
07-12-1905	1410E	Irrigation	40.00	0.57	12.51	
09-26-1910	2322E	Irrigation	646.00	9.22	21.73	
07-29-1915	3253E	Domestic, Irrigation	289.00	4.13	25.86	

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 Horse Creek near Chenette Ditch.¹

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.

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

Andrus Ditch, Spring 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994										
1995										
1996					14.63	899.56				
1997										
1998										

Averages:					14.63	899.56				
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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

Andrus Ditch, Spring Creek, Diversion Data

Data:

1996: 6/17, 42 cfs (est); 6/27, 52 cfs (est); 7/17, 7.5 cfs (est); 7/30, 8/23, 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, slightly below 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

Apex Ditch, Green River

Diversion Description: Diversion consists of two 4' by 4' slide gates mounted on a wooden structure. A rock diversion dam exists.¹

Diversion Location:

Source: Green River

Section, Township, Range: 17,35,111

Conveyance Description: Open Channel Canal, approximately 3½ miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
05-17-1905	6652	Irrigation	553.00	7.89	7.89	
11-30-1906	1641E	Irrigation	666.00	9.51	17.40	
05-07-1908	1876E	Irrigation	154.00	2.20	19.60	
04-01-1914	2939E	Domestic, Irrigation	830.00	11.85	31.45	
07-21-1914	2989E	Domestic, Irrigation, Stock	1,019.00	14.54	45.99	
08-20-1917	3900E	Domestic, Irrigation, Stock	492.50	7.02	53.01	
03-08-1968	6213E	Irrigation	69.00	0.99	54.00	

Storage Rights: None.

Estimated Canal Losses: Greater than typical losses (25%) are experienced in the first mile of the ditch, typical losses (10%) are experienced in the lower reach.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 Forth Rod Creek at Green River.²

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

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

Apex Ditch, Green River

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

Apex Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994			61.88	3,682.12	24.89	1,530.43	6.93	426.11	3.20	190.41
1995	36.18	2,224.62	69.98	4,164.10	73.35	4,510.12	20.14	1,238.36		
1996										
1997										
1998							15.74	967.81		

Averages:	36.18	2,224.62	65.93	3,923.11	49.12	3,020.28	14.29	877.43	3.20	190.41
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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

Apex Ditch, Green River, Diversion Data

Data:

1992: 7/14, 50.00 cfs; 9/24, 17.00 cfs.

1993: 5/25, 75.7 cfs; 7/20, 101.3 cfs; 9/14, 22.00 cfs.

1994: 5/20, 40.00 cfs; 6/6, 78.80 cfs; 7/1, 40.00 cfs; 8/2, 8.80 cfs; 8/17, 6.50 cfs; 9/20, 4.5 cfs.

1995: 5/9, 43.0 cfs; 5/26, 50.9 cfs; 6/19, 75 cfs (est); 7/19, 80 cfs (est); 8/21, 10.0 cfs.

1996: 5/11, 6.5 cfs (est).

1997: 7/5, 21.7 cs; 8/6, 19.6 cfs.

1998: 6/2, 76.6 cfs; 7/28, 36.05 cfs; 8/20, 7.9 cfs; 9/15, 15.9 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, slightly below 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

Ashley-Wolf Ditch, Green River

Diversion Description: Diversion consists of a single 5' by 5' slide gate.¹

Diversion Location:

Source: Green River

Section, Township, Range: 29,35,111

Conveyance Description: Open Channel Canal, approximately 3 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
09-21-1900	2828	Irrigation	545.00	7.76	7.76	
07-01-1904	1256E	Irrigation	124.00	1.77	9.53	
07-02-1904	1233E	Irrigation	230.00	3.28	12.81	
08-03-1911	2521E	Irrigation	123.00	1.66	14.47	
02-05-1954	5775E	Irrigation	80.00	1.15	15.62	

Storage Rights: None.

Estimated Canal Losses: Greater than typical losses (25%) are experienced in the first mile of the ditch, typical losses (10%) are experienced in the lower reach.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 Forth Rod 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

Ashley-Wolf Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994	30.44	1,871.68	32.84	1,954.12	20.46	1,258.04	7.91	486.37	4.43	263.60
1995	12.48	767.37	31.09	1,849.98	31.66	1,946.70	8.65	531.87		
1996										
1997										
1998										

Averages:	21.46	1,319.52	31.97	1,902.05	26.06	1,602.37	8.28	509.12	4.43	263.60
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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

Ashley-Wolf Ditch, Green River, Diversion Data

Data:

1993: 5/25, 15.90 cfs; 7/20, 25.50 cfs; 9/14, 4.00 cfs.

1994: 5/2, 28.80 cfs; 6/6, 35.00 cfs; 7/1, 30.00 cfs; 8/2, 10.30 cfs; 8/17, 7.00 cfs; 9/20, 7.00 cfs.

1995: 5/9, 13.3 cfs; 5/26, 18.0 cfs; 6/19, 35 cfs (est); 7/19, 33.9 cfs; 8/21, 4.5 cfs.

1996: 5/11, 3.0 cfs (est).

1997: 7/16, 1.0 cfs (est); 8/13, off.

1998: 6/2, 33.8 cfs; 7/28, 8/20, 9/15, 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, slightly below 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

Bonneville Ditch, Green River

Diversion Description: Diversion consists of a single 24" slide gate. No diversion dam exists.¹

Diversion Location:

Source: Green River

Section, Township, Range: 19, 34, 111

Conveyance Description: Open Channel Canal, approximately 5 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
07-30-1898	1897	Irrigation	948.00	13.54	13.54	
05-27-1903	1055E	Irrigation	320.00	4.56	18.10	
06-27-1906	1568E	Irrigation	70.00	1.00	19.10	
08-24-1906	1609E	Irrigation	160.00	2.28	21.38	

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 Horse Creek at Prairie Creek.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Bonneville Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994			28.93	1,721.45	10.35	636.40	1.75	107.60	1.18	70.21
1995	12.40	762.45	16.20	963.97	18.67	1,147.97	4.22	259.48		
1996	7.40	455.01	27.48	1,635.17	27.47	1,689.06	6.83	419.96		
1997					39.34	2,418.92				
1998										

Averages:	9.90	608.73	24.20	1,440.20	23.96	1,473.09	4.27	262.35	1.18	70.21
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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

Bonneville Ditch, Green River, Diversion Data

Data:

1994: 5/20, 20.00 cfs; 6/6, 38.30 cfs; 6/21, 25.00 cfs; 7/1, 18.00 cfs; 8/2, 2.20 cfs; 8/17, 1.50 cfs; 9/20, 2.00 cfs.

1995: 5/9, 14.8 cfs; 5/26, 18.0 cfs; 6/19, 40 cfs (est); 7/19, 42.8 cfs; 8/21, off.

1996: 5/11, 4.0 cfs (est); 6/27, 35 cfs (est); 7/17, 28 cfs (est); 7/30, 21 cfs (est); 8/23, off.

1997: 6/25, 51.5 cfs; 7/20, 40.8 cfs; 8/13, 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, slightly below 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

Brome Ditch, Green River

Diversion Description: Diversion consists of a wood stop log headgate. No diversion dam exists.¹

Diversion Location:

Source: Green River

Section, Township, Range: 33, 34, 111

Conveyance Description: Open Channel Canal, approximately 4 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
01-09-1901	612E	Irrigation	276.00	3.94	3.94	POD/MOC change from a portion of Todd Ditch (Horse Creek)
09-05-1901	710E	Irrigation	160.00	2.28	6.22	POD/MOC change from a portion of Todd Ditch (Horse Creek)
12-30-1902	963E	Irrigation	300.00	4.26	10.48	POD/MOC change from a portion of Todd Ditch (Horse Creek)
04-21-1911	2436E	Irrigation	142.00	2.03	12.51	POD/MOC change from a portion of Todd Ditch (Horse Creek)
12-08-1922	4332E	Domestic, Irrigation, Stock	450.00	6.42	18.93	POD/MOC change from a portion of Sutton Ditch
04-19-1960	22235	Irrigation, Stock	152.00	2.17	21.10	Supplemental Supply for 765.00 acres with Original Supply from Horse Creek

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.

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

Brome Ditch, Green River

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

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Brome Ditch, Green River, Diversion Data

Data:

1995: 5/9, 1.5 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, slightly below 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

Canyon Ditch, Green River

Diversion Description: Diversion consists of two 4' by 4' slide gates mounted on a concrete wall.¹

Diversion Location:

Source: Green River

Section, Township, Range: 29,35,111

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
10-06-1952	21099	Domestic, Irrigation, Stock	1,721.50	24.57	24.57	
02-17-1954	5800E	Irrigation	610.00	8.71	33.28	

Storage Rights: None.

Estimated Canal Losses: Typical losses (10%) are experienced.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 Duck Creek at Kitchen and Sunset Reservoir.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

Canyon Ditch, Green River, 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)
1975			<i>53.99</i>	<i>3,212.43</i>	<i>74.57</i>	<i>4,584.99</i>	<i>21.92</i>	<i>1,347.90</i>	<i>8.70</i>	<i>517.69</i>
1976			<i>76.64</i>	<i>4,560.10</i>	<i>53.24</i>	<i>3,273.42</i>	<i>58.69</i>	<i>3,608.60</i>	<i>30.35</i>	<i>1,806.20</i>
1980			<i>51.79</i>	<i>3,081.72</i>	<i>77.01</i>	<i>4,735.16</i>	<i>31.55</i>	<i>1,939.93</i>		
1981			<i>38.23</i>	<i>2,274.84</i>	<i>44.92</i>	<i>2,762.02</i>	<i>20.59</i>	<i>1,266.03</i>		
1982					<i>71.95</i>	<i>4,424.03</i>	<i>32.81</i>	<i>2,017.41</i>	<i>34.62</i>	<i>2,060.03</i>
1983			<i>25.22</i>	<i>1,500.69</i>	<i>86.58</i>	<i>5,323.60</i>	<i>47.86</i>	<i>2,942.80</i>		
1984										
1985										
1986										
1987										
1988										
1989										
1990										
1991										
1992					<i>44.54</i>	<i>2,738.66</i>	<i>27.16</i>	<i>1,670.00</i>	<i>23.92</i>	<i>1,423.34</i>
1993										
1994			<i>48.93</i>	<i>2,911.54</i>	<i>30.87</i>	<i>1,898.12</i>	<i>13.39</i>	<i>823.32</i>	<i>11.52</i>	<i>685.49</i>
1995	<i>29.85</i>	<i>1,835.40</i>	<i>46.82</i>	<i>2,785.98</i>	<i>40.10</i>	<i>2,465.65</i>	<i>16.87</i>	<i>1,037.30</i>		
1996										
1997					<i>57.57</i>	<i>3,539.90</i>				
1998							<i>40.96</i>	<i>2,518.53</i>		

Averages:

29.85	1,835.40	48.80	2,903.90	58.14	3,574.56	31.18	1,917.18	21.52	1,298.55
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Data in italics from USGS gaging station 006075.00, see attached data sheets.

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

Canyon Ditch, Green River, Diversion Data

Data:

1980: 6/11, 57 cfs; 6/17, 77 cfs; 7/7, 92 cfs; 7/29, 60 cfs; 8/20, 45 cfs.
1981: 6/15, 60 cfs; 6/26, 80 cfs; 7/23, 30 cfs; 8/6, 35 cfs; 8/12, 17.7 cfs; 8/28, 14 cfs.
1982: 7/1, 72 cfs; 7/16, 82 cfs; 7/22, 78 cfs; 8/4, 30 cfs; 8/27, 32 cfs; 9/2, 50 cfs; 9/24, 40 cfs.
1983: 6/22, 80 cfs; 6/27, 85 cfs; 7/11, 92 cfs; 7/18, 82 cfs; 7/26, 88 cfs; 8/26, 40 cfs.
1984: 7/10, 95 cfs; 7/20, 51 cfs.
1986: 6/25, above rating; 7/30, 28.4 cfs; 9/2, 36 cfs.
1987: 7/16, 134 cfs.
1990: 6/27, 86.9 cfs at Homestead Bridge, 87.4 cfs at 3rd Bridge.
1991: 6/13, 50 cfs; 7/15, 68 cfs.
1992: 4/20, 12.00 cfs; 5/13, 45.00 cfs; 5/21, 65.00 cfs; 7/14, 50.00 cfs; 8/4, 25.00 cfs; 9/24, 33.00 cfs.
1993: 7/20, 43.80 cfs; 9/14, 35.00 cfs.
1994: 5/20, 38.40 cfs; 6/6, 48.00 cfs; 6/21, 50.00 cfs; 7/1, 50.00 cfs; 8/2, 10.50 cfs; 8/17, 13.50 cfs; 9/20, 20.00 cfs.
1995: 5/9, 35.0 cfs; 5/26, 43.0 cfs; 6/19, 48.8 cfs; 7/19, 40.3 cfs; 8/21, 20.0 cfs.
1996: 5/11, off; 7/2, 88 cfs (est).
1997: 7/3, 92.3 cfs; 7/21, 106 cfs.
1998: 5/19, 43.49 cfs; 8/3, 78.8 cfs; 8/12, 26.8 cfs; 9/4, 38.5 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, slightly below 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

Canyon Ditch, Green River, Diversion Data

CANYON DITCH

STATION NO. 006075.00

LATITUDE 0-00-00 LONGITUDE 0-00-00

SECTION 0 TOWNSHIP 0 ,RANGE 0 P.M.

ELEVATION UNKNOWN DRAINAGE AREA UNKNOWN

NONCONTRIBUTING AREA UNKNOWN BASIN UNKNOWN

DATA FROM WATER COMMISSIONERS (P)

MEAN DAILY FLOW IN CFS BY WATER YEAR													
1975													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	**	**	**	**	**	**	**	**	**	76.60	75.00	13.00	1
2	**	**	**	**	**	**	**	**	29.60	77.00	70.00	13.00	2
3	**	**	**	**	**	**	**	**	31.00	78.00	70.00	13.00	3
4	**	**	**	**	**	**	**	**	32.50	76.00	68.20	13.00	4
5	**	**	**	**	**	**	**	**	34.00	74.00	20.00	12.75	5
6	**	**	**	**	**	**	**	**	36.00	72.00	20.00	12.75	6
7	**	**	**	**	**	**	**	**	36.00	71.00	19.00	12.75	7
8	**	**	**	**	**	**	**	**	38.00	71.00	19.00	12.75	8
9	**	**	**	**	**	**	**	**	38.00	71.00	19.00	12.00	9
10	**	**	**	**	**	**	**	**	40.00	71.00	19.00	12.00	10
11	**	**	**	**	**	**	**	**	43.00	71.00	18.60	11.00	11
12	**	**	**	**	**	**	**	**	43.50	71.00	18.00	11.00	12
13	**	**	**	**	**	**	**	**	44.00	71.00	17.00	10.00	13
14	**	**	**	**	**	**	**	**	47.00	71.00	16.00	10.00	14
15	**	**	**	**	**	**	**	**	50.00	71.00	12.00	10.00	15
16	**	**	**	**	**	**	**	**	55.00	71.00	9.00	10.00	16
17	**	**	**	**	**	**	**	**	60.00	71.00	7.00	10.00	17
18	**	**	**	**	**	**	**	**	65.00	71.00	5.25	10.00	18
19	**	**	**	**	**	**	**	**	66.00	71.00	5.00	9.00	19
20	**	**	**	**	**	**	**	**	71.00	71.00	15.00	9.00	20
21	**	**	**	**	**	**	**	**	76.00	71.00	15.00	9.00	21
22	**	**	**	**	**	**	**	**	76.00	71.00	15.00	9.00	22
23	**	**	**	**	**	**	**	**	76.00	71.00	15.00	8.00	23
24	**	**	**	**	**	**	**	**	76.00	72.00	15.00	8.00	24
25	**	**	**	**	**	**	**	**	76.00	76.00	15.00	**	25
26	**	**	**	**	**	**	**	**	76.00	79.00	14.50	**	26
27	**	**	**	**	**	**	**	**	76.00	86.00	14.00	**	27
28	**	**	**	**	**	**	**	**	76.00	86.00	14.00	**	28
29	**	**	**	**		**	**	**	76.00	88.00	14.00	**	29
30	**	**	**	**		**	**	**	76.00	84.00	13.00	**	30
31	**		**	**		**		**		80.00	13.00		31
TOTAL	**	**	**	**	**	**	**	**	1619.60*	2311.60	679.55	261.00*	
MEAN	**	**	**	**	**	**	**	**	55.85*	74.57	21.92	10.88*	
AC-FT	**	**	**	**	**	**	**	**	3212.43*	4584.99	1347.87	517.69*	

** INDICATES
MISSING DATA

* INDICATES
COMPUTED FROM
INCOMPLETE DATA

E INDICATES
ESTIMATED VALUE

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

Canyon Ditch, Green River, Diversion Data

CANYON DITCH
 LATITUDE 0-00-00 LONGITUDE 0-00-00
 SECTION 0 TOWNSHIP 0 ,RANGE 0 P.M.
 ELEVATION UNKNOWN DRAINAGE AREA UNKNOWN
 NONCONTRIBUTING AREA UNKNOWN BASIN UNKNOWN
 DATA FROM WATER COMMISSIONERS (P)

STATION NO. 006075.00

MEAN DAILY FLOW IN CFS BY WATER YEAR													
1976													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	**	**	**	**	**	**	**	**	**	95.00	94.00	36.00	1
2	**	**	**	**	**	**	**	**	**	90.00	94.00	35.00	2
3	**	**	**	**	**	**	**	**	**	85.00	97.00	35.00	3
4	**	**	**	**	**	**	**	**	50.45	80.00	97.00	34.00	4
5	**	**	**	**	**	**	**	**	60.00	40.00	94.00	34.00	5
6	**	**	**	**	**	**	**	**	70.00	40.50	93.00	33.00	6
7	**	**	**	**	**	**	**	**	80.00	40.00	90.00	33.00	7
8	**	**	**	**	**	**	**	**	81.20	42.00	87.00	32.80	8
9	**	**	**	**	**	**	**	**	80.00	44.00	84.00	32.00	9
10	**	**	**	**	**	**	**	**	80.00	48.00	74.00	32.00	10
11	**	**	**	**	**	**	**	**	80.00	52.00	70.00	32.00	11
12	**	**	**	**	**	**	**	**	80.00	57.00	44.50	32.00	12
13	**	**	**	**	**	**	**	**	80.00	57.25	40.90	31.00	13
14	**	**	**	**	**	**	**	**	80.00	52.00	41.00	31.20	14
15	**	**	**	**	**	**	**	**	79.00	48.00	41.00	31.00	15
16	**	**	**	**	**	**	**	**	80.00	36.00	42.00	31.00	16
17	**	**	**	**	**	**	**	**	84.00	29.00	43.00	30.00	17
18	**	**	**	**	**	**	**	**	88.00	29.00	43.00	30.00	18
19	**	**	**	**	**	**	**	**	92.00	29.60	44.00	29.00	19
20	**	**	**	**	**	**	**	**	95.00	30.00	44.00	29.00	20
21	**	**	**	**	**	**	**	**	97.00	30.00	45.00	29.00	21
22	**	**	**	**	**	**	**	**	97.00	30.00	45.00	28.00	22
23	**	**	**	**	**	**	**	**	97.00	30.00	45.00	28.00	23
24	**	**	**	**	**	**	**	**	97.00	30.00	45.00	27.00	24
25	**	**	**	**	**	**	**	**	96.00	30.00	45.50	27.00	25
26	**	**	**	**	**	**	**	**	96.00	30.00	44.00	26.00	26
27	**	**	**	**	**	**	**	**	95.00	88.00	42.00	26.00	27
28	**	**	**	**	**	**	**	**	95.00	88.00	40.00	26.00	28
29	**	**	**	**	**	**	**	**	95.00	88.00	38.00	25.60	29
30	**	**	**	**		**	**	**	94.40	90.00	36.00	25.00	30
31	**		**	**		**		**		92.00	36.45		31
TOTAL	**	**	**	**	**	**	**	**	2299.05*	1650.35	1819.35	910.60	
MEAN	**	**	**	**	**	**	**	**	85.15*	53.24	58.69	30.35	
AC-FT	**	**	**	**	**	**	**	**	4560.10*	3273.42	3608.63	1806.15	

** INDICATES
MISSING DATA

* INDICATES
COMPUTED FROM
INCOMPLETE DATA

E INDICATES
ESTIMATED VALUE

Source: Wyoming Water Resources Data System, March 20, 2000.

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

Cox Number 1 Ditch, Green River

Diversion Description: Diversion consists of wood stop log headgate. No diversion dam exists.¹

Diversion Location:

Source: Green River

Section, Township, Range: 29, 35, 111

Conveyance Description: Open Channel Canal, approximately 3 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
03-14-1901	3085	Irrigation	523.84	7.48	7.48	
03-26-1973	6460E	Irrigation	200.00	2.86	10.34	

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 Forty Rod Creek above Green River.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Cox Number 1 Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994			17.54	1,043.70	6.19	380.61	0.33	20.29	1.37	81.52
1995	8.44	518.96	19.50	1,160.33	22.29	1,370.56	4.89	300.67		
1996										
1997										
1998							0.00	0.00		

Averages:	8.44	518.96	18.52	1,102.02	14.24	875.59	1.74	106.99	1.37	81.52
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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

Cox Number 1 Ditch, Green River, Diversion Data

Data:

1993: 5/25, 23.10 cfs; 7/20, 13.20 cfs; 9/14, 1.50 cfs.

1994: 5/20, 10.00 cfs; 6/6, 22.00 cfs; 7/1, 12.00 cfs; 8/2, 8/17, off; 9/20, 3.00 cfs.

1995: 5/9, 9.5 cfs; 5/26, 12.0 cfs; 6/19, 21.3 cfs; 7/19, 25 cfs (est); 8/21, off.

1996: 5/11, off.

1997: 7/16, 1.0 cfs (est); 8/13, off.

1998: 6/2, 17.25 cfs; 7/28, 8/20, 9/15, 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, slightly below 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

Dickinson Number 1 Ditch, Green River

Diversion Description: Information not available at time of report.

Diversion Location:

Source: Green River

Section, Township, Range: 20, 35, 111

Conveyance Description: Open Channel Canal, approximately 4 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
11-13-1901	3549	Irrigation	120.00	1.71	1.71	
10-22-1903	1103E	Irrigation	260.00	3.71	5.42	
12-19-1907	1863E	Irrigation	534.00	7.62	13.04	
05-07-1908	1877E	Irrigation	125.00	1.78	14.82	
09-29-1953	5700E	Irrigation	240.00	3.43	18.25	

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 Forty Rod Creek above Green River.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Dickinson Number 1 Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994			30.50	1,814.88	11.04	678.82	0.69	42.43	1.14	67.83
1995										
1996										
1997										
1998										

Averages:			30.50	1,814.88	11.04	678.82	0.69	42.43	1.14	67.83
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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

Dickinson Number 1 Ditch, Green River, Diversion Data

Data:

1993: 7/20, 13.50 cfs; 9/14, 6.00 cfs.

1994: 5/20, 20.00 cfs; 6/6, 38.80 cfs; 7/1, 20.00 cfs; 8/2, 1.50 cfs; 8/17, off; 9/20, 2.50 cfs.

1997: 7/16, 1.0 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, slightly below 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

Enos Ditch, Green River

Diversion Description: Diversion consists of a wood stop log headgate.¹

Diversion Location:

Source: Green River

Section, Township, Range: 29, 34, 111

Conveyance Description: Open Channel Canal, approximately 4 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
09-07-1900	2809	Irrigation	308.00	4.40	4.40	
10-16-1901	3502	Irrigation	470.00	6.71	11.11	POD/MOC change from Small Ditch
08-15-1907	1801E	Irrigation, Stock	320.00	4.57	15.68	

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 Green River at Horse Creek.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Enos Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994	20.78	1,277.71	22.38	1,331.70	6.19	380.61	0.27	16.60	1.14	67.83
1995	10.96	673.90	34.06	2,026.71	33.21	2,042.00	7.33	450.70		
1996					2.32	142.65				
1997					24.78	1,523.66				
1998										

Averages:	15.87	975.81	28.27	1,679.21	16.63	1,022.23	3.80	233.65	1.14	67.83
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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

Enos Ditch, Green River, Diversion Data

Data:

1993: 7/20, 22.60 cfs; 9/14, off.

1994: 5/2, 15.00 cfs; 6/6, 30.10 cfs; 7/1, 12.00 cfs; 8/2, 8/17, off; 9/20, 2.50 cfs.

1995: 5/9, 11.7 cfs; 5/26, 15.3 cfs; 6/19, 40 cfs (est); 7/19, 35.2 cfs; 8/21, 1.0 cfs.

1996: 5/11, 10.0 cfs (est); 6/27, 3.0 cfs (est); 7/17, 5.5 cfs (est).

1997: 6/25, 18.6 cfs; 7/20, 30.3 cfs; 8/13, 1.4 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, slightly below 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

Green River Supply Canal, Green River

Diversion Description: Diversion consists of a wood stop log headgate.¹

Diversion Location:

Source: Green River

Section, Township, Range: 4, 33, 110

Conveyance Description: Open Channel Canal, approximately 5 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
12-28-1910	10419	Irrigation	2,114.00	30.19	30.19	
03-23-1920	4104E	Irrigation, Stock			30.19	Supplementary Supply for 3,481.60 acres with Original Supply from Cottonwood Creek
01-28-1921	4180E	Irrigation, Stock	219.00	3.13	33.32	
11-12-1921	4257E	Domestic, Irrigation	72.00	1.03	34.35	Supplementary Supply for 248.00 acres with Original Supply from Horse Creek

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 Green River at Soap Hole Basin, and approximately 40% to Cottonwood Creek above Green River.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Green River Supply Canal, Green River, 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)
1975			<i>55.81</i>	<i>3,320.73</i>	<i>54.52</i>	<i>3,352.06</i>				
1980			54.83	3,262.86	48.88	3,005.43				
1981										
1982										
1983			65.76	3,912.99	73.75	4,534.71				
1984										
1985										
1986										
1987										
1988										
1989										
1990										
1991										
1992	66.94	4,115.98	115.36	6,864.40	97.10	5,970.45	45.15	2,776.17	2.51	149.36
1993									0.00	0.00
1994										
1995										
1996										
1997										
1998										

Averages:	66.94	4,115.98	72.94	4,340.25	68.56	4,215.66	45.15	2,776.17	1.26	74.68
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Data in italics from USGS gaging station 006070.00, see attached data sheets.

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

Green River Supply Canal, Green River, Diversion Data

Data:

1980: 5/28, off; 6/20, 74 cfs; 7/11, 76 cfs; 7/31, off.

1981: 4/16, 15 cfs (est).

1983: 5/25, 10 cfs; 6/28, 96 cfs; 7/12, 142 cfs; 7/25, off.

1984: 6/27, 140 cfs; 7/10, 150 cfs; 8/20, off.

1986: 7/1, 67 cfs.

1992: 4/30, 12.0 cfs (est); 5/18, 78.0 cfs (est); 6/9, 120 cfs (est); 7/10, 110 cfs (est); 8/13, 52.0 cfs (est);
9/10, off.

1993: (all est): 5/27, 18.0 cfs; 7/2, 78.0 cfs; 8/23, 9/3, 9/27, off.

1996: 6/27, 50 cfs (est).

1997: 6/10, 25 cfs (est) (arrive), 80 cfs (depart); 8/19, 1 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, slightly below 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

Green River Supply Canal, Green River, Diversion Data

GREEN RIVER SUPPLY CANAL

STATION NO. 006070.00

LATITUDE 0-00-00 LONGITUDE 0-00-00

SECTION 0 TOWNSHIP 0 ,RANGE 0 P.M.

ELEVATION UNKNOWN DRAINAGE AREA UNKNOWN

NONCONTRIBUTING AREA UNKNOWN BASIN UNKNOWN

DATA FROM WATER COMMISSIONERS (P)

MEAN DAILY FLOW IN CFS BY WATER YEAR													
1976													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	**	**	**	**	**	**	**	**	37.00	65.00	**	**	1
2	**	**	**	**	**	**	**	**	37.00	65.00	**	**	2
3	**	**	**	**	**	**	**	**	37.00	66.00	**	**	3
4	**	**	**	**	**	**	**	**	37.00	66.00	**	**	4
5	**	**	**	**	**	**	**	**	37.00	67.00	**	**	5
6	**	**	**	**	**	**	**	**	37.00	67.00	**	**	6
7	**	**	**	**	**	**	**	**	37.00	68.00	**	**	7
8	**	**	**	**	**	**	**	**	37.00	68.00	**	**	8
9	**	**	**	**	**	**	**	**	37.00	69.00	**	**	9
10	**	**	**	**	**	**	**	**	37.00	69.00	**	**	10
11	**	**	**	**	**	**	**	**	66.00	70.00	**	**	11
12	**	**	**	**	**	**	**	**	66.00	70.00	**	**	12
13	**	**	**	**	**	**	**	**	66.00	70.00	**	**	13
14	**	**	**	**	**	**	**	**	66.00	70.00	**	**	14
15	**	**	**	**	**	**	**	**	66.00	70.00	**	**	15
16	**	**	**	**	**	**	**	**	66.00	69.00	**	**	16
17	**	**	**	**	**	**	**	**	66.00	69.00	**	**	17
18	**	**	**	**	**	**	**	**	66.00	68.00	**	**	18
19	**	**	**	**	**	**	**	**	66.00	68.00	**	**	19
20	**	**	**	**	**	**	**	**	66.00	67.00	**	**	20
21	**	**	**	**	**	**	**	**	65.00	67.00	**	**	21
22	**	**	**	**	**	**	**	**	65.00	66.00	**	**	22
23	**	**	**	**	**	**	**	**	65.00	66.00	**	**	23
24	**	**	**	**	**	**	**	**	65.00	65.00	**	**	24
25	**	**	**	**	**	**	**	**	64.20	65.00	**	**	25
26	**	**	**	**	**	**	**	**	64.00	**	**	**	26
27	**	**	**	**	**	**	**	**	64.00	**	**	**	27
28	**	**	**	**	**	**	**	**	64.00	**	**	**	28
29	**	**	**	**	**	**	**	**	64.00	**	**	**	29
30	**	**	**	**	**	**	**	**	64.00	**	**	**	30
31	**	**	**	**	**	**	**	**	**	**	**	**	31
TOTAL	**	**	**	**	**	**	**	**	1674.20	1690.00*	**	**	
MEAN	**	**	**	**	**	**	**	**	55.81	67.60*	**	**	
AC-FT	**	**	**	**	**	**	**	**	3320.73	3352.06*	**	**	

** INDICATES
MISSING DATA

* INDICATES
COMPUTED FROM
INCOMPLETE DATA

E INDICATES
ESTIMATED VALUE

Source: Wyoming Water Resources Data System, March 20, 2000.

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

Harrison-Sayer Ditch, South Fork Horse Creek

Diversion Description: Information not available at time of report.

Diversion Location:

Source: South Fork Horse Creek, Trib. Horse Creek, Trib. Green River
Section, Township, Range: 25, 34, 114

Conveyance Description: Open Channel Canal.

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
08-08-1901	3351	Irrigation	992.00	14.16	14.16	
02-13-1904	1165E	Irrigation	168.00	2.39	16.55	
12-18-1906	1636	Irrigation	40.00	0.57	17.12	
08-29-1912	2662E	Irrigation	17.00	0.24	17.36	
07-19-1915	3191E	Domestic, Irrigation	165.00	2.35	19.71	
07-29-1915	3213E	Irrigation	48.00	0.69	20.40	

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 Cottonwood Creek at Ryegrass Junction.¹

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.

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

Harrison-Sayer Ditch, South Fork Horse Creek, Diversion Data

No Diversion Data Available.

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

Hartley Ditch, Horse Creek

Diversion Description: No headgate or diversion dam exists.¹

Diversion Location:

Source: Horse Creek, Trib. Green River

Section, Township, Range: 5, 34, 113

Conveyance Description: Open Channel Canal, approximately 3 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
05-01-1889	Terr.	Irrigation	800.00	11.42	11.42	
03-25-1902	3794	Irrigation	160.00	2.28	13.70	POD/MOC change from a portion of McGovern No. 2 Ditch
11-30-1914	3066E	Irrigation	43.00	0.61	14.31	POD/MOC change from a portion of Irwin No. 1 Ditch
03-22-1915	3151E	Domestic, Irrigation	108.00	1.54	15.85	POD/MOC change from a portion of McGovern Ditch
04-17-1973	6478E	Irrigation	75.00	1.07	16.92	

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 Horse Creek at South Horse Creek.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Hartley Ditch, Horse 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993							0.37	22.75		
1994			12.59	749.16	2.75	169.09	0.07	4.30		
1995	14.63	899.56	28.36	1,687.54	17.65	1,085.26	2.31	142.04		
1996							0.00	0.00		
1997										
1998			45.36	2,699.37						

Averages:	14.63	899.56	28.77	1,712.02	10.20	627.18	0.69	42.27		
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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

Hartley Ditch, Horse Creek, Diversion Data

Data:

1990: 6/25, 15.0 cfs (est); 7/7, 4.0 cfs (est).

1991: 6/17, 18.0 cfs; 7/7, 7.0 cfs.

1993: 5/10, off; 5/21, 25.20 cfs; 7/20, 1.50 cfs; 8/24, off.

1994: 6/4, 18.80 cfs; 6/6, 17.00 cfs; 6/18, 16.50 cfs; 6/19, 15.00 cfs; 6/27, 8.50 cfs; 7/15, 2.00 cfs; 8/8, 9/7, off.

1995: 4/14, off; 5/2, 5.0 cfs; 5/15, 15.0 cfs; 6/18, 30 cfs (est); 7/7, 33.3 cfs; 7/28, off; 9/4, 4.5 cfs.

1996: 7/17, 3.0 cfs (est); 7/30, 8/23, off.

1997: 6/11, 18.0 cfs (est); 6/23, 14.0 cfs; 8/13, off.

1998: 5/29, 72.4 cfs; 6/22, 58.9 cfs; 8/14, 4 cfs (est); 9/28, 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, slightly below 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

Irwin Ditch, Horse Creek

Diversion Description: Diversion consists of a single 24" slide gate. No diversion dam exists.¹

Diversion Location:

Source: Horse Creek, Trib. Green River
Section, Township, Range: 4, 34, 113

Conveyance Description: Open Channel Canal, approximately 3 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
04-24-1901	3135	Irrigation	320.00	4.57	4.57	
12-22-1906	1656E	Irrigation	125.00	1.78	6.35	Permitted Name: Irwin No. 1 Ditch
09-03-1908	1952E	Domestic, Irrigation	320.00	4.57	10.92	Permitted Name: Irwin No. 1 Ditch
11-30-1914	3066E	Irrigation	320.00	4.56	15.48	Permitted Name: Irwin No. 1 Ditch
06-01-1918	3951E	Irrigation	400.00	5.71	21.19	Permitted Name: Irwin No. 1 Ditch
04-17-1973	6477E	Irrigation	45.00	0.64	21.83	Permitted Name: Irwin No. 1 Ditch

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 Horse Creek at South Horse Creek.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Irwin Ditch, Horse 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993							2.58	158.64		
1994			10.20	606.94	1.34	82.39	0.66	40.58		
1995	13.02	800.57	36.49	2,171.31	23.81	1,464.02	1.03	63.33		
1996										
1997			19.43	1,156.17						
1998			38.21	2,273.65	21.22	1,304.77	2.01	123.53	4.15	246.88

Averages:	13.02	800.57	22.04	1,311.47	12.58	773.21	1.57	96.52	4.15	246.88
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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

Irwin Ditch, Horse Creek, Diversion Data

Data:

1990: 6/25, 20.0 cfs (est); 7/7, 1.5 cfs (est).

1991: 6/17, 100 + cfs.

1993: 5/10, off; 5/21, 85.80 cfs; 7/20, 7.50 cfs; 8/24, 1.50 cfs.

1994: 6/4, 32.80 cfs; 6/6, off; 6/18, 20.70 cfs; 6/19, 19.90 cfs; 6/27, 6.50 cfs; 7/15, off; 8/8, 1.00 cfs; 9/7, off.

1995: 4/14, 2.0 cfs; 5/2, 5.5 cfs; 5/15, 10.0 cfs; 6/18, 40.0 cfs; 7/7, 45 cfs (est); 7/28, off; 9/4, 2.0 cfs.

1997: 6/11, 7.5 cfs (est); 6/24, 41.0 cfs; 8/13, 1.43 cfs.

1998: 5/29, 44.0 cfs; 6/22, 36.9 cfs; 8/14, 3 cfs (est); 9/28, 5.3 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, slightly below 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

Lead Ditch, Horse Creek

Diversion Description: Diversion consists of two 24" slide gates.¹

Diversion Location:

Source: Horse Creek, Trib. Green River

Section, Township, Range: 5, 34, 113

Conveyance Description: Open Channel Canal, approximately 6 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
06-11-1900	2656	Irrigation	663.00	9.46	9.46	
05-31-1906	1579E	Irrigation	157.00	2.24	11.70	
08-22-1907	1757E	Irrigation	160.00	2.28	13.98	
06-05-1919	4010E	Irrigation	127.00	1.81	15.79	POD/MOC change from a portion of McGovern No. 2 Ditch
04-26-1956	5861E	Domestic, Irrigation, Stock	72.00	1.03	16.82	
01-10-1961	6060E	Irrigation	90.00	1.29	18.11	POD/MOC change from a portion of McGovern No. 2 Ditch

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 Horse Creek at South Horse Creek.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Lead Ditch, Horse 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993							3.08	189.38		
1994			10.12	622.25	3.56	218.90	1.51	92.85		
1995	26.72	1,642.95	45.26	2,782.93	23.99	1,475.09	5.57	342.49		
1996					14.74	906.33	0.00	0.00		
1997			13.92	855.91	11.75	722.48				
1998							0.00	0.00	0.00	0.00

Averages:	26.72	1,642.95	23.10	1,420.36	13.51	830.70	2.03	124.94	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

Lead Ditch, Horse Creek, Diversion Data

Data:

1988: 5/12, 14.5 cfs.

1990: 6/25, 12.0 cfs (est); 7/7, 4.0 cfs (est).

1991: 5/7, 4 cfs; 6/17, 20.13 cfs.

1993: 5/10, 5.80 cfs; 5/21, 50.80 cfs; 7/20, 10.60 cfs; 8/24, 1.00 cfs.

1994: 6/4, 25.50 cfs; 6/6, off; 6/18, 18.80 cfs; 6/19, 17.30 cfs; 6/27, 10.20 cfs; 7/15, 2.50 cfs; 8/8, 1.00 cfs; 9/7, off.

1995: 4/14, 3.0 cfs; 5/2, 18.0 cfs; 5/15, 25.0 cfs; 6/18, 50.0 cfs; 7/7, 41.9 cfs; 7/28, 3.0 cfs; 9/4, 8.0 cfs.

1996: 6/17, 31 cfs (est); 6/27, 65.1 cfs; 7/17, 2.5 cfs (est); 7/30, 8/23, off.

1997: 6/11, 21.0 cfs (est); 6/23, 21.8 cfs; 8/13, off.

1998: 5/29, 23.8 cfs; 6/22, 16.4 cfs; 8/14, 9/28, 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, slightly below 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

Lena Ditch, North Beaver Creek

Diversion Description: Information not available at time of report.

Diversion Location:

Source: North Beaver Creek, Trib. Beaver Creek, Trib. Green River
Section, Township, Range: 25, 36, 112

Conveyance Description: Open Channel Canal.

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
09-13-1913	12043	Domestic, Irrigation	627.00	8.95	8.95	
08-08-1916	14321	Domestic, Irrigation	81.00	1.15	10.10	POD/MOC change from McDole Ditch.
12-17-1917	3840E	Irrigation			10.10	Supplementary Supply for 121.00 acres with Original Supply from Little Beaver Creek. POD/MOC change from McDole Ditch.

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 Beaver Creek at North Beaver Creek.¹

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.

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

Lena Ditch, North Beaver 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993			1.10	65.60						
1994					5.42	333.06	0.78	47.77		
1995			7.85	467.05	14.47	889.52				
1996										
1997										
1998										

Averages:			4.48	266.33	9.95	611.29	0.78	47.77		
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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

Lena Ditch, North Beaver Creek, Diversion Data

Data:

1990: 5/24, 19.1 cfs; 5/16, 12.9 cfs; 7/18, 2.0 cfs (est).
1991: 6/13, 15.0 cfs.
1992: NA, 0.00 cfs.
1993: 5/25, 4.20 cfs; 6/22, off; 8/9, 2.00 cfs.
1994: 5/19, 12.00 cfs; 7/1, 8.00 cfs; 8/18, off.
1995: 5/23, 3.5 cfs; 6/28, 10.0 cfs; 7/26, 18.0 cfs; 8/11, off.
1997: 6/9, 12.5 cfs (est).
1998: 7/28, 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, slightly below 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

Diversi

Sources: 1) Loren Smith, Wyoming State Engineer’s Office, Fax, June 9, 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.

Diversion Location:

Source: Boulder Creek, Trib. Green River
Section, Township, Range: 19, 37, 109

Conveyance Description: Open Channel Canal, approximately 4 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M–D–Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
01-10-1901	749E	Irrigation	150.00	2.14	2.14	POD/MOC change from a portion of Black Butte Ditch
08-01-1904	6369	Irrigation	270.00	3.85	5.99	
08-28-1936	5041E	Irrigation	351.00	5.01	11.00	
08-28-1936	5042E	Irrigation	67.00	0.96	11.96	

Storage Rights: None.

Estimated Canal Losses: Typical (10%).¹

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 Boulder Creek at Pot Creek.²

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

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

Luckpenny Ditch, Boulder 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993	3.21	197.38	6.49	386.18						
1994	8.11	498.66	10.90	648.60	6.22	382.45	1.05	64.56	1.20	71.40
1995	4.13	253.94					7.11	437.18		
1996							8.07	496.20		
1997										
1998							2.98	183.23		

Averages:	5.15	316.66	8.70	517.39	6.22	382.45	5.41	332.65	1.20	71.40
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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

Luckpenny Ditch, Boulder Creek, Diversion Data

Data:

1990: 6/12, 9.2 cfs.

1991: 6/12, 9.23 cfs; 9/20, 11.3 cfs.

1992: 5/28, 0.00 cfs; 7/14, 12.3 cfs.

1993: 5/14, 2.00 cfs; 6/17, 15.30 cfs.

1994: 5/9, 5.00 cfs; 5/25, 15.00 cfs; 6/3, 10.00 cfs; 6/8, 13.00 cfs; 6/9, 12.50; 7/16, 6.50 cfs; 8/16, off;
9/21, 2.50 cfs.

1995: 4/13, off; 4/20, 2.0 cfs; 5/11, 3.0 cfs; 5/26, 4.5 cfs; 6/6, 15.0 cfs; 7/19, 20 cfs (est); 8/25, 4.0 cfs.

1996: 7/2, 13 cfs (est); 8/8, 1.5 cfs (est).

1998: 5/19, off; 7/27, 4.8 cfs; 8/3, 4.5 cfs (est); 9/4, 0.90 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, slightly below 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

Pape Ditch, Green River

Diversion Description: Diversion consists of a wood stop log headgate. No diversion dam exists.¹

Diversion Location:

Source: Green River

Section, Township, Range: 32, 35, 111

Conveyance Description: Open Channel Canal, approximately 4 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
03-22-1901	3095	Irrigation	516.00	7.36	7.36	
02-02-1905	1344E	Irrigation	80.00	1.14	8.50	
10-12-1905	1448E	Domestic, Irrigation, Stock	220.00	3.14	11.64	
08-26-1909	2112E	Irrigation	171.20	2.44	14.08	

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 Forty Rod Creek above Green River.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Pape Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994			23.28	1,431.43	7.73	475.30	0.27	16.60	1.14	70.10
1995	10.45	642.55	28.90	1,776.99	28.15	1,730.88	5.87	360.93		
1996										
1997										
1998							0.00	0.00		

Averages:	10.45	642.55	26.09	1,604.21	17.97	1,103.09	2.05	125.84	1.14	70.10
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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

Pape Ditch, Green River, Diversion Data

Data:

1993: 5/25, 62.90 cfs; 9/14, 4.50 cfs.

1994: 5/20, 15.00 cfs; 6/6, 30.00 cfs; 7/1, 15.00 cfs; 8/2, 8/17, off; 9/20, 2.50 cfs.

1995: 5/9, 12.5 cfs; 5/26, 14.0 cfs; 6/19, 33.6 cfs; 7/19, 30 cfs (est); 8/21, off.

1996: 5/11, 2.5 cfs (est).

1997: 7/16, 29.0 cfs; 8/13, off.

1998: 6/2, 39.42 cfs; 7/28, 8/20, 9/15, 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, slightly below 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

Payne-Gooden Ditch, Middle Beaver Creek

Diversion Description: Information not available at time of report.

Diversion Location:

Source: Middle Beaver Creek, Trib. Beaver Creek, Trib. Green River
Section, Township, Range: 33, 36, 112

Conveyance Description: Open Channel Canal.

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
11-22-1913	12141	Irrigation	1,061.00	15.13	15.13	

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 Beaver Creek at North Beaver Creek.¹

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.

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

Payne-Gooden Ditch, Middle Beaver 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994										
1995					20.49	1,259.88				
1996										
1997										
1998										

Averages:					20.49	1,259.88				
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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

Payne-Gooden Ditch, Middle Beaver Creek, Diversion Data

Data:

1993: 6/22, 11.50 cfs.

1994: 5/19, 18.00 cfs; 8/18, off.

1995: 6/28, 15.0 cfs; 7/26, 25.0 cfs; 8/11, 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, slightly below 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

Diversi

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 9, 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.

Diversion Location:

Source: Boulder Creek, Trib. Green River
Section, Township, Range: 19, 37, 109

Conveyance Description: Open Channel Canal.

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
08-19-1918	15187	Irrigation	748.00	10.67	10.67	

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 Boulder Creek at Pot Creek.²

Other Operational Information: Ditch has not been used for years.¹

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

Preston Ditch, Boulder Creek, Diversion Data

Data:

1993: 5/14, 6/17, off.

1994: 5/9, 5/25, off.

1995: 4/13, 5/11, off.

1998: 8/3, 9/4, 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, slightly below 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

Scott Ditch, Green River

Diversion Description: Diversion consists of a single 36" slide gate. No diversion dam exists.¹

Diversion Location:

Source: Green River

Section, Township, Range: 29, 35, 111

Conveyance Description: Open Channel Canal, approximately 3 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
07-18-1898	1885	Irrigation	741.00	10.59	10.59	
05-18-1903	1057E	Irrigation	30.00	0.43	11.02	
08-24-1914	3087E	Irrigation	263.00	3.75	14.77	
03-25-1986	6820E	Irrigation	192.00	2.74	17.51	

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 Green River at Forty Rod Creek.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Scott Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994			30.93	1,840.46	15.16	932.15	0.69	42.43	1.14	67.83
1995	16.45	1,011.47	43.70	2,600.33	45.87	2,820.44	9.78	601.35		
1996	2.67	164.17	5.13	305.26	4.76	292.68				
1997										
1998							0.00	0.00	0.00	0.00

Averages:	9.56	587.82	26.59	1,582.02	21.93	1,348.42	3.49	214.59	0.57	33.92
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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

Scott Ditch, Green River, Diversion Data

Data:

1994: 5/20, 30.60 cfs; 6/6, 30.00 cfs; 6/21, 33.00 cfs; 7/1, 28.00 cfs; 8/2, 1.50 cfs; 8/17, off cfs; 9/20, 2.50 cfs.

1995: 5/9, 20.0 cfs; 5/26, 22.0 cfs; 6/19, 50 cfs (est); 7/19, 50 cfs (est); 8/21, off.

1996: 5/11, 3.5 cfs (est); 6/27, 5.5 cfs (est); 7/17, 14 cfs (est); 7/30, 16 cfs (est).

1998: 6/2, 16.42 cfs; 7/28, 8/20, 9/15, 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, slightly below 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

Snider Ditch, Horse Creek

Diversion Description: Diversion consists of two 24" slide gates.¹

Diversion Location:

Source: Horse Creek, Trib. Green River

Section, Township, Range: 5, 34, 113

Conveyance Description: Open Channel Canal, approximately 6 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
07-04-1898	1942	Irrigation	320.00	4.57	4.57	
01-11-1900	492E	Irrigation	280.00	4.00	8.57	
03-25-1902	3794	Irrigation	80.00	1.14	9.71	POD/MOC change from a portion of McGovern No. 2 Ditch
05-23-1902	847E	Irrigation	320.00	4.57	14.28	Permitted Name: Snyder Ditch
05-14-1904	1200E	Irrigation, Stock	187.00	2.67	16.95	
03-28-1912	2774E	Irrigation	80.00	1.14	18.09	POD/MOC change from a portion of McGovern No. 2 Ditch
09-04-1912	2678E	Irrigation	314.00	4.48	22.57	
09-10-1914	3032E	Irrigation	320.00	4.56	27.13	POD/MOC change from a portion of McGovern Ditch
11-30-1914	3066E	Irrigation	117.00	1.67	28.80	POD/MOC change from a portion of Irwin Ditch
03-22-1915	3151E	Domestic, Irrigation	52.00	0.74	29.54	POD/MOC change from a portion of McGovern Ditch
03-29-1918	3884E	Irrigation	181.20	2.59	32.13	
04-17-1973	6479E	Irrigation	37.00	0.53	32.66	

Storage Rights: None.

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

Irrigation Practices: Information not available at time of report.

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

Snider Ditch, Horse Creek

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

Return Flows: Return flows are delivered to Horse Creek at South Horse Creek.²

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

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Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Snider Ditch, Horse 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										
1987										
1988	35.84	2,203.72	30.20	1,797.02	6.40	393.52	0.55	33.82		
1989										
1990										
1991										
1992	35.53	2,184.65	11.11	661.09						
1993							5.24	322.20		
1994			15.63	930.05	6.03	370.77	1.60	98.38		
1995	28.05	1,724.73	59.90	3,564.30	38.85	2,388.79	5.51	338.80		
1996					10.75	660.99	0.38	23.37		
1997										
1998			18.95	1,127.88						

Averages:	33.14	2,037.70	27.16	1,616.07	15.51	953.52	2.66	163.31		
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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

Snider Ditch, Horse Creek, Diversion Data

Data:

1988: 5/12, 50.1 cfs; 5/23, 61.24 cfs; 6/29, 13.3 cfs; 7/18, 5.3 cfs; 8/1, 1.5 cfs; 8/18, 0.5 cfs.

1990: 6/25, 25.0 cfs (est); 7/7, 4.0 cfs (est).

1991: 5/7, 8 cfs; 6/17, 12.11 cfs; 7/1, 21 cfs.

1992: 4/22, 12.00 cfs; 5/4, 40.00 cfs; 5/8, 26.30 cfs; 5/12, 40.00 cfs; 5/13, 45.00 cfs; 6/19, 10.00 cfs.

1993: 5/10, 15.30 cfs; 5/21, 55.3 cfs; 7/20, 12.30 cfs; 8/24, 5.5 cfs.

1994: 6/4, 38.20 cfs; 6/6, dry; 6/18, 30.40 cfs; 6/19, 25.60 cfs; 6/27, 15.30 cfs; 7/15, 5.00 cfs; 8/8, 1.00 cfs; 9/7, 2.50 cfs.

1995: 4/14, 2.0 cfs; 5/2, 15.0 cfs; 5/15, 25.0 cfs; 6/18, 65.0 cfs; 7/7, 68.8 cfs; 7/28, 5.0 cfs; 9/4, 6.0 cfs.

1996: 6/17, 19 cfs (est); 6/27, 42.0 cfs; 7/17, 4.0 cfs (est); 7/30, off; 8/23, 1.0 cfs (est).

1997: 6/11, 16.0 cfs (est); 6/23, 13.9 cfs; 8/13, off.

1998: 5/29, 31.55 cfs; 6/22, 23.6 cfs; 8/14, 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, slightly below 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

Stockade Ditch, Green River

Diversion Description: Diversion consists of two 36" slide gates. No diversion dam exists.¹

Diversion Location:

Source: Green River

Section, Township, Range: 18, 34, 111

Conveyance Description: Open Channel Canal, approximately 4 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
12-03-1903	5692	Irrigation	765.92	10.91	10.91	
11-14-1933	4931E	Domestic, Irrigation, Stock	1,080.00	15.43	26.34	

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 Horse Creek at Prairie Creek.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Stockade Ditch, Green River, 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994			33.73	2,007.07	14.05	863.90	0.99	60.87	1.37	81.52
1995	10.36	637.01	22.08	1,313.85	19.57	1,203.31	2.96	182.00		
1996					21.07	1,295.54	5.85	359.70		
1997										
1998										

Averages:	10.36	637.01	27.91	3,320.92	18.23	1,120.92	3.27	200.86	1.37	81.52
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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

Stockade Ditch, Green River, Diversion Data

Data:

1993: 5/25, off; 7/20, 48.80 cfs; 9/14, 5.00 cfs.

1994: 5/20, 30.00 cfs; 6/6, 40.40 cfs; 7/1, 25.00 cfs; 8/2, 2.40 cfs; 8/17, off; 9/20, 3.00 cfs.

1995: 5/9, 10.0 cfs; 5/26, 15.6 cfs; 6/19, 45.0 cfs (est); 7/19, 39.6 cfs; 8/21, off.

1996: 5/11, off; 6/27, 18 cfs (est); 7/17, 24 cfs (est); 7/30, 18 cfs (est); 8/23, off.

1997: 6/25, 8/13, off.

1998: 6/2, 38.44 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, slightly below 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

Sutton Ditch, Green River

Diversion Description: Diversion consists of a wood stop log headgate. No diversion dam exists.¹

Diversion Location:

Source: Green River

Section, Township, Range: 32, 34, 110

Conveyance Description: Open Channel Canal, approximately 3 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
08-11-1897	1566	Irrigation	670.00	8.84	8.84	
12-22-1900	606E	Irrigation	93.00	1.33	10.17	
12-05-1968	6305E	Irrigation	40.00	0.57	10.74	

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 Green River at Tom Poole Slough.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Sutton Ditch, Green River, Diversion Data

No Diversion Data Available.

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

Todd Ditch, Horse Creek

Diversion Description: Diversion consists of a single 24" slide gate.¹

Diversion Location:

Source: Horse Creek, Trib. Green River

Section, Township, Range: Lot 2, 1, 33, 111

Conveyance Description: Open Channel Canal, approximately 4 miles in length.¹

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
07-00-1889	Terr.	Irrigation	100.00	1.43	1.43	
11-14-1901	737E	Irrigation	623.00	8.87	10.30	
09-06-1906	1610E	Irrigation	42.00	0.60	10.90	
01-18-1935	5025E	Domestic, Irrigation, Stock	126.00	1.80	12.70	Supplemental Supply for 450.00 acres with Original Supply from Green River

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 Green River at Horse Creek.²

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

Sources: 1) Loren Smith, Wyoming State Engineer's Office, Fax, June 6, 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

Todd Ditch, Horse 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										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994			15.72	935.40	5.27	324.04	0.00	0.00		
1995					10.29	632.71				
1996										
1997										
1998										

Averages:			15.72	935.40	7.78	478.37	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.

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Description and Operation Memorandum

Todd Ditch, Horse Creek, Diversion Data

Data:

1993: 5/10, 5.00 cfs.

1994: 6/4, dry; 6/6, 35.00 cfs; 6/18, dry; 6/19, dry; 6/27, 30.00 cfs; 7/15, dry; 8/8, off; 9/7, 3.00 cfs.

1995: 4/14, 2.0 cfs; 5/2, 6.5 cfs; 6/18, 35.0 cfs; 7/28, off.

1996: 7/3, 67 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, slightly below average; 1994, below average; 1995, slightly above average; 1996, average; 1997, average; 1998, slightly above average.

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

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Vickery Number 1 Ditch, South Fork Horse Creek

Diversion Description: Information not available at time of report.

Diversion Location:

Source: South Fork Horse Creek, Trib. Horse Creek, Trib. Green River
Section, Township, Range: 25, 34, 114

Conveyance Description: Open Channel Canal.

Wyoming Water Rights Summary:

Priority Date (M-D-Y)	Permit Number	Permitted Use	Acres	Flow (cfs)	Cumulative Flow (cfs)	Comments
09-10-1900	2800	Irrigation	415.00	5.93	5.93	
04-18-1902	816E	Irrigation	140.00	2.00	7.93	
03-25-1910	2229E	Irrigation	79.42	1.13	9.06	
06-05-1916	3663E	Irrigation	108.00	1.54	10.60	
07-09-1918	3920E	Irrigation	113.00	1.61	12.21	

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 Cottonwood Creek at Ryegrass Junction.¹

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.

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Vickery Number 1 Ditch, South Fork Horse Creek, Diversion Data

No Diversion Data Available.