
FINAL TECHNICAL MEMORANDUM

SUBJECT: **Green River Basin Plan**
Available Surface Water Determination

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 Corporation

Introduction

The Green River Basin spreadsheet model is a tool for identifying flows that are available to Wyoming water users for future development, and evaluating yield and impacts of potential projects at a planning level. The purpose of this task is to analyze historical runs developed during spreadsheet calibration to determine location, quantity, and timing of available flows. The calibration spreadsheets represent conditions in the four sub-basins (Little Snake, Henrys Fork, Blacks Fork, and Green River) under current levels of development for three hydrologic conditions: Dry, Normal, and Wet year water supply.

Background information on the spreadsheet model can be found in other technical memos prepared for this project:

- “Surface Water Data Collection and Study Period Selection” describes how historical Dry, Normal, and Wet years were determined for the purposes of the spreadsheet
- “Surface Water Spreadsheet Model Development” summarizes development of the model

Available Flow

Each basin model is divided into a number of reaches, each composed of several nodes, or water balance points. Reaches are typically defined by gages or confluences, and represent tributary basins or subsections of the mainstem. An output worksheet in each spreadsheet model summarizes monthly flow at the downstream end of each reach, and provides the basis of this analysis.

While simulated flow at the reach terminus indicates estimated amount of water physically present, it does not fully reflect availability. If a downstream diverter has historically diverted the entire stream at its headgate, the water supply at the upper point is not available for future development; it is already needed to meet current requirements.

Available water determination

To determine how much of the physical supply is actually available to future uses, “available water” at a reach terminus was defined as the minimum of the physically available flow at that point, and “available water” at all downstream reaches. Thus available flow must be defined first at the most downstream point, with upstream availability calculated in stream order. These calculations were made on a monthly basis, and annual availability was computed as the sum of monthly availabilities. Note that calculating annual availability in this way yields a different value than applying the same logic to annual flows for each reach. The summation of monthly values is more accurate, reflecting constraints of downstream use on a monthly basis.

Instream flow right considerations

Instream flow rights exert a demand on the river but do not affect physical supply, because the water is not removed from the stream. Thus any reach terminus located immediately upstream of a reach that contained an instream flow right had to be handled specially. That is, available flow at the upstream reach terminus was determined as the minimum of physical flow at that point, and “available water” *less the instream flow requirement* at the downstream reach terminus.

The two permitted instream flow rights and 32 pending instream flow applications were reviewed for applicability of the special handling described above. (See the technical memorandum “Instream Flows in Wyoming.”) Except for one, all the instream flow rights are located high enough in the basin that they have no upstream reach in the model. The exception is a 1.5-mile long reach of the West Fork New Fork River, under permit #7IF. Available water at the downstream terminus of Reach 8 in the Green River sub-basin spreadsheet was calculated taking the instream flow demand into consideration.

Compact considerations

The spreadsheet models do not contain logic to operate curtailment to meet the state’s obligations under the Upper Colorado River Basin Compact (the Compact). The models were developed to portray historical use over the study period 1971-1998. Never during that time, nor since the Compact was ratified, have diversions been curtailed pursuant to Article IV of the Compact. While the principles under which such administration should be conducted are set forth in the Compact, actual details of their application have not been worked out by the Upper Colorado River Commission. Accordingly, simulation of curtailment was outside the scope of this effort. The models could be used, however, to test the impacts of a future downstream demand representing a Compact delivery obligation.

Article XI of the Compact addresses the division of waters of the Little Snake River, whose tributaries lie on both sides of the Colorado-Wyoming state line, and whose mainstem crosses the boundary numerous times. The Compact identifies a point just below the mouth of Savery Creek, above which pre-Compact rights are not subject to calls emanating from below the point. This administrative nuance does not alter the definition of available flow for new or future uses above the so-called Compact point, however, since they could be regulated to satisfy senior users below the Compact point. Post-Compact rights, including future uses, below the Compact point, “shall be administered on the basis of an interstate priority schedule prepared by the Commission in conformity with priority dates established by the laws of the respective States,” according to Article XI. Therefore, calculation of “available water” in this part of the basin must take into consideration the needs of downstream users in Colorado. To summarize, the method of calculating available water described above, when applied to the Little Snake including the Colorado sections of the river, is in accordance with Article XI of the Compact.

Results

Tables 1 through **12** summarize water availability for the four sub-basins and three hydrologic conditions. Reach outflows, on which water availability is based, are also included as **Tables 13** through **24**. The latter group of tables comes directly from the models’ Outflow Summary by Reach. The available water determination was executed in a separate spreadsheet, outside the models.

The tabulations show annual available supply at the bottom of the system for each basin as follows:

	Dry Condition (af/yr)	Normal Condition (af/yr)	Wet Condition (af/yr)
Little Snake	189,000	449,000	665,000
Henrys Fork	23,000	60,000	125,000
Blacks Fork	101,000	229,000	422,000
Green River	620,000	1,269,000	1,924,000

Available water supply is a function of timing and location, however, and Tables 1 through 12 provide additional information on availability on a monthly basis, in specific reaches.

Table 1
Available Flow for Little Snake River Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	North Fork Little Snake River	436.	431.	814.	3582.	7442.	3351.	492.	70.	268.	577.	508.	438.	18409.
2	Middle Fork Little Snake River	679.	668.	1457.	7156.	14971.	6257.	492.	70.	268.	969.	826.	684.	34497.
3	Little Snake River between Middle Fork and South Fork	1406.	1382.	3015.	14810.	31471.	14517.	492.	70.	268.	2006.	1710.	1416.	72563.
4	South Fork Little Snake River	257.	253.	552.	2711.	5617.	2195.	289.	70.	177.	367.	313.	259.	13060.
5	Little Snake River between South Fork and Roaring Fork Little Snake	1663.	1635.	3567.	17522.	37074.	16665.	492.	70.	268.	2373.	2023.	1675.	85027.
6	Little Snake River between Roaring Fork and Battle Creek	1663.	1635.	8814.	20377.	49645.	21963.	492.	70.	268.	2373.	2023.	1675.	111000.
7	Battle Creek	967.	993.	2070.	8308.	11464.	3490.	429.	70.	268.	1431.	1292.	1109.	31890.
8	Little Snake River between Battle Creek and Slater Creek	2378.	2628.	10885.	28685.	59873.	21963.	492.	70.	268.	3802.	3315.	2783.	137143.
9	Slater Creek	986.	1010.	2022.	7878.	10768.	3119.	318.	70.	268.	1422.	1291.	1119.	30272.
10	Little Snake River between Slater Creek and Savery Creek	2378.	3221.	12906.	36563.	59873.	21963.	492.	70.	268.	3802.	4406.	2966.	148911.
11	Savery Creek	1685.	1712.	3687.	12045.	11530.	3561.	376.	70.	268.	1870.	1937.	1873.	40615.
12	Little Snake River between Savery Creek and Willow Creek	2378.	3221.	16851.	49518.	59873.	21963.	492.	70.	268.	3802.	4406.	2966.	165810.
13	Willow Creek	134.	145.	264.	911.	973.	0.	112.	82.	94.	195.	181.	141.	3230.
14	Little Snake River between Willow Creek and Muddy Creek	3644.	4549.	16851.	49518.	59873.	22629.	911.	520.	436.	4425.	5454.	4256.	173067.
15	Muddy Creek	24.	18.	3150.	1560.	1025.	718.	238.	79.	113.	461.	195.	39.	7618.
16	Little Snake River between Muddy Creek and Little Snake River near Lily, CO gage	4472.	5365.	19805.	49918.	59873.	28243.	2878.	644.	436.	6087.	6620.	5095.	189437.

Table 2
Available Flow for Little Snake River Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	North Fork Little Snake River	487.	482.	768.	3022.	14166.	12396.	2404.	629.	459.	605.	564.	518.	36500.
2	Middle Fork Little Snake River	784.	774.	1362.	6001.	28794.	24978.	4451.	1028.	617.	1027.	942.	848.	71608.
3	Little Snake River between Middle Fork and South Fork	1623.	1602.	2819.	12421.	60052.	52683.	10073.	1250.	617.	2126.	1950.	1754.	148971.
4	South Fork Little Snake River	297.	293.	516.	2274.	10847.	9329.	1569.	369.	260.	389.	357.	321.	26822.
5	Little Snake River between South Fork and Roaring Fork Little Snake	1921.	1895.	3335.	14694.	70882.	61977.	11611.	1250.	617.	2515.	2308.	2076.	175081.
6	Little Snake River between Roaring Fork and Battle Creek	1921.	3294.	11796.	17734.	75301.	75208.	17326.	1250.	617.	2515.	2308.	2076.	211345.
7	Battle Creek	1176.	1181.	2476.	8078.	28733.	19262.	3238.	667.	617.	1434.	1359.	1240.	69462.
8	Little Snake River between Battle Creek and Slater Creek	3097.	4475.	14272.	25812.	104034.	94470.	18004.	1250.	617.	3949.	3666.	3316.	276963.
9	Slater Creek	1182.	1187.	2403.	7663.	26974.	17985.	2961.	677.	617.	1424.	1354.	1242.	65669.
10	Little Snake River between Slater Creek and Savery Creek	4242.	5662.	16675.	33474.	130783.	111972.	18004.	1250.	617.	5275.	5020.	4558.	337534.
11	Savery Creek	2026.	1997.	3836.	12621.	34940.	22007.	3854.	1120.	617.	2073.	2101.	2048.	89242.
12	Little Snake River between Savery Creek and Willow Creek	4242.	7830.	20954.	47384.	160497.	120576.	18004.	1250.	617.	5275.	6134.	4616.	397380.
13	Willow Creek	180.	172.	449.	1289.	2226.	1688.	529.	218.	155.	216.	179.	177.	7478.
14	Little Snake River between Willow Creek and Muddy Creek	5619.	9450.	20954.	53211.	164610.	122097.	20187.	2176.	1117.	5459.	6569.	5945.	417394.
15	Muddy Creek	36.	30.	4765.	2871.	3080.	1180.	518.	132.	101.	400.	551.	109.	13772.
16	Little Snake River between Muddy Creek and Little Snake River near Lily, CO gage	6446.	10246.	24151.	56543.	168774.	127104.	25778.	4734.	2436.	7585.	8449.	6842.	449088.

Table 3
Available Flow for Little Snake River Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	North Fork Little Snake River	657.	516.	818.	4190.	19920.	19855.	3965.	826.	680.	725.	631.	602.	53386.
2	Middle Fork Little Snake River	1133.	845.	1465.	8407.	40575.	40349.	7673.	1432.	1177.	1275.	1080.	1022.	106432.
3	Little Snake River between Middle Fork and South Fork	2346.	1748.	3032.	17398.	84631.	84445.	16714.	3115.	2448.	2639.	2234.	2115.	222864.
4	South Fork Little Snake River	429.	320.	555.	3185.	15284.	15160.	2794.	522.	445.	483.	409.	387.	39972.
5	Little Snake River between South Fork and Roaring Fork Little Snake	2775.	2068.	3587.	20583.	99890.	99571.	19478.	3631.	2889.	3122.	2643.	2502.	262740.
6	Little Snake River between Roaring Fork and Battle Creek	2775.	2068.	13301.	24224.	106992.	116728.	28786.	4799.	2889.	3122.	2643.	2502.	310829.
7	Battle Creek	1482.	1272.	2475.	8338.	38864.	27969.	5514.	1228.	1605.	2056.	1658.	1373.	93834.
8	Little Snake River between Battle Creek and Slater Creek	4257.	3341.	15776.	32561.	145856.	144697.	34300.	4799.	4366.	5178.	4302.	3874.	403306.
9	Slater Creek	1469.	1272.	2402.	7907.	36451.	26169.	5103.	1204.	1583.	2008.	1635.	1367.	88569.
10	Little Snake River between Slater Creek and Savery Creek	5726.	4613.	18178.	40468.	181986.	170408.	36612.	4799.	4366.	7186.	5937.	5241.	485518.
11	Savery Creek	2230.	2033.	3554.	12296.	48005.	33840.	6678.	1857.	2481.	2913.	2531.	2224.	120640.
12	Little Snake River between Savery Creek and Willow Creek	5974.	5981.	22288.	54464.	227350.	194067.	36612.	4799.	4366.	7857.	7732.	6221.	577710.
13	Willow Creek	255.	247.	558.	1700.	3139.	2611.	1004.	277.	266.	318.	250.	234.	10860.
14	Little Snake River between Willow Creek and Muddy Creek	7361.	7565.	23748.	63058.	240561.	211738.	42260.	5700.	5118.	8286.	8329.	7416.	631140.
15	Muddy Creek	36.	30.	4765.	2871.	3080.	1180.	518.	132.	101.	400.	551.	109.	13772.
16	Little Snake River between Muddy Creek and Little Snake River near Lily, CO gage	8177.	8373.	29155.	66325.	243117.	215717.	47410.	9398.	8268.	10852.	10250.	8303.	665345.

Table 4
Available Flow for Henrys Fork Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Below Henrys Fork near Lonetree (09226000) and Beaver Creek	541.	473.	1000.	868.	1459.	3113.	236.	121.	59.	548.	626.	580.	9624.
2	Beaver Creek	965.	883.	1456.	1331.	1459.	3113.	236.	121.	59.	897.	1048.	1019.	12588.
3	Henrys Fork between Beaver Creek and Burnt Fork	1506.	1356.	2456.	1694.	1459.	3113.	236.	121.	59.	897.	1674.	1599.	16170.
4	Burnt Fork	464.	449.	495.	585.	2030.	2995.	581.	435.	298.	639.	562.	497.	10030.
5	Henrys Fork between Burnt Fork and Birch Creek	1970.	1805.	3049.	2279.	2030.	4004.	581.	435.	298.	1399.	2236.	2096.	22181.
6	Birch Creek	171.	166.	183.	216.	924.	1269.	419.	335.	199.	236.	207.	183.	4507.
7	Henrys Fork between Birch Creek and Henrys Fork near Manila, UT gage (09229500)	2116.	1939.	3231.	2336.	2030.	4004.	581.	435.	298.	1399.	2313.	2224.	22906.

Table 5
Available Flow for Henrys Fork Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Below Henrys Fork near Lonetree (09226000) and Beaver Creek	844.	978.	1908.	1870.	6103.	9691.	3064.	1310.	588.	862.	1151.	937.	29305.
2	Beaver Creek	1259.	1388.	2378.	2418.	6439.	9150.	3620.	1397.	934.	1264.	1573.	1358.	33179.
3	Henrys Fork between Beaver Creek and Burnt Fork	2103.	2366.	4286.	4288.	8212.	12875.	3620.	1397.	1155.	2126.	2724.	2295.	47448.
4	Burnt Fork	532.	498.	551.	737.	3574.	6212.	2306.	1121.	612.	821.	654.	580.	18199.
5	Henrys Fork between Burnt Fork and Birch Creek	2636.	2942.	5179.	5112.	9994.	15472.	4599.	1954.	1666.	2841.	3379.	2874.	58645.
6	Birch Creek	196.	184.	203.	272.	1359.	2430.	959.	442.	259.	303.	241.	214.	7062.
7	Henrys Fork between Birch Creek and Henrys Fork near Manila, UT gage (09229500)	2817.	3126.	5382.	5384.	9994.	15472.	4599.	1954.	1666.	2841.	3547.	3042.	59821.

Table 6
Available Flow for Henrys Fork Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Below Henrys Fork near Lonetree (09226000) and Beaver Creek	1343.	1012.	2405.	2735.	8557.	17944.	8138.	2781.	1586.	1904.	1583.	1244.	51233.
2	Beaver Creek	1760.	1420.	2886.	3668.	11101.	17226.	8992.	3459.	2162.	2301.	1999.	1653.	58627.
3	Henrys Fork between Beaver Creek and Burnt Fork	3103.	2433.	5291.	6403.	15595.	32654.	17072.	6193.	3742.	4205.	3582.	2897.	103169.
4	Burnt Fork	579.	535.	594.	925.	3501.	11749.	7713.	2618.	1359.	1000.	748.	644.	31963.
5	Henrys Fork between Burnt Fork and Birch Creek	3778.	3006.	6343.	7527.	18668.	38708.	20403.	7621.	4742.	5204.	4330.	3542.	123873.
6	Birch Creek	213.	197.	219.	341.	1328.	4454.	2940.	989.	511.	369.	276.	238.	12075.
7	Henrys Fork between Birch Creek and Henrys Fork near Manila, UT gage (09229500)	3992.	3204.	6562.	7868.	18668.	38708.	20403.	7621.	4742.	5286.	4554.	3750.	125358.

Table 7
Available Flow for Blacks Fork Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Blacks Fork	775.	1134.	3462.	3180.	4225.	3718.	2049.	840.	644.	1200.	1050.	982.	23260.
2	West Fork of Smiths Fork	331.	506.	1554.	1387.	2696.	1269.	937.	113.	499.	372.	452.	420.	10534.
3	East Fork of Smiths Fork	478.	549.	1108.	1124.	4093.	4766.	2049.	840.	644.	793.	600.	529.	17573.
4	Smiths Fork	848.	1139.	3018.	2794.	4505.	4766.	2049.	840.	644.	1884.	1312.	1016.	24816.
5	Cottonwood Creek	140.	194.	541.	610.	1306.	77.	0.	0.	0.	195.	191.	171.	3424.
6	Smiths Fork between Cottonwood Creek and Blacks Fork River	988.	1332.	3559.	3404.	5811.	4766.	2049.	840.	644.	2079.	1503.	1186.	28163.
7	Blacks Fork between Smiths Fork and Muddy Creek	1763.	2466.	7021.	6584.	6888.	4766.	2049.	840.	644.	2481.	2433.	2168.	40105.
8	Little Muddy Creek	308.	487.	600.	971.	450.	167.	81.	139.	90.	241.	547.	479.	4560.
9	Upper Muddy Creek	0.	18.	343.	449.	224.	61.	0.	0.	0.	0.	139.	0.	1234.
10	Muddy Creek below Little Muddy Creek	308.	505.	943.	1420.	674.	228.	81.	139.	90.	241.	686.	479.	5794.
11	Blacks Fork between Muddy Creek and Hams Fork	2071.	3071.	10130.	10111.	10946.	5218.	2166.	979.	734.	2772.	3207.	2647.	54053.
12	Hams Fork River	961.	1069.	7058.	7762.	16874.	7251.	1578.	1448.	259.	1668.	1376.	1052.	48355.
13	Blacks Fork between Hams Fork and Blacks Fork nr Little America gage	2783.	4140.	17188.	17873.	27820.	12469.	3744.	1448.	832.	4439.	4583.	3622.	100941.

Table 8
Available Flow for Blacks Fork Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Blacks Fork	1366.	1738.	5347.	7403.	10309.	11695.	4814.	2740.	2111.	1806.	1735.	1249.	52313.
2	West Fork of Smiths Fork	500.	714.	2286.	2584.	4749.	4078.	957.	377.	493.	436.	633.	461.	18266.
3	East Fork of Smiths Fork	704.	751.	1657.	1978.	4964.	10491.	5081.	2546.	1688.	1358.	884.	670.	32772.
4	Smiths Fork	1324.	1625.	4537.	5629.	9858.	11907.	6448.	3047.	2589.	2008.	1738.	1231.	51942.
5	Cottonwood Creek	192.	267.	771.	910.	2362.	1710.	109.	112.	64.	228.	281.	205.	7211.
6	Smiths Fork between Cottonwood Creek and Blacks Fork River	1516.	1892.	5308.	6538.	12219.	13617.	6557.	3047.	2589.	2236.	2020.	1436.	58976.
7	Blacks Fork between Smiths Fork and Muddy Creek	2882.	3630.	10655.	13941.	21421.	23177.	7073.	3047.	2589.	3188.	3755.	2684.	98042.
8	Little Muddy Creek	469.	718.	2168.	5353.	2348.	1257.	545.	314.	264.	342.	298.	404.	14479.
9	Upper Muddy Creek	111.	369.	2804.	2259.	6962.	2862.	400.	0.	0.	322.	412.	258.	16759.
10	Muddy Creek below Little Muddy Creek	580.	1086.	4972.	7612.	9310.	4119.	945.	314.	264.	664.	710.	663.	31238.
11	Blacks Fork between Muddy Creek and Hams Fork	3626.	4910.	16842.	22773.	33457.	27878.	8176.	3361.	2853.	3914.	4696.	3347.	135832.
12	Hams Fork River	2030.	1988.	6676.	12840.	28300.	24186.	7099.	3041.	3040.	1947.	2099.	1683.	94931.
13	Blacks Fork between Hams Fork and Blacks Fork nr Little America gage	5656.	6898.	23518.	35613.	61757.	52064.	15276.	5919.	4542.	5861.	6796.	4948.	228847.

Table 9
Available Flow for Blacks Fork Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Blacks Fork	1773.	2157.	6603.	7841.	19093.	33210.	14269.	5162.	4046.	3109.	2517.	1755.	101534.
2	West Fork of Smiths Fork	649.	861.	2852.	2963.	6682.	9658.	4581.	1458.	1135.	890.	824.	600.	33152.
3	East Fork of Smiths Fork	849.	898.	1975.	2201.	6335.	18716.	12871.	4720.	3451.	1888.	1319.	882.	56104.
4	Smiths Fork	1654.	1964.	5553.	6185.	15240.	29056.	18554.	8654.	6329.	3775.	2693.	1639.	101297.
5	Cottonwood Creek	289.	346.	1009.	1081.	2367.	4688.	2107.	693.	563.	465.	427.	286.	14322.
6	Smiths Fork between Cottonwood Creek and Blacks Fork River	1943.	2310.	6562.	7266.	17607.	33744.	20661.	9347.	6892.	4240.	3120.	1926.	115619.
7	Blacks Fork between Smiths Fork and Muddy Creek	3717.	4467.	13164.	15107.	36700.	66954.	30869.	9998.	7379.	6365.	5531.	3680.	203932.
8	Little Muddy Creek	469.	718.	2168.	5353.	2348.	1257.	545.	314.	264.	342.	298.	404.	14479.
9	Upper Muddy Creek	111.	369.	2804.	2259.	6962.	2862.	400.	0.	0.	322.	412.	258.	16759.
10	Muddy Creek below Little Muddy Creek	580.	1086.	4972.	7612.	9310.	4119.	945.	314.	264.	664.	710.	663.	31238.
11	Blacks Fork between Muddy Creek and Hams Fork	4296.	5554.	18704.	22719.	46010.	77087.	33989.	11437.	8803.	7481.	6717.	4372.	247168.
12	Hams Fork River	4065.	5605.	8788.	14857.	46235.	62688.	21846.	6865.	5462.	3104.	3411.	2892.	185820.
13	Blacks Fork between Hams Fork and Blacks Fork nr Little America gage	7226.	9062.	27492.	32467.	89150.	139775.	55835.	18302.	14265.	10585.	10128.	7264.	421550.

Table 10
Available Flow for Green River Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Green River above Warren Bridge	5935.	5567.	6802.	17403.	44939.	58043.	28074.	15919.	12146.	10460.	6890.	6658.	218836.
2	Beaver Creek	335.	305.	639.	2261.	1777.	870.	42.	39.	201.	277.	382.	359.	7487.
3	Green River between Beaver Creek and Horse Creek	6332.	5956.	7728.	19757.	44939.	58043.	28074.	15919.	12146.	10816.	7429.	7095.	224233.
4	Horse Creek	784.	899.	2417.	2513.	5072.	4289.	2453.	1634.	490.	1113.	1525.	916.	24105.
5	Green River between Horse Creek and Cottonwood Creek	7116.	6855.	10145.	22269.	48757.	58043.	28074.	15919.	12337.	11929.	8954.	8011.	238409.
6	Cottonwood Creek	856.	1012.	2842.	2638.	1597.	0.	1332.	525.	171.	1381.	1846.	1072.	15271.
7	Green River between Cottonwood Creek and New Fork River	7972.	7867.	12987.	24907.	49791.	58043.	28074.	15919.	12374.	13311.	10799.	9083.	251126.
8	West Fork New Fork River above Pine Creek	0.	0.	0.	1854.	15535.	29488.	7479.	0.	0.	1679.	617.	0.	56652.
9	Pine Creek	4218.	3460.	4645.	7507.	24818.	39148.	18092.	7787.	5583.	7520.	6270.	5319.	134368.
10	Pole Creek	5090.	4216.	5560.	9478.	24818.	39148.	20696.	8080.	5583.	9537.	7830.	6327.	146362.
11	Boulder Creek	5500.	4624.	6136.	10629.	42618.	66935.	30185.	11231.	7712.	11707.	8723.	6869.	212870.
12	East Fork New Fork River	2957.	3196.	4336.	3941.	21509.	17287.	8446.	4899.	4237.	4259.	4270.	3342.	82678.
13	New Fork River below confluence of West and East Forks	10873.	10550.	14118.	15055.	56830.	66935.	44057.	20146.	15270.	18493.	16228.	12823.	301380.
14	Green River between New Fork River and Piney Creeks	18969.	18586.	27678.	40148.	57368.	66935.	52932.	35771.	27534.	31961.	27341.	22062.	427285.
15	North Piney Creek	1112.	1274.	3429.	1858.	785.	0.	2204.	1629.	193.	1800.	2305.	1324.	17913.
16	Middle Piney Creek	992.	1213.	3496.	1527.	561.	0.	3435.	2653.	299.	1393.	2138.	1188.	18895.
17	South Piney Creek	902.	1035.	2786.	2888.	2800.	1062.	1282.	1426.	408.	1282.	1756.	1055.	18684.
18	Green River between Piney Creeks and LaBarge Creek	21967.	22102.	37383.	46416.	57368.	66935.	52932.	41508.	28513.	36476.	33556.	25624.	470781.
19	LaBarge Creek	2404.	2298.	3595.	4096.	6916.	3872.	2936.	2193.	1950.	2772.	3082.	2759.	38874.
20	Green River between La Barge Creek and Fontenelle Reservoir	24372.	24400.	40602.	50512.	57368.	66935.	52932.	43942.	30622.	39311.	36667.	28393.	496055.
21	Fontenelle Creek	1347.	1297.	1890.	3470.	4231.	2939.	610.	565.	934.	1793.	1607.	1413.	22095.

Table 10 (continued)
Available Flow for Green River Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
22	Green River Between Fontenelle Reservoir and Big Sandy River	50627.	41291.	40602.	61966.	57368.	66935.	52932.	51463.	39138.	47695.	49963.	53297.	613277.
23	Big Sandy River below Farson gage and Green River	1550.	1415.	3170.	2687.	2178.	2582.	2928.	3037.	2950.	3112.	2677.	1892.	30177.
24	Green River between Big Sandy River and Green River near Green River gage	50627.	42740.	44590.	63005.	57368.	66935.	52932.	51463.	39138.	47695.	49963.	53297.	619753.

Table 11
Available Flow for Green River Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Green River above Warren Bridge	6689.	6159.	7726.	16510.	59720.	98850.	80423.	29914.	17985.	14043.	9305.	7553.	354878.
2	Beaver Creek	676.	635.	894.	7554.	6966.	3053.	48.	135.	197.	562.	813.	710.	22243.
3	Green River between Beaver Creek and Horse Creek	7391.	6842.	8780.	24321.	64490.	98850.	80423.	29914.	17985.	14618.	10216.	8300.	372130.
4	Horse Creek	1051.	1101.	2107.	6460.	15209.	16446.	5603.	3742.	1179.	1512.	1826.	1158.	57393.
5	Green River between Horse Creek and Cottonwood Creek	8442.	7943.	10887.	30782.	78265.	112263.	82733.	31262.	18595.	16129.	12042.	9458.	418801.
6	Cottonwood Creek	1299.	1350.	2752.	8430.	9787.	9073.	6528.	3599.	1256.	2043.	2302.	1430.	49850.
7	Green River between Cottonwood Creek and New Fork River	9741.	9293.	13639.	39212.	87407.	119973.	87781.	33785.	19595.	18172.	14344.	10888.	463832.
8	West Fork New Fork River above Pine Creek	0.	0.	39.	5777.	21286.	57224.	24194.	7536.	2124.	3047.	954.	0.	122181.
9	Pine Creek	4803.	4577.	5880.	11430.	34534.	98862.	51498.	16933.	10158.	8888.	6607.	5377.	259547.
10	Pole Creek	6169.	5857.	7252.	14054.	34828.	99118.	60537.	19678.	10158.	9275.	8057.	6754.	281736.
11	Boulder Creek	7262.	6806.	8348.	16319.	59468.	164908.	86225.	27205.	15343.	13019.	9694.	8022.	422619.
12	East Fork New Fork River	3188.	3237.	4597.	7165.	32042.	46727.	20547.	7246.	5110.	7659.	6468.	4232.	148218.
13	New Fork River below confluence of West and East Forks	12790.	12531.	16639.	27633.	80235.	181813.	116202.	39376.	23239.	25771.	21068.	15347.	572643.
14	Green River between New Fork River and Piney Creeks	22585.	21920.	30597.	67358.	163844.	246144.	196206.	73300.	42759.	43969.	35609.	26307.	970598.
15	North Piney Creek	1098.	1239.	2534.	4341.	4520.	8033.	8791.	5483.	1269.	1739.	2139.	1280.	42466.
16	Middle Piney Creek	756.	957.	2268.	3711.	2335.	3786.	8835.	6373.	1487.	1017.	1714.	906.	34147.
17	South Piney Creek	1207.	1265.	2425.	7428.	12187.	10004.	464.	2233.	254.	1736.	2100.	1331.	42636.
18	Green River between Piney Creeks and LaBarge Creek	25639.	25376.	37819.	82833.	163844.	246144.	196206.	88331.	46539.	48767.	41698.	29860.	1033054.
19	LaBarge Creek	3215.	3033.	4085.	7269.	13312.	9118.	6639.	4401.	3885.	4646.	4193.	3518.	67314.
20	Green River between La Barge Creek and Fontenelle Reservoir	28854.	28409.	41903.	90102.	163844.	246144.	196206.	93447.	51012.	53667.	45962.	33405.	1072953.
21	Fontenelle Creek	1643.	1537.	2084.	5729.	12740.	12740.	4518.	2062.	1765.	2086.	1925.	1751.	50583.

Table 11 (continued)
Available Flow for Green River Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
22	Green River Between Fontenelle Reservoir and Big Sandy River	56650.	56499.	65350.	95495.	163844.	246144.	196206.	105392.	61884.	59142.	55769.	54215.	1216590.
23	Big Sandy River below Farson gage and Green River	1980.	2034.	4730.	6111.	4234.	6747.	6033.	5123.	4542.	3822.	3171.	2484.	51011.
24	Green River between Big Sandy River and Green River near Green River gage	58891.	59204.	73947.	99523.	163844.	251899.	214389.	112609.	66028.	59142.	55769.	54255.	1269499.

Table 12
Available Flow for Green River Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Green River above Warren Bridge	7632.	6557.	8645.	16682.	82151.	179777.	94945.	42993.	23604.	11568.	9572.	9557.	493682.
2	Beaver Creek	723.	646.	877.	9492.	16816.	7275.	1228.	638.	348.	702.	913.	810.	40467.
3	Green River between Beaver Creek and Horse Creek	8418.	7285.	9937.	26213.	95856.	183091.	94945.	42993.	23910.	12427.	10633.	10403.	526110.
4	Horse Creek	1248.	1322.	3731.	6418.	22623.	31328.	10557.	6290.	3109.	2571.	2328.	1132.	92658.
5	Green River between Horse Creek and Cottonwood Creek	9667.	8607.	13667.	32631.	116449.	211532.	102314.	46854.	26812.	14998.	12961.	11535.	608028.
6	Cottonwood Creek	1294.	1442.	4508.	12234.	19033.	24265.	16016.	7683.	3902.	2985.	2790.	1284.	97436.
7	Green River between Cottonwood Creek and New Fork River	10961.	10048.	18176.	44866.	134569.	234500.	116898.	53446.	30622.	17982.	15751.	12819.	700637.
8	West Fork New Fork River above Pine Creek	376.	537.	1451.	9676.	21227.	73459.	46053.	13197.	7022.	5134.	3492.	1092.	182717.
9	Pine Creek	6218.	5813.	7292.	15574.	37566.	124681.	91686.	28635.	15055.	10975.	9145.	6934.	359575.
10	Pole Creek	8165.	7561.	8848.	18843.	43672.	126058.	108776.	35334.	15055.	12209.	10504.	8768.	403794.
11	Boulder Creek	9448.	9164.	10948.	22327.	69011.	206329.	154498.	49157.	24758.	15568.	11922.	9924.	593052.
12	East Fork New Fork River	2590.	1850.	6723.	8598.	31331.	85624.	18685.	4659.	5067.	7389.	5308.	4011.	181835.
13	New Fork River below confluence of West and East Forks	13607.	12003.	23205.	36400.	80518.	303150.	156347.	54412.	31838.	27207.	20962.	16785.	776433.
14	Green River between New Fork River and Piney Creeks	24696.	22216.	42209.	81345.	214246.	520231.	273410.	108286.	62924.	45501.	37010.	29676.	1461752.
15	North Piney Creek	1387.	1554.	5142.	2552.	6330.	21756.	16382.	9059.	4735.	3277.	2656.	1229.	76060.
16	Middle Piney Creek	1131.	1322.	5096.	1495.	2798.	14140.	13315.	9123.	4681.	2695.	2258.	879.	58934.
17	South Piney Creek	1436.	1521.	4299.	7373.	21350.	23087.	2666.	5132.	2480.	2958.	2679.	1301.	76282.
18	Green River between Piney Creeks and LaBarge Creek	28644.	26608.	56741.	92758.	228370.	520231.	307332.	132680.	75892.	54809.	44760.	33139.	1601962.
19	LaBarge Creek	3268.	3459.	5894.	9530.	25619.	22859.	10135.	8637.	6493.	4723.	3912.	2903.	107432.
20	Green River between La Barge Creek and Fontenelle Reservoir	31912.	30067.	62635.	102288.	228370.	520231.	318376.	140233.	81387.	59707.	47877.	36075.	1659158.
21	Fontenelle Creek	1792.	1628.	2520.	9443.	23982.	26841.	7484.	3402.	2854.	2072.	1858.	1710.	85586.

Table 12 (continued)
Available Flow for Green River Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
22	Green River Between Fontenelle Reservoir and Big Sandy River	55141.	53517.	77604.	118211.	228370.	520231.	345100.	140233.	81387.	79281.	47877.	55499.	1802451.
23	Big Sandy River below Farson gage and Green River	2232.	2192.	9553.	12503.	8413.	19093.	12192.	6503.	5445.	4322.	3995.	2623.	89067.
24	Green River between Big Sandy River and Green River near Green River gage	57303.	55888.	91293.	140212.	261167.	537167.	345100.	140233.	81387.	92410.	64343.	57857.	1924360.

Table 13
Reach Outflow for Little Snake River Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	North Fork Little Snake River	436.	431.	814.	3582.	7442.	3351.	772.	410.	338.	577.	508.	438.	19099.
2	Middle Fork Little Snake River	679.	668.	1457.	7156.	14971.	6257.	1081.	579.	472.	969.	826.	684.	35799.
3	Little Snake River between Middle Fork and South Fork	1406.	1382.	3015.	14810.	31471.	14517.	3359.	1500.	1013.	2006.	1710.	1416.	77606.
4	South Fork Little Snake River	257.	253.	552.	2711.	5617.	2195.	289.	200.	177.	367.	313.	259.	13190.
5	Little Snake River between South Fork and Roaring Fork Little Snake	1663.	1635.	3567.	17522.	37074.	16665.	3616.	1695.	1189.	2373.	2023.	1675.	90696.
6	Little Snake River between Roaring Fork and Battle Creek	1663.	1635.	8814.	20377.	49645.	25381.	4876.	1503.	1165.	2373.	2023.	1675.	121132.
7	Battle Creek	967.	993.	2070.	8308.	11464.	3490.	429.	236.	363.	1431.	1292.	1109.	32151.
8	Little Snake River between Battle Creek and Slater Creek	2631.	2628.	10885.	28685.	61109.	28871.	5305.	1739.	1528.	3805.	3315.	2783.	153283.
9	Slater Creek	986.	1010.	2022.	7878.	10768.	3119.	318.	273.	415.	1422.	1291.	1119.	30622.
10	Little Snake River between Slater Creek and Savery Creek	3617.	3638.	12906.	36563.	71680.	31356.	5188.	1942.	1936.	5226.	4606.	3902.	182560.
11	Savery Creek	1685.	1712.	3687.	12045.	11530.	3561.	376.	499.	724.	1870.	1937.	1873.	41500.
12	Little Snake River between Savery Creek and Willow Creek	2378.	3221.	16856.	49518.	69118.	21963.	492.	70.	268.	3802.	4406.	2966.	175060.
13	Willow Creek	134.	145.	264.	911.	973.	0.	112.	82.	94.	195.	181.	141.	3230.
14	Little Snake River between Willow Creek and Muddy Creek	3644.	4549.	16851.	49518.	70123.	22629.	911.	520.	500.	4425.	5454.	4256.	183380.
15	Muddy Creek	24.	18.	3150.	1560.	1025.	718.	238.	79.	113.	461.	195.	39.	7618.
16	Little Snake River between Muddy Creek and Little Snake River near Lily, CO gage	4472.	5365.	19805.	49918.	59873.	28243.	2878.	644.	436.	6087.	6620.	5095.	189437.

Table 14
Reach Outflow for Little Snake River Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	North Fork Little Snake River	487.	482.	768.	3022.	14166.	12396.	2404.	629.	459.	605.	564.	518.	36500.
2	Middle Fork Little Snake River	784.	774.	1362.	6001.	28794.	24978.	4451.	1028.	707.	1027.	942.	848.	71697.
3	Little Snake River between Middle Fork and South Fork	1623.	1602.	2819.	12421.	60052.	52683.	10073.	2277.	1521.	2126.	1950.	1754.	150901.
4	South Fork Little Snake River	297.	293.	516.	2274.	10847.	9329.	1569.	369.	260.	389.	357.	321.	26822.
5	Little Snake River between South Fork and Roaring Fork Little Snake	1921.	1895.	3335.	14694.	70882.	61977.	11611.	2641.	1779.	2515.	2308.	2076.	177633.
6	Little Snake River between Roaring Fork and Battle Creek	1921.	3294.	11796.	17734.	75301.	75208.	17326.	2605.	1765.	2515.	2308.	2076.	213847.
7	Battle Creek	1176.	1181.	2476.	8078.	28733.	19262.	3238.	667.	695.	1434.	1359.	1240.	69540.
8	Little Snake River between Battle Creek and Slater Creek	3097.	4475.	14272.	25812.	104034.	94470.	20563.	3272.	2460.	3949.	3666.	3316.	283386.
9	Slater Creek	1182.	1187.	2403.	7663.	26974.	17985.	2961.	677.	720.	1424.	1354.	1242.	65771.
10	Little Snake River between Slater Creek and Savery Creek	4279.	5662.	16675.	33474.	130783.	111972.	23104.	3876.	3151.	5373.	5020.	4558.	347927.
11	Savery Creek	2026.	1997.	3836.	12621.	34940.	22007.	3854.	1120.	1212.	2073.	2101.	2048.	89836.
12	Little Snake River between Savery Creek and Willow Creek	4242.	7830.	20959.	47384.	160497.	120576.	18004.	1250.	617.	5275.	6134.	4616.	397385.
13	Willow Creek	180.	172.	449.	1289.	2226.	1688.	529.	218.	155.	216.	179.	177.	7478.
14	Little Snake River between Willow Creek and Muddy Creek	5619.	9450.	20954.	53211.	164610.	122097.	20187.	2176.	1117.	5459.	6569.	5945.	417394.
15	Muddy Creek	36.	30.	4765.	2871.	3080.	1180.	518.	132.	101.	400.	551.	109.	13772.
16	Little Snake River between Muddy Creek and Little Snake River near Lily, CO gage	6446.	10246.	24151.	56543.	168774.	127104.	25778.	4734.	2436.	7585.	8449.	6842.	449088.

Table 15
Reach Outflow for Little Snake River Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	North Fork Little Snake River	657.	516.	818.	4190.	19920.	19855.	3965.	826.	680.	725.	631.	602.	53386
2	Middle Fork Little Snake River	1133.	845.	1465.	8407.	40575.	40349.	7673.	1432.	1177.	1275.	1080.	1022.	106432
3	Little Snake River between Middle Fork and South Fork	2346.	1748.	3032.	17398.	84631.	84445.	16714.	3115.	2448.	2639.	2234.	2115.	222864
4	South Fork Little Snake River	429.	320.	555.	3185.	15284.	15160.	2794.	522.	445.	483.	409.	387.	39972
5	Little Snake River between South Fork and Roaring Fork Little Snake	2775.	2068.	3587.	20583.	99890.	99571.	19478.	3631.	2892.	3122.	2643.	2502.	262742
6	Little Snake River between Roaring Fork and Battle Creek	2775.	2068.	13301.	24224.	106992.	116728.	28786.	5591.	2889.	3122.	2643.	2502.	311621
7	Battle Creek	1482.	1272.	2475.	8338.	38864.	27969.	5514.	1228.	1605.	2056.	1658.	1373.	93834
8	Little Snake River between Battle Creek and Slater Creek	4257.	3341.	15776.	32561.	145856.	144697.	34300.	6819.	4494.	5178.	4302.	3874.	405455
9	Slater Creek	1469.	1272.	2402.	7907.	36451.	26169.	5103.	1204.	1583.	2008.	1635.	1367.	88569
10	Little Snake River between Slater Creek and Savery Creek	5726.	4613.	18178.	40468.	181986.	170408.	38996.	7948.	6072.	7186.	5937.	5241.	492757
11	Savery Creek	2230.	2033.	3554.	12296.	48005.	33840.	6678.	1857.	2481.	2913.	2531.	2224.	120640
12	Little Snake River between Savery Creek and Willow Creek	5974.	5981.	22288.	54464.	227350.	194067.	36612.	4799.	4366.	7857.	7732.	6221.	577710
13	Willow Creek	255.	247.	558.	1700.	3139.	2611.	1004.	277.	266.	318.	250.	234.	10860
14	Little Snake River between Willow Creek and Muddy Creek	7361.	7565.	23748.	63058.	240561.	211738.	42260.	5700.	5118.	8286.	8329.	7416.	631140
15	Muddy Creek	36.	30.	4765.	2871.	3080.	1180.	518.	132.	101.	400.	551.	109.	13772
16	Little Snake River between Muddy Creek and Little Snake River near Lily, CO gage	8177.	8373.	29155.	66325.	243117.	215717.	47410.	9398.	8268.	10852.	10250.	8303.	665345

Table 16
Reach Outflow for Henrys Fork Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Below Henrys Fork near Lonetree (09226000) and Beaver Creek	541.	473.	1000.	868.	4834.	4918.	1319.	767.	518.	548.	626.	580.	16992.
2	Beaver Creek	965.	883.	1456.	1331.	5129.	4760.	1781.	1083.	806.	964.	1048.	1019.	21226.
3	Henrys Fork between Beaver Creek and Burnt Fork	1506.	1356.	2456.	1694.	1459.	3113.	236.	121.	59.	897.	1674.	1599.	16170.
4	Burnt Fork	464.	449.	495.	585.	2413.	2995.	820.	830.	426.	639.	562.	497.	11174.
5	Henrys Fork between Burnt Fork and Birch Creek	1970.	1805.	3049.	2279.	3792.	5730.	785.	885.	387.	1536.	2236.	2096.	26550.
6	Birch Creek	171.	166.	183.	216.	924.	1269.	419.	335.	199.	236.	207.	183.	4507.
7	Henrys Fork between Birch Creek and Henrys Fork near Manila, UT gage (09229500)	2116.	1939.	3231.	2336.	2030.	4004.	581.	435.	298.	1399.	2313.	2224.	22906.

Table 17
Reach Outflow for Henrys Fork Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Below Henrys Fork near Lonetree (09226000) and Beaver Creek	844.	978.	1908.	1870.	6103.	9691.	3064.	1310.	588.	862.	1151.	937.	29305.
2	Beaver Creek	1259.	1388.	2378.	2418.	6439.	9150.	3751.	1984.	934.	1264.	1573.	1358.	33897.
3	Henrys Fork between Beaver Creek and Burnt Fork	2103.	2366.	4286.	4288.	8212.	12875.	3620.	1397.	1155.	2126.	2724.	2295.	47448.
4	Burnt Fork	532.	498.	551.	737.	3574.	6212.	2306.	1121.	612.	821.	654.	580.	18199.
5	Henrys Fork between Burnt Fork and Birch Creek	2636.	2942.	5179.	5112.	11693.	18767.	5676.	2453.	1689.	2947.	3379.	2874.	65347.
6	Birch Creek	196.	184.	203.	272.	1359.	2430.	959.	442.	259.	303.	241.	214.	7062.
7	Henrys Fork between Birch Creek and Henrys Fork near Manila, UT gage (09229500)	2817.	3126.	5382.	5384.	9994.	15472.	4599.	1954.	1666.	2841.	3547.	3042.	59821.

Table 18
Reach Outflow for Henrys Fork Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Below Henrys Fork near Lonetree (09226000) and Beaver Creek	1343.	1012.	2405.	2735.	8557.	17944.	8138.	2781.	1586.	1904.	1583.	1244.	51233
2	Beaver Creek	1760.	1420.	2886.	3668.	11101.	17226.	8992.	3459.	2162.	2301.	1999.	1653.	58627
3	Henrys Fork between Beaver Creek and Burnt Fork	3103.	2433.	5291.	6403.	15595.	32654.	17072.	6193.	3742.	4205.	3582.	2897.	103169
4	Burnt Fork	579.	535.	594.	925.	3501.	11749.	7713.	2618.	1359.	1000.	748.	644.	31963
5	Henrys Fork between Burnt Fork and Birch Creek	3778.	3006.	6343.	7527.	19011.	44127.	24566.	8758.	5077.	5204.	4330.	3542.	135270
6	Birch Creek	213.	197.	219.	341.	1328.	4454.	2940.	989.	511.	369.	276.	238.	12075
7	Henrys Fork between Birch Creek and Henrys Fork near Manila, UT gage (09229500)	3992.	3204.	6562.	7868.	18668.	38708.	20403.	7621.	4742.	5286.	4554.	3750.	125358

Table 19
Reach Outflow for Blacks Fork Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Blacks Fork	775.	1134.	3462.	3180.	4225.	3718.	2325.	1234.	672.	1200.	1050.	982.	23957.
2	West Fork of Smiths Fork	331.	506.	1554.	1387.	2696.	1269.	937.	113.	499.	372.	452.	420.	10534.
3	East Fork of Smiths Fork	478.	549.	1108.	1124.	4093.	5489.	3426.	1424.	1174.	793.	600.	529.	20786.
4	Smiths Fork	848.	1139.	3018.	2794.	4505.	4936.	4252.	3363.	2127.	1884.	1312.	1016.	31195.
5	Cottonwood Creek	140.	194.	541.	610.	1306.	77.	0.	0.	0.	195.	191.	171.	3424.
6	Smiths Fork between Cottonwood Creek and Blacks Fork River	988.	1332.	3559.	3404.	5811.	5013.	4252.	3363.	2127.	2079.	1503.	1186.	34620.
7	Blacks Fork between Smiths Fork and Muddy Creek	1763.	2466.	7021.	6584.	6888.	4766.	2049.	840.	644.	2481.	2433.	2168.	40105.
8	Little Muddy Creek	455.	487.	600.	971.	450.	167.	242.	327.	155.	301.	547.	633.	5335.
9	Upper Muddy Creek	0.	18.	343.	449.	224.	61.	0.	0.	0.	0.	139.	0.	1234.
10	Muddy Creek below Little Muddy Creek	308.	505.	943.	1420.	674.	228.	81.	139.	90.	241.	686.	479.	5794.
11	Blacks Fork between Muddy Creek and Hams Fork	2071.	3071.	10130.	10111.	10946.	5218.	2166.	979.	734.	2772.	3207.	2647.	54053.
12	Hams Fork River	961.	1069.	7058.	7762.	16874.	7251.	1578.	1905.	259.	1668.	1376.	1052.	48812.
13	Blacks Fork between Hams Fork and Blacks Fork nr Little America gage	2783.	4140.	17188.	17873.	27820.	12469.	3744.	1448.	832.	4439.	4583.	3622.	100941.

Table 20
Reach Outflow for Blacks Fork Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Blacks Fork	1366.	1738.	5347.	7403.	10309.	11695.	4814.	2740.	2111.	1806.	1735.	1249.	52313.
2	West Fork of Smiths Fork	500.	714.	2286.	2584.	4749.	4078.	957.	377.	493.	436.	633.	461.	18266.
3	East Fork of Smiths Fork	704.	751.	1657.	1978.	4964.	10491.	5081.	2546.	1688.	1358.	884.	670.	32772.
4	Smiths Fork	1324.	1625.	4537.	5629.	9858.	11907.	6448.	4072.	2728.	2008.	1738.	1231.	53105.
5	Cottonwood Creek	192.	267.	771.	910.	2362.	1710.	109.	112.	64.	228.	281.	205.	7211.
6	Smiths Fork between Cottonwood Creek and Blacks Fork River	1516.	1892.	5308.	6538.	12219.	13617.	6557.	4184.	2793.	2236.	2020.	1436.	60317.
7	Blacks Fork between Smiths Fork and Muddy Creek	2882.	3630.	10655.	13941.	21421.	23177.	7073.	3047.	2589.	3188.	3755.	2684.	98042.
8	Little Muddy Creek	469.	718.	2168.	5353.	2348.	1257.	545.	473.	378.	342.	298.	404.	14753.
9	Upper Muddy Creek	111.	369.	2804.	2259.	6962.	2862.	400.	0.	0.	322.	412.	258.	16759.
10	Muddy Creek below Little Muddy Creek	580.	1086.	4972.	7612.	9310.	4119.	945.	314.	264.	664.	710.	663.	31238.
11	Blacks Fork between Muddy Creek and Hams Fork	3626.	4910.	16842.	22773.	33457.	27878.	8176.	3361.	2853.	3914.	4696.	3347.	135832.
12	Hams Fork River	2030.	1988.	6676.	12840.	28300.	24186.	7099.	3041.	3040.	1947.	2099.	1683.	94931.
13	Blacks Fork between Hams Fork and Blacks Fork nr Little America gage	5656.	6898.	23518.	35613.	61757.	52064.	15276.	5919.	4542.	5861.	6796.	4948.	228847.

Table 21
Reach Outflow for Blacks Fork Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Blacks Fork	1773.	2157.	6603.	7841.	19093.	33210.	14269.	5162.	4046.	3109.	2517.	1755.	101534
2	West Fork of Smiths Fork	649.	861.	2852.	2963.	6682.	9658.	4581.	1458.	1135.	890.	824.	600.	33152
3	East Fork of Smiths Fork	849.	898.	1975.	2201.	6335.	18716.	12871.	4720.	3451.	1888.	1319.	882.	56104
4	Smiths Fork	1654.	1964.	5553.	6185.	15240.	29056.	18554.	8654.	6329.	3775.	2693.	1639.	101297
5	Cottonwood Creek	289.	346.	1009.	1081.	2367.	4688.	2107.	693.	563.	465.	427.	286.	14322
6	Smiths Fork between Cottonwood Creek and Blacks Fork River	1943.	2310.	6562.	7266.	17607.	33744.	20661.	9347.	6892.	4240.	3120.	1926.	115619
7	Blacks Fork between Smiths Fork and Muddy Creek	3717.	4467.	13164.	15107.	36700.	66954.	30869.	9998.	7379.	6365.	5531.	3680.	203932
8	Little Muddy Creek	469.	718.	2168.	5353.	2348.	1257.	545.	473.	378.	342.	298.	404.	14753
9	Upper Muddy Creek	111.	369.	2804.	2259.	6962.	2862.	400.	0.	0.	322.	412.	258.	16759
10	Muddy Creek below Little Muddy Creek	580.	1086.	4972.	7612.	9310.	4119.	945.	314.	264.	664.	710.	663.	31238
11	Blacks Fork between Muddy Creek and Hams Fork	4296.	5554.	18704.	22719.	46010.	77087.	33989.	11437.	8803.	7481.	6717.	4372.	247168
12	Hams Fork River	4065.	5605.	8788.	14857.	46235.	62688.	21846.	6865.	5462.	3104.	3411.	2892.	185820
13	Blacks Fork between Hams Fork and Blacks Fork nr Little America gage	7226.	9062.	27492.	32467.	89150.	139775.	55835.	18302.	14265.	10585.	10128.	7264.	421550

Table 22
Reach Outflow for Green River Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Green River above Warren Bridge	5935.	5567.	6802.	17403.	45082.	64704.	33890.	20075.	12397.	10460.	6890.	6658.	235864.
2	Beaver Creek	335.	305.	639.	2261.	1777.	870.	42.	39.	201.	277.	382.	359.	7487.
3	Green River between Beaver Creek and Horse Creek	6332.	5956.	7728.	19757.	44939.	59520.	29222.	17003.	12146.	10816.	7429.	7095.	227942.
4	Horse Creek	784.	899.	2417.	2513.	5072.	4289.	2453.	1634.	490.	1113.	1525.	916.	24105.
5	Green River between Horse Creek and Cottonwood Creek	7116.	6855.	10145.	22269.	48757.	59831.	28272.	16399.	12337.	11929.	8954.	8011.	240876.
6	Cottonwood Creek	856.	1012.	2842.	2638.	1597.	0.	1332.	525.	171.	1381.	1846.	1072.	15271.
7	Green River between Cottonwood Creek and New Fork River	7972.	7867.	12987.	24907.	49791.	58043.	28074.	15919.	12374.	13311.	10799.	9083.	251126.
8	West Fork New Fork River above Pine Creek	3686.	3193.	3950.	5280.	15535.	29488.	7479.	3039.	3623.	4465.	4481.	4247.	88466.
9	Pine Creek	4218.	3460.	4645.	7507.	25580.	48612.	18092.	7787.	6268.	7520.	6270.	5319.	145278.
10	Pole Creek	5090.	4216.	5560.	9478.	24818.	39148.	20696.	8080.	5583.	9537.	7830.	6327.	146362.
11	Boulder Creek	5500.	4624.	6136.	10629.	42618.	80723.	30185.	11231.	7712.	11707.	8723.	6869.	226658.
12	East Fork New Fork River	2957.	3196.	4336.	3941.	21509.	17287.	8446.	4899.	4237.	4259.	4270.	3342.	82678.
13	New Fork River below confluence of West and East Forks	10873.	10550.	14118.	15055.	56830.	81753.	44057.	20146.	15270.	18493.	16228.	12823.	316198.
14	Green River between New Fork River and Piney Creeks	18969.	18586.	27678.	40148.	106102.	138227.	71729.	35771.	27534.	31961.	27341.	22062.	566108.
15	North Piney Creek	1112.	1274.	3429.	1858.	785.	0.	2204.	1629.	193.	1800.	2305.	1324.	17913.
16	Middle Piney Creek	992.	1213.	3496.	1527.	561.	0.	3435.	2653.	299.	1393.	2138.	1188.	18895.
17	South Piney Creek	902.	1035.	2786.	2888.	2800.	1062.	1282.	1426.	408.	1282.	1756.	1055.	18684.
18	Green River between Piney Creeks and LaBarge Creek	21967.	22102.	37383.	46416.	110709.	139282.	78597.	41508.	28513.	36476.	33556.	25624.	622134.
19	LaBarge Creek	2404.	2298.	3595.	4096.	6916.	3872.	2936.	2193.	1950.	2772.	3082.	2759.	38874.
20	Green River between La Barge Creek and Fontenelle Reservoir	24372.	24400.	40978.	50512.	89772.	143459.	81826.	43942.	30622.	39311.	36667.	28393.	634254.
21	Fontenelle Creek	1347.	1297.	1890.	3470.	4231.	2939.	610.	565.	934.	1793.	1607.	1413.	22095.

Table 22 (continued)
Reach Outflow for Green River Basin and Dry Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
22	Green River Between Fontenelle Reservoir and Big Sandy River	52829.	41291.	40602.	61966.	58153.	68493.	54066.	53366.	40019.	47741.	50509.	56107.	625142.
23	Big Sandy River below Farson gage and Green River	1550.	1415.	3170.	2687.	2178.	2582.	2928.	3037.	2950.	3112.	2677.	1892.	30177.
24	Green River between Big Sandy River and Green River near Green River gage	50627.	42740.	44590.	63005.	57368.	66935.	52932.	51463.	39138.	47695.	49963.	53297.	619753.

Table 23
Reach Outflow for Green River Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Green River above Warren Bridge	6689.	6159.	7726.	16510.	59720.	100442.	84662.	32880.	18580.	14043.	9305.	7553.	364272.
2	Beaver Creek	676.	635.	894.	7554.	6966.	3053.	48.	135.	197.	562.	813.	710.	22243.
3	Green River between Beaver Creek and Horse Creek	7391.	6842.	8780.	24321.	64490.	98850.	80423.	29914.	17985.	14618.	10216.	8300.	372130.
4	Horse Creek	1051.	1101.	2107.	6460.	15209.	16446.	5603.	3742.	1179.	1512.	1826.	1158.	57393.
5	Green River between Horse Creek and Cottonwood Creek	8442.	7943.	10887.	30782.	78265.	112263.	82733.	31262.	18595.	16129.	12042.	9458.	418801.
6	Cottonwood Creek	1299.	1350.	2752.	8430.	9787.	9073.	6528.	3599.	1256.	2043.	2302.	1430.	49850.
7	Green River between Cottonwood Creek and New Fork River	9741.	9293.	13639.	39212.	87407.	119973.	87781.	33785.	19595.	18172.	14344.	10888.	463832.
8	West Fork New Fork River above Pine Creek	3873.	3769.	4526.	7410.	21286.	57224.	24194.	7536.	7122.	5418.	4579.	4047.	150984.
9	Pine Creek	4803.	4577.	5880.	11430.	34534.	98862.	51498.	16933.	12163.	8888.	6607.	5377.	261553.
10	Pole Creek	6169.	5857.	7252.	14054.	34828.	99118.	60537.	19678.	10158.	9275.	8057.	6754.	281736.
11	Boulder Creek	7262.	6806.	8348.	16319.	59468.	164908.	86225.	27205.	15343.	13019.	9694.	8022.	422619.
12	East Fork New Fork River	3188.	3237.	4597.	7165.	32042.	46727.	20547.	7246.	5110.	7659.	6468.	4232.	148218.
13	New Fork River below confluence of West and East Forks	12790.	12531.	16639.	27633.	80235.	181813.	116202.	39376.	23239.	25771.	21068.	15347.	572643.
14	Green River between New Fork River and Piney Creeks	22585.	21920.	30597.	67358.	167049.	300530.	204133.	73300.	42759.	43969.	35609.	26307.	1036116.
15	North Piney Creek	1098.	1239.	2534.	4341.	4520.	8033.	8791.	5483.	1269.	1739.	2139.	1280.	42466.
16	Middle Piney Creek	756.	957.	2268.	3711.	2335.	3786.	8835.	6373.	1487.	1017.	1714.	906.	34147.
17	South Piney Creek	1207.	1265.	2425.	7428.	12187.	10004.	464.	2233.	254.	1736.	2100.	1331.	42636.
18	Green River between Piney Creeks and LaBarge Creek	25639.	25376.	37819.	82833.	187018.	323798.	223318.	88331.	46539.	48767.	41698.	29860.	1160995.
19	LaBarge Creek	3215.	3033.	4085.	7269.	13312.	9118.	6639.	4401.	3885.	4646.	4193.	3518.	67314.
20	Green River between La Barge Creek and Fontenelle Reservoir	28854.	28409.	41903.	90102.	189776.	325300.	231315.	93447.	51012.	53667.	45962.	33405.	1213150.
21	Fontenelle Creek	1643.	1537.	2084.	5729.	12740.	12740.	4518.	2062.	1765.	2086.	1925.	1751.	50583.

Table 23 (continued)
Reach Outflow for Green River Basin and Normal Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
22	Green River Between Fontenelle Reservoir and Big Sandy River	56650.	56499.	65350.	95495.	170042.	246144.	196206.	105392.	61884.	62333.	58689.	54215.	1228900.
23	Big Sandy River below Farson gage and Green River	1980.	2034.	4730.	6111.	4234.	6747.	6033.	5123.	4542.	3822.	3171.	2484.	51011.
24	Green River between Big Sandy River and Green River near Green River gage	58891.	59204.	73947.	99523.	163844.	251899.	214389.	112609.	66028.	59142.	55769.	54255.	1269499.

Table 24
Reach Outflow for Green River Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1	Upper Green River above Warren Bridge	7632.	6557.	8645.	16682.	82151.	179777.	97857.	45360.	23604.	11568.	9572.	9557.	498960.
2	Beaver Creek	723.	646.	877.	9492.	16816.	7275.	1228.	638.	348.	702.	913.	810.	40467.
3	Green River between Beaver Creek and Horse Creek	8418.	7285.	9937.	26213.	95856.	183091.	94945.	42993.	23910.	12427.	10633.	10403.	526110.
4	Horse Creek	1248.	1322.	3731.	6418.	22623.	31328.	10557.	6290.	3109.	2571.	2328.	1132.	92658.
5	Green River between Horse Creek and Cottonwood Creek	9667.	8607.	13667.	32631.	116449.	211532.	102314.	46854.	26812.	14998.	12961.	11535.	608028.
6	Cottonwood Creek	1294.	1442.	4508.	12234.	19033.	24265.	16016.	7683.	3902.	2985.	2790.	1284.	97436.
7	Green River between Cottonwood Creek and New Fork River	10961.	10048.	18176.	44866.	134569.	234500.	116898.	53446.	30622.	17982.	15751.	12819.	700637.
8	West Fork New Fork River above Pine Creek	4505.	4337.	5312.	9676.	21227.	73459.	46053.	13197.	12017.	6384.	6164.	4827.	207158.
9	Pine Creek	6218.	5813.	7292.	15574.	37566.	124681.	91686.	28635.	18884.	10975.	9145.	6934.	363404.
10	Pole Creek	8165.	7561.	8848.	18843.	43672.	126058.	108776.	35334.	15055.	12209.	10504.	8768.	403794.
11	Boulder Creek	9448.	9164.	10948.	22327.	69011.	206329.	154498.	49157.	24758.	15568.	11922.	9924.	593052.
12	East Fork New Fork River	2590.	1850.	6723.	8598.	31331.	85624.	18685.	4659.	5067.	7389.	5308.	4011.	181835.
13	New Fork River below confluence of West and East Forks	13607.	12003.	23205.	36400.	80518.	303150.	156347.	54412.	31838.	27207.	20962.	16785.	776433.
14	Green River between New Fork River and Piney Creeks	24696.	22216.	42209.	81345.	214246.	537375.	273410.	108286.	62924.	45501.	37010.	29676.	1478896.
15	North Piney Creek	1387.	1554.	5142.	2552.	6330.	21756.	16382.	9059.	4735.	3277.	2656.	1229.	76060.
16	Middle Piney Creek	1131.	1322.	5096.	1495.	2798.	14140.	13315.	9123.	4681.	2695.	2258.	879.	58934.
17	South Piney Creek	1436.	1521.	4299.	7373.	21350.	23087.	2666.	5132.	2480.	2958.	2679.	1301.	76282.
18	Green River between Piney Creeks and LaBarge Creek	28644.	26608.	56741.	92758.	245478.	598325.	307332.	132680.	75892.	54809.	44760.	33139.	1697163.
19	LaBarge Creek	3268.	3459.	5894.	9530.	25619.	22859.	10135.	8637.	6493.	4723.	3912.	2903.	107432.
20	Green River between La Barge Creek and Fontenelle Reservoir	31912.	30067.	62635.	102288.	262221.	622607.	318376.	142014.	82960.	59707.	48751.	36075.	1799614.
21	Fontenelle Creek	1792.	1628.	2520.	9443.	23982.	26841.	7484.	3402.	2854.	2072.	1858.	1710.	85586.

Table 24 (continued)
Reach Outflow for Green River Basin and Wet Hydrologic Condition
 values in acre-feet

Reach	Reach Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
22	Green River Between Fontenelle Reservoir and Big Sandy River	55141.	53517.	77604.	118211.	228370.	520231.	355631.	144598.	84397.	79281.	47877.	55499.	1820357.
23	Big Sandy River below Farson gage and Green River	2232.	2192.	9553.	12503.	8413.	19093.	12192.	6503.	5445.	4322.	3995.	2623.	89067.
24	Green River between Big Sandy River and Green River near Green River gage	57303.	55888.	91293.	140212.	261167.	537167.	345100.	140233.	81387.	92410.	64343.	57857.	1924360.