BEAR RIVER COMMISSION

TWENTY-FIRST BIENNIAL REPORT

2019-2020

In Memory of

Jack Arnold Barnett

1936 - 2018

COVER:

Jack A. Barnett (1936 – 2018) became the second Engineer-Manager of the Bear River Commission on July 1, 1989, a position that he held until June 30, 2010. He continued to serve the Commission until his passing in April 2018. During his time with the Commission, he was instrumental in organizing and preserving the Commission's historical documents, the creation of a Commission library and the development of the Commission's website which includes the preservation of many of the historical documents. He was instrumental in developing and assisting the standing committees of the Commission and served as chair of the Commission's Technical Advisory Committee. He helped form the Commission's Water Quality Committee and supported them in their activities. He created a system of memoranda to keep Commissioners informed on Commission business and matters around the Bear River Basin. He guided the Commission through the development of a number of "Commission Approved Procedures," including the procedure for estimating depletions within the Basin, and led the States through several depletion estimate efforts. He also helped the Commission with two 20-year Compact Review efforts. Always a teacher, Jack provided instruction and guidance on Bear River technical matters and organized and conducted a number of tours in the Basin. In his role as Engineer-Manager he regulated the equitable distribution of water between river sections in the Upper and Central Divisions and participated in a number of reviews and evaluations of water rights or projects which would affect water distribution pursuant to the Compact. He worked tirelessly to promote interstate comity on the Bear River. He was a friend to all he met as he invited them into the Bear River family and he and his legacy are honored by the Commission.

TWENTY-FIRST BIENNIAL REPORT

BEAR RIVER COMMISSION

2019-2020

For the Biennium October 1, 2018

to

September 30, 2020

FARMINGTON, UTAH

April 2022

BEAR RIVER COMMISSION

226 South 200 West
Farmington, Utah 84025
801-292-4662
bearrivercommission.org

April 6, 2022

Joe Biden
President of the United States
Executive Office of the President
The White House
1600 Pennsylvania Avenue NW
Washington, D.C. 20500

Dear President Biden:

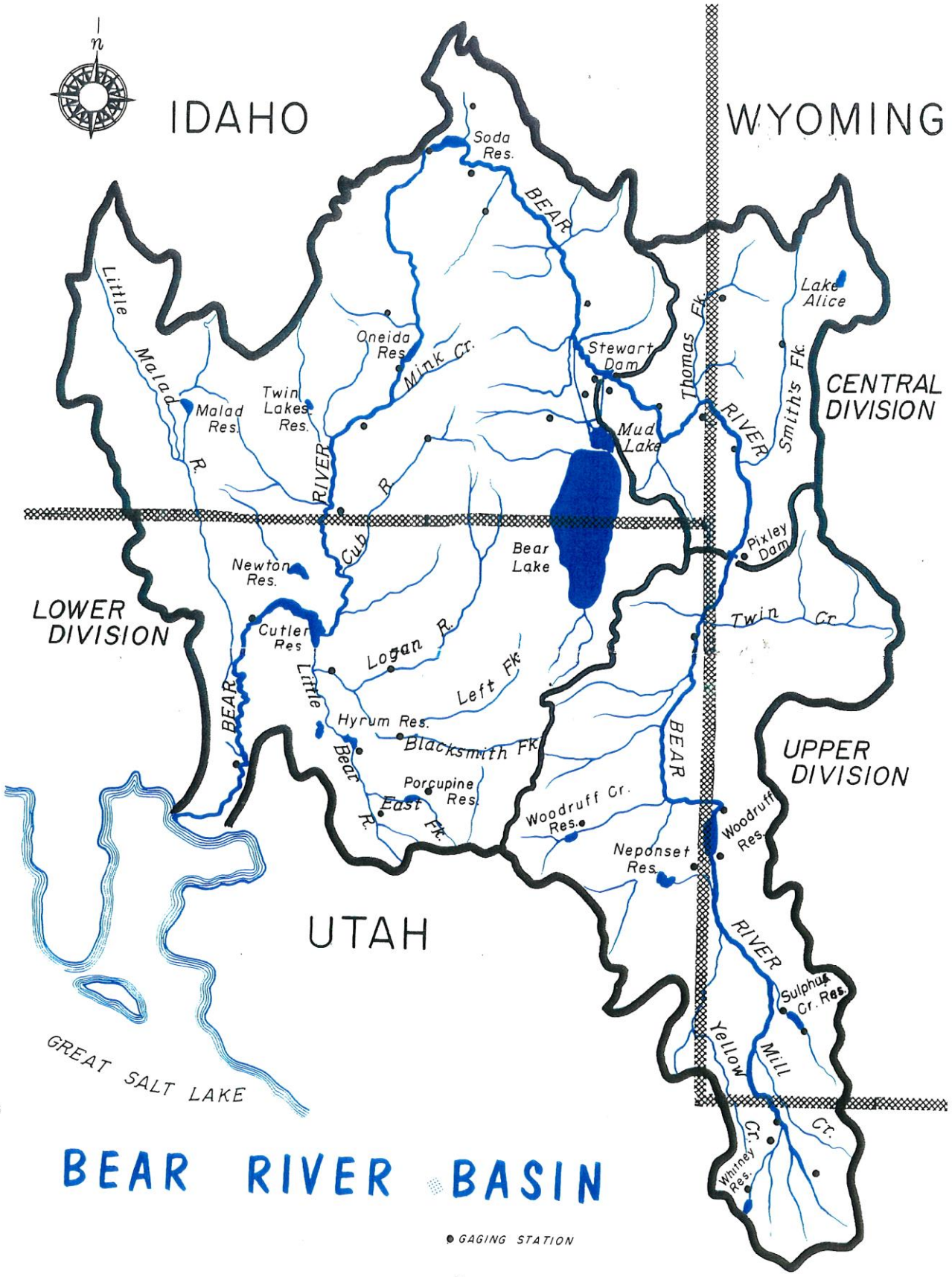
Submitted herewith is the Twenty-first Biennial Report of the Bear River Commission, as required by Article III.D.2 of the Amended Bear River Compact.

A copy of the report is being transmitted to the governor of each signatory state to the Bear River Compact.

Sincerely,

Don A. Barnett
Engineer-Manager

Enclosure


N
IDAHO
WYOMING
UTAH
Soda Res.
BEAR R.
Little Malad R.
Malad Res.
Oneida Res.
Mink Cr.
Twin Lakes Res.
RIVER
Stewart Dam
Thomas Fk.
Lake Alice
Smith's Fk.
CENTRAL DIVISION
Mud Lake
Cub R.
Bear Lake
Pixley Dam
Newton Res.
LOWER DIVISION
Cutler Res.
Logan R.
Left Fk.
Twin Cr.
Little Bear R.
Hyrum Res.
Blacksmith Fk.
Porcupine Res.
East Fk.
Woodruff Cr. Res.
Woodruff Res.
Neponset Res.
UPPER DIVISION
Sulphur Cr. Res.
Yellow Mill Cr.
Whitney Res.
GREAT SALT LAKE
BEAR RIVER BASIN
GAGING STATION

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TWENTY-FIRST BIENNIAL REPORT
BEAR RIVER COMMISSION

Overview

SYNOPSIS

The two years reported on in this biennial period differed in water supply. The water supply in 2019 was near normal to slightly above normal whereas the water supply in 2020 was nearer to about 85% of normal. Interstate water deliveries pursuant to a water emergency declaration occurred in the Central Division in both years. No water emergencies were declared in 2019 or 2020 in the Upper and Lower Divisions. Distribution in all three divisions was done with great cooperation between administrators and users of waters within the Bear River system.

This biennial report is divided into three chapters. This first chapter, the Overview Chapter, provides a background of the Compact and the Commission and its general activities. The second and third chapters provide specific water supply and streamflow distribution information for the 2019 and 2020 water years, respectively.

BACKGROUND

The Bear River Compact determines the rights and obligations of the signatory states of Idaho, Utah and Wyoming with respect to the waters of the Bear River. Federal consent to the Compact was given by Congress and signed by President Eisenhower on March 17, 1958. The Bear River Commission was created by the Compact and has been organized as an interstate agency to administer the Compact.

The Bear River Compact was amended in accordance with Article XIII of the Original Compact (Article XIV, Amended Compact) following several years of study and review of Compact provisions. Principal amendments and other changes are discussed elsewhere in this report. Amendments to the Compact were agreed to by representatives of the compacting states on December 22, 1978, and State Amending Legislation was approved in each state in the spring of 1979. Congressional consent was given by the 96th Congress by Public Law 96-189 and signed into law by President Carter on February 8, 1980.

Article III.D.2 of the Compact was amended to provide that the Bear River Commission compile a biennial report rather than an annual report as required in the original Compact. Annual reports were compiled in each of the 21 years (1958-78) and were transmitted to the President of the United States and to the Governors of the signatory states. This is the Twenty-First Biennial Report covering the 2019 and 2020 water years (October 1, 2018, to September 30, 2020).

River operation under the Bear River Compact and activities of the Bear River Commission during the 2019 and 2020 water years are summarized in this report, by year, in the two chapters which follow. This biennial report is organized so that the specific information for each water year is reported in separate chapters. Selected streamflow records are given in the chapters discussing each water year.

COMMISSION ORGANIZATION and MEMBERS

Ten commissioners, three representing each state and one representing the United States, constitute the Bear River Commission. The Federal representative serves as chairperson without a vote, while each of the other nine Commissioners has one vote. Figure O.1 lists the Bear River Commission membership as of October 1, 2018 (the beginning of the biennial period).

The Commission amended its bylaws on April 16, 1990. The amendments allowed for the creation of three standing committees of the Commission: the Management Committee, the Operations Committee, and the Records Committee. On November 18, 1997, the Commission again amended its bylaws and changed the name of the Records Committee to the Records & Public Involvement Committee. A Water Quality Committee was also created on November 18, 1997. On November 20, 2018, the Commission amended its bylaws recognizing that Commission communications could occur via electronic mail. Further, it formalized its Technical Advisory Committee (TAC) and made it a standing committee. The above standing committees have duties as assigned to them by the Commission. Each state is allowed to designate its representatives to the committees, and in all committees, votes are taken by state, with each state having one vote. These five committees met from time to time on an as-needed basis throughout this biennium. For the most part, they are advisory to the Commission.

Bear River Commission Members

(as of October 1, 2018)

Officers

Chair ..... Jody L. Williams, Salt Lake City, UT
Vice Chair ..... Curtis Stoddard, Grace, ID
Secretary ..... Eric Millis, Salt Lake City, UT
Treasurer ..... Randy Staker, Salt Lake City, UT
Engineer-Manager ..... Don A. Barnett, Farmington, UT

Members

Idaho

Gary Spackman ..... Boise, ID
Kerry Romrell ..... Montpelier, ID
Curtis Stoddard ..... Grace, ID

Utah

Eric Millis[1] ..... Salt Lake City, UT
Blair Francis ..... Woodruff, UT
Charles W. Holmgren ..... Bear River City, UT

Wyoming

Pat Tyrrell[2] ..... Cheyenne, WY
Adrian Hunolt ..... Evanston, WY
Tim Teichert ..... Cokeville, WY

United States

Jody L. Williams ..... Salt Lake City, UT

Management Committee

Gary Spackman ..... Boise, ID
Eric Millis ..... Salt Lake City, UT
Pat Tyrrell ..... Cheyenne, WY

Operations Committee

Adrian Hunolt ..... Evanston, WY
Blair Francis ..... Woodruff, UT
Kerry Romrell ..... Montpelier, ID

Records Committee

Charles Holmgren ..... Bear River City, UT
Curtis Stoddard ..... Grace, ID
Tim Teichert ..... Cokeville, WY

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[1] On December 20, 2019 Eric Millis was replaced by Todd Adams
[2] On April 16, 2020 Pat Tyrrell was replaced by Greg Lanning

Figure O.1

MEETINGS

Four Regular or Annual Commission meetings were held during the biennium. The dates of the meetings are as follows:

November 20, 2018	Regular Meeting	Salt Lake City, Utah
April 16, 2019	Annual Meeting	Salt Lake City, Utah
November 19, 2019	Regular Meeting	Salt Lake City, Utah
April 21, 2020	Annual Meeting	Virtual Meeting

Three of the four meetings during this biennium were held at the Utah Department of Natural Resources building in Salt Lake City, Utah. The fourth was held virtually due to the COVID 19 pandemic. At the annual meetings held in April, elections were held, and fiscal matters were addressed. A fiscal report for the biennial period, prepared by the Treasurer, has been made a part of this chapter. Formal minutes for all four of the Commission meetings have been approved and are available on the Commission's website (bearrivercommission.org).

COMMISSION ACTION AND ACTIVITIES

This section is to provide a brief accounting of significant actions or activities of the Commission during the biennial period separate and apart from specific streamflow measurement and distribution which are discussed elsewhere in this report. Greater details relative to specific actions or activities of the Commission are contained within the Commission's approved meeting minutes.

The first meeting of the biennial period was the Commission's regular fall meeting held on November 20, 2018, in Salt Lake City, Utah. The Commission first turned its attention to financial matters. The Commission then received a report on the extremely dry 2018 water years. This was followed by a detailed discussion regarding 20-year Compact Review effort. Barnett reviewed the number of comments that, though encouraging that the Compact not be amended, did make recommendations on various items associated with the Commission's activities. The TAC was working on responses to these items. The Commission then had a discussion on proposed changes to the Commission's bylaws. One change allowed for Commission notices to be provided by electronic mail. Another was to make the TAC a standing committee and have its chair be a state representative. The Commission then heard committee reports. A more detailed report on this meeting can be found in the Commission's meeting minutes.

The second meeting of the Commission during this biennial period was the Commission's annual meeting which was held on April 16, 2019, in Salt Lake City, Utah. As the meeting began, the Commission noted the passing of John Tiechert, a former Commissioner from Wyoming. The Commission then reviewed finances and approved a budget for FY2020 after which Curtis Stoddard was elected as the Commission's Vice Chair. The Commission then heard an encouraging report on the projected water supply in 2019. The Commission then received a report introducing it to the issues associated with the Great Salt Lake from the

Friends of the Great Salt Lake. It then received an update on the efforts to respond to the recommendations gathered during the 20-year Compact Review process followed by reports from the Commission's standing committees. A more detailed report of this meeting can be found in the Commission's meeting minutes.

The third meeting of the biennial period was the Commission's regular fall meeting held on November 19, 2019, in Salt Lake City, Utah. A report was provided by the Commission's Treasurer on the closeout of the FY2019 income and expenses. This was followed by a report by PacifiCorp on the initiation of its Cutler Hydroelectric relicensing efforts. There was also a report on Utah's creation of water banking authorities followed by a report on the good water supply year in 2019. There were then reports from the Commission's standing committees. The Water Quality Committee reported that Mary Ann Nelson was a new member from Idaho who would chair the committee. The Records Committee reported on the addition of a USGS water level gage at Bear Lake. More detail on specific discussions of the Commission and reports can be found in the Commission's meeting minutes.

The fourth and final meeting of the Commission during the biennial period was held on April 21, 2020. Due to the outbreak of COVID 19, the meeting was held virtually. At the start of the meeting the Commission welcomed Greg Lanning and Todd Adams as new commissioners from Wyoming and Utah, respectively. Todd Adams was elected as the Commission's Secretary and Kevin Payne was assigned to be the new TAC chair. The Commission then approved its FY2021 budget. It then heard a report on and then approved the Commission's 20-year Compact Review Report, which formally concluded the Compact review effort. It was reported that the Water Quality Committee had met virtually, but due to COVID 19, the Records and Public Involvement Committee and the Operations Committee did not meet. During Idaho's report it was noted that the Idaho Legislature had authorized the Bear River adjudication. Greater detail relative to the Commission meeting and activities can be found in the Commission's meeting minutes.

In recognition of the Commission's commitment to broaden its public outreach, the Commission sponsored one tour during the biennial period. The "Bend of the Bear River" tour went from Soda Point Reservoir downstream to just above Oneida Reservoir. It included tours of PacifiCorp's power facilities, irrigation works including the Last Canal Company's new diversion dam, discussions of recreational flows through the Black Canyon and environmental and water quality improvement projects. It also included a tour of the Gentile Valley where potential increases to Bear River flows could create flooding issues. Approximately 55 people from a number of organizations participated in the day-long tour. A second tour was planned for the summer of 2020 but it was postponed due to COVID 19 concerns.

A very significant event during this biennial period was the conclusion of the 20-year Compact review effort. This effort included significant outreach through press releases, news articles, public meetings and the addition of a 20-year Compact Review page to the Commission's website. In all 67 written comments were received. The vast majority recommended no change to the Compact, but many also provided suggestions to improve the way that the Commission approaches and communicates on matters in the basin. The single most significant outcome of the effort was the formalization of the TAC and the assignment for it to provide outreach and communication on environmental and watershed health matters. The formal effort was concluded with a Commission report, but many of the identified efforts are ongoing.

FINANCIAL REPORT

The fiscal year of the Commission begins on July 1 of a given year and ends on June 30 of the following year. The expenditures for the period are shown in Figure O.2 and were presented to the Commission by the Treasurer.

The Commission records were audited by an auditor. The audit of accounts and records, including a statement of budget revenue and disbursements for the biennium ending June 30, 2020, is a part of the formally accepted Commission minutes.

Expenses incurred by the Bear River Commission are paid equally by the signatory states. Compensation and expenses of the federal representative, each commissioner, and each adviser are paid by the government which they represent.

Financial Report
June 30, 2020

	ACTUAL FY 19	ACTUAL FY 20	PROPOSED FY 21	PROPOSED FY 22
ACTUAL/ANTICIPATED INCOME				
Idaho Assessment	45,000.00	45,000.00	45,000.00	45,000.00
Utah Assessment	45,000.00	45,000.00	45,000.00	45,000.00
Wyoming Assessment	45,000.00	45,000.00	45,000.00	45,000.00
State Water Quality Agencies	8,254.00	8,254.00	8,254.00	8,254.00
Interest on Savings	2,000.00	2,185.92	2,000.00	2,000.00
TOTAL	$145,254.00	$145,439.92	$145,254.00	$145,254.00
ACTUAL/ANTICIPATED EXPENSES				
Stream Gaging	$41,940.00	$42,970.00	45,910.00	47,902.00
Personal Services, Engineer-Manager	67,281.00	69,963.00	72,062.00	74,224.00
Travel Expenses	1,200.00	1,200.00	1,200.00	1,200.00
Office Expenses	1,600.00	1,600.00	1,600.00	1,600.00
Biennial Report	1,000.00	1.000.00	1,000.00	1,000.00
Treasurer Bond & Audit	1,400.00	1,400.00	1,400.00	1,400.00
Printing	1,600.00	1,600.00	1,600.00	1,600.00
Real-time Web Hosting	8,400.00	8,400.00	8,400.00	8,400.00
Clerical	8,723.00	8,941.00	9,209.00	9,485.00
Tour	2,500.00	2,500.00	2,500.00	2,500.00
Contingency	2,000.00	2,000.00	2,000.00	2,000.00
TOTAL	$137,644.00	$141,574.00	146,881.00	151,311.00

Figure O.2

THE BEAR RIVER

The Bear River drains an area of 6,900 square miles in southwestern Wyoming, northern Utah and southeastern Idaho. Its headwaters are only 90 miles from its mouth, yet it meanders 500 miles in a circuitous course in reaching the Great Salt Lake. In its travels, it

makes five state line crossings in the three states. The map found on page ii shows the major features of the Bear River system.

The Bear River is not only the largest tributary to the Great Salt Lake but is the largest stream in the North American Continent that does not flow to an ocean. Prior to settlement and irrigation development, the annual discharge of the river into the Great Salt Lake averaged an estimated 1,750,000 acre-feet. Settlement of lands adjacent to the Bear River began in about 1860, and power development began in 1907. In 1911, Bear Lake was converted into a storage reservoir by constructing inlet and outlet canals connecting the lake and the river.

Approximately 500 irrigation organizations own and operate separate irrigation systems in the Basin, supplying irrigation water for half a million acres of land. Six hydroelectric plants are in operation on the main stem of the Bear River.

In addition, a municipality, numerous communities, individual families, a variety of industrial and miscellaneous users, and waterfowl refuges withdraw water from the Bear River, its tributaries and its tributary ground water. Today, on an average, nearly a million acre-feet of water still flows annually into the Great Salt Lake from the Bear River.

BEAR RIVER COMPACT

The Bear River Compact is a document voluntarily adopted by the states which establishes the rights and obligations of Idaho, Utah and Wyoming with respect to the waters of the Bear River. The Compact became effective on March 17, 1958.

The main purposes of the Compact are outlined in paragraph A of Article I of the Compact, which states:

> *The major purposes of this Compact are to remove the causes of present and future controversy over the distribution and use of the waters of the Bear River, to provide for efficient use of water for multiple purposes, to permit additional development of the water resources of Bear River, and to promote interstate comity.*

The Original (1958) Compact provided the following:

- Divided the Bear River into three main divisions: the Upper Division, the Central Division, and the Lower Division, with subdivisions or sections created in the Upper and Central Divisions. The Compact specifically identified which river flows and canal diversions are to be assigned to each of the divisions.
- Apportioned the direct flows of the Bear River and its tributaries between Utah and Wyoming in the Upper Division (upstream of Pixley Dam) and between Idaho and Wyoming in the Central Division (Pixley Dam to Stewart Dam).
- Did not specifically allocate the water in the Lower Division between the states of Idaho and Utah. The Compact did, however, provide a mechanism

wherein a Utah water user may allege that because of diversions within Idaho, he is being deprived of water to which he is justly entitled and request distribution across the state line. If the Commission finds this to be the case, the Commission may declare a water emergency and establish a water delivery schedule in the Lower Division based upon priority of rights without regard to the state line.

- Defined the pre-compact storage rights for each of the three states in reservoirs above Bear Lake and established additional rights to store above Stewart Dam 36,500 acre-feet of Bear River water in any water year. This 36,500 acre-feet of storage is referred to as "Original Compact Storage" and was allocated to each of the states as follows:

Utah	17,750 acre-feet
Wyoming	17,750 acre-feet
Idaho	1,000 acre-feet

- Reserved a portion of the storage capacity in Bear Lake for primary use by, and protection of, irrigation uses and rights downstream from Bear Lake. This compact-provided-for "irrigation reserve" establishes minimum Bear Lake levels which correspond to upstream storage development, below which Bear Lake cannot be drawn down only for power purposes.

AMENDED BEAR RIVER COMPACT

Proposed amendments to the Bear River Compact were approved by the Commission in December 1978 and the Amended Compact became law on February 8, 1980. The Amended Compact replaces the original Compact. Amendments provide for the following principal changes to the 1958 Compact:

Amendment Highlights

- The allocation and distribution of direct flow rights between the various sections in the Upper and Central Divisions are unchanged from the 1958 Compact.

- Additional storage is granted above Bear Lake for 74,500 acre-feet, of which 4,500 acre-feet is granted to Idaho and 35,000 acre-feet is granted each to Utah and Wyoming. This storage, plus water appropriated (including ground water) and applied to beneficial use after January 1, 1976, is limited to an annual depletion of 28,000 acre-feet, of which Idaho is allocated 2,000 acre-feet and Utah and Wyoming are allocated 13,000 acre-feet each. This additional storage in the Upper and Central Division will not be allowed when the elevation of Bear Lake is below 5911 feet (Utah Power and Light datum).

- Additional rights are granted to store water in the Upper and Central Divisions which would otherwise be spilled or bypassed from Bear Lake when all other direct flow

and storage rights are satisfied. These storage rights are allocated with equal priority as follows: 6 percent to Idaho, 47 percent to Utah and 47 percent to Wyoming.

- The method for the declaration of a water emergency in the Lower Division and the distribution of direct flow diversions by priority without regard to state line is unchanged from the 1958 Compact.

- The water not applied to beneficial use prior to January 1, 1976, including ground water tributary to the Bear River, is allocated on a depletion basis.

- In the Lower Division, Idaho is granted the first right to develop and deplete 125,000 acre-feet. Utah is granted the second right to develop and deplete 275,000 acre-feet. The next 150,000 acre-feet of water depletion will be divided equally between Utah and Idaho. All water in excess of the above allocations will be divided between Utah and Idaho, with Idaho receiving 30 percent and Utah 70 percent.

Compact Required Depletion Estimates

The Amended Bear River Compact, as referenced above, states that the new provisions allowing for additional storage and use of waters subsequent to January 1, 1976, are to be administered based on allowed new depletions. The Compact provides that Commission-approved procedures shall be adopted to make such depletion estimates. Working under the direction of the Commission, the Technical Advisory Committee (TAC) first prepared a depletion estimate in 1990. An update to the depletion estimates has now been prepared through 2009. Such estimates are memorialized in a Technical Memorandum titled *2009 Depletions Update.* At the April 2014 Commission meeting the Commission formally adopted these updated depletion estimates. The Commission's approved procedures which provide for depletion estimate calculations were also revised. The Commission-approved procedures direct that the latest depletion estimates should be included in the Biennial Report. Figure O.3 represents the most recent depletion estimates.

Bear River Commission

Estimated Annual Depletions[1]

Changes from January 1, 1976, to December 31, 2009

ABOVE STEWART DAM

State	Allocation	Agricultural Depletions	M&I Depletions	Reservoir Evaporation	Total Depletions	Remaining Allocation
Utah	13,000	5,935	-5	841	6,771	6,229
Wyoming	13,000	2,407	401	197	3,005	9,995
Idaho	2,000	1,310	3	0	1,313	687

LOWER DIVISION

State	Allocation	Agricultural Depletions	M&I Depletions	Reservoir Evaporation	Total Depletions	Remaining Allocation
Idaho	125,000[2]	8,667	300	11	8,978	116,022
Utah	275,000[3]	-5,771	5,978	0	207	274,793

[1]Any reductions in pre-1976 depletions are reflected in the above numbers.

[2]First right under Compact. Compact grants additional rights.

[3]Second right under Compact. Compact grants additional rights.

Figure O.3

ADMINISTRATION OF BEAR RIVER COMPACT

General

Provisions of the Compact are generally administered and enforced under the direction of the Bear River Commission. However, water rights within each state are adjudicated and administered in accordance with state law, subject to limitations provided in the Compact.

Seasonal daily records are collected on about 130 diversions above Bear Lake by state river commissioners under the direction of their respective State Engineers and under the general supervision of the Commission's Engineer-Manager. These records include all of the diversions from Bear River main stem and Smith's Fork, as they are required to administer the Bear River Compact. Daily discharge records for canals in the Upper and Central Divisions are published in this biennial report and have been published in previous biennial reports.

The Engineer-Manager determines when, under provisions of the Compact, a water emergency exists in the Upper or Central Divisions. Once a determination has been made of a water emergency, the Engineer-Manager is in weekly contact with state river

commissioners as to flows and diversions and, at least once a week, allocates the water within the Upper and Central Divisions as provided for under the Compact. The Engineer-Manager also inspects diversions in the field as needed to ensure the equitable apportionment of the water of the Bear River as provided for under the Compact.

Storage

New Storage

The original Compact defines storage rights in existing reservoirs above Bear Lake and provides for an additional storage allowance of 36,500 acre-feet annually. Idaho users on Thomas Fork are allotted 1,000 acre-feet of this amount, and the remainder is divided equally between Wyoming and Utah.

The reservoirs listed in Figure O.4 have been constructed under the additional storage provisions of the original Compact.

Constructed Additional Storage Provided for Under the Original Compact

Reservoir	*Allocation*
Sulphur Creek Reservoir (Wyoming)	4,614 ac-ft
Sulphur Creek Reservoir Enlargement (Wyoming)	1,100 ac-ft
J. L. Martin Reservoir, Sulphur Creek (Wyoming)	88 ac-ft
A. J. Barker Reservoir, Yellow Creek (Utah)	162 ac-ft
Hatch Brothers Reservoir (Utah)	350 ac-ft
Woodruff Narrows Reservoir (Wyoming)	3,250 ac-ft
Woodruff Narrows Reservoir (Utah)	15,240 ac-ft
Whitney Reservoir (Wyoming)	4,200 ac-ft
Wyman Reservoir (Wyoming)	22 ac-ft
Massae Reservoir (Wyoming)	107 ac-ft
Massae Reservoir Enlargement (Wyoming)	51 ac-ft
Woodruff Creek Reservoir (Utah)	2,000 ac-ft
Coy Reservoir (Wyoming)	50 ac-ft
Bear River Regional Joint Powers Board (Wyoming)	168 ac-ft
TOTAL ALLOCATION	31,402 ac-ft

Figure O.4

Additional storage allowance is also granted under the Amended Compact. Woodruff Narrows was enlarged in 1980 under this provision from a capacity of 28,100 acre-feet to 57,300 acre-feet. Allocated to this enlargement is: Utah, 18,000 acre-feet, including 6,686 acre-feet depletion; and Wyoming, 2,960 acre-feet, including 871 acre-feet depletion.

Sulphur Creek Reservoir was enlarged in 1988 to a total capacity of 19,775 acre-feet. Allocated to this enlargement is 10,315 acre-feet (9,370 for municipal use), including 701 acre-feet for depletion.

Bear Lake

Article VI of the Compact provides an irrigation reserve level in Bear Lake below which water shall not be released solely for generation of power, except in emergency; but after release for irrigation, it may be used in generating power as it is conveyed to irrigation diversion works. The reserve is to be increased by designated amounts as additional storage, allocated by the original Compact, is developed above Bear Lake. No additional storage was built pursuant to this provision in the Compact during the biennial period, and so the irrigation reserve elevation remained at 5,914.61 feet, with an active storage content in Bear Lake of 794,000 acre-feet. This irrigation reserve elevation corresponds to 30,000 acre-feet of developed additional original Compact storage allocation.

Water Supply

The Commission uses three stream gages, one in each of the three river divisions, as general indicators of the water supply during a given year in the respective divisions. Each of these three gages has a period of record beginning in 1943 and continues to the present. There are not significant streamflow diversions above these three gages and, hence, they are used to approximate natural flow conditions.

In the Upper Division, most of the Bear River streamflow originates on the north slopes of the Uinta Mountains and flows northward across the state line into Wyoming. The USGS Utah-Wyoming State Line Gage has been used as a good indicator gage of the water supply generally available above Bear Lake and, in particular, to the Upper Division.

Inflow from the Smith's Fork to the Bear River in the Central Division often represents half, or more, of the combined flow of the Bear River at this location. Therefore, the USGS gage on Smith's Fork has been used by the Commission as an indicator of the available water supply in the Central Division.

A large amount of the available water supply in the Lower Division originates and is diverted in the Cache Valley. The major streams which are tributary to the Bear River in the Cache Valley originate in the mountains on the east side of the valley. One of these tributaries, the Logan River, has been used by the Commission as a good indicator gage of the water supply available for diversion in the Cache Valley and, in general, in the Lower Division. A canal diverts from the Logan River above the USGS gaging station. Hence, in order to gain a good record of approximate natural flow conditions, the canal diversion data are added to the USGS stream gage data to generate a combined Logan River flow value. It is this combined Logan River data which is used as an indicator of the general water supply in the Lower Division.

Streamflow Distribution

The administration of the distribution of the waters of the Bear River between the three Compact states and the various subdivisions of the river, as defined by the Compact (the river crosses state lines five times), is defined by the original Compact. When the flow of the river in the Upper and Central Divisions decreases to certain levels, the Engineer-

Manager is to declare a "water emergency" and supervise the allocation of water between the sections within the divisions of the river as directed by the Compact.

The Compact provides that in the Upper Division, which comprises all of the Basin from its headwaters down to and including Pixley Dam, there shall be two sections administered in Wyoming and two sections administered in Utah. The Compact provides that when the total natural flow diversion in the division, plus the flow passing Pixley Dam, is less than 1,250 cfs (divertible flow) a water emergency exists and such divertible flow is allocated to the sections as follows:

Upper Utah Section	0.6 percent
Upper Wyoming Section	49.3 percent
Lower Utah Section	40.5 percent
Lower Wyoming Section	9.6 percent

The Amended Compact further provides in Article IV.A.1.e. that:

> *If for any reason the aggregate of all diversions in a river section of the Upper Division does not equal the allocation of water thereto, the unused portion of such allocation shall be available for use in the other river sections in the Upper Division in the following order: (1) In the other river section of the same State in which the unused allocation occurs; and (2) in the river sections of the other State. No permanent right of use shall be established by the distribution of water pursuant to this paragraph e.*

The Compact defines the Central Division as comprising that part of the Basin from Pixley Dam down to and including Stewart Dam (the point of diversion to Bear Lake). It includes one section in Wyoming and one in Idaho.

Divertible flow in the Central Division is the sum of diversions from Smith's Fork and designated tributaries, diversions from Bear River in the division, diversion to Bear Lake via the Rainbow Inlet Canal, and flow passing Stewart Dam. A water emergency shall exist when this divertible flow is less than 870 cfs, or when the flow of the Bear River entering Idaho (gaging station at Border) is less than 350 cfs. Wyoming diversions are limited to 43 percent of divertible flow during a water emergency.

Procedures for the Lower Division Water Delivery were adopted several years ago. No formal requests for the declaration of a water emergency in the Lower Division have ever been received by the Commission, though water is distributed by the States of Idaho and Utah with similar water right accounting models which essentially distribute water between users similar to what would occur if a water emergency were declared in the Lower Division.

Stream Gaging Program

The Commission has concluded a record of the stream flows in the Bear River drainage is most important as this record is needed: 1) for the measurement and subsequent distribution of waters during the irrigation season in compliance with the Compact; 2) to verify the

compliance of diversions with the Compact; 3) for the review of the Compact, as is required from time to time; and 4) for the three states to plan for water resource use and development. As an indication of the Commission's commitment to the stream-gaging program, the Commission allocated in the biennium about half of its budget to the stream-gaging program. PacifiCorp, the individual states, and water user organizations maintain additional records of stream flows and canal diversions. A composite of all of the records is needed to accurately reflect the waters available for use in the Bear River drainage.

All of the stream gages supported by the Commission are operated and maintained by the U.S. Geological Survey (USGS). The USGS is well recognized as a leader in stream-gaging technologies, and their records are used as a standard for planning, water distribution and legal purposes. The cooperative agreement between the Bear River Commission and the USGS provides that both contribute to the funding of the program. The adequacy of the stream-gaging program is constantly reviewed by the Commission's TAC, by Commission members and by the USGS.

Lists of the individual gages supported during the biennium and the records of key gages during the biennium are made a part of this report, and respective detail is provided in the 2019 and 2020 chapters of this report. The locations of the gages that were in operation during the biennial period are shown on Figure O.5.

BIENNIUM STATE ADMINISTRATION

Article XI of the Amended Compact provides that applications for appropriation or change in water use within each state shall be in accordance with individual state law, except no such application shall be approved if the effect will deprive water users within another state or increase the depletion beyond that which is provided for under the Compact. This article further requires that state officials report, in a format and at intervals established by the Commission, the status of their respective allocations and uses. The Commission has determined the best format for reporting such changes in use is the Biennial Report. Details of state water-related activities are shown in the respective years' write-ups.

WATER QUALITY EFFORTS

The water quality agencies within each of the three Bear River States supported the Commission creating the Water Quality Committee. It was determined that the three state lead water quality administrators would serve as committee members. The committee generally reports twice each year at the Commission meetings regarding its activities. At the time of the creation of the Water Quality Committee, the Bear River Water Quality Task Force was already in existence. Technical representatives from the three states' water quality agencies co-chair this task force which meets three times a year in the basin and which serves as a support to the committee in identifying, reviewing, coordinating and reporting water quality activities within the Bear River Basin. Though water quality administration is not a specific charge in the Compact, water quality issues certainly become entwined in water administration within the Basin. Not only has the committee worked effectively on some cross-discipline issues, but the cooperation fostered within the water quality administration arena has been most notable and worthwhile.

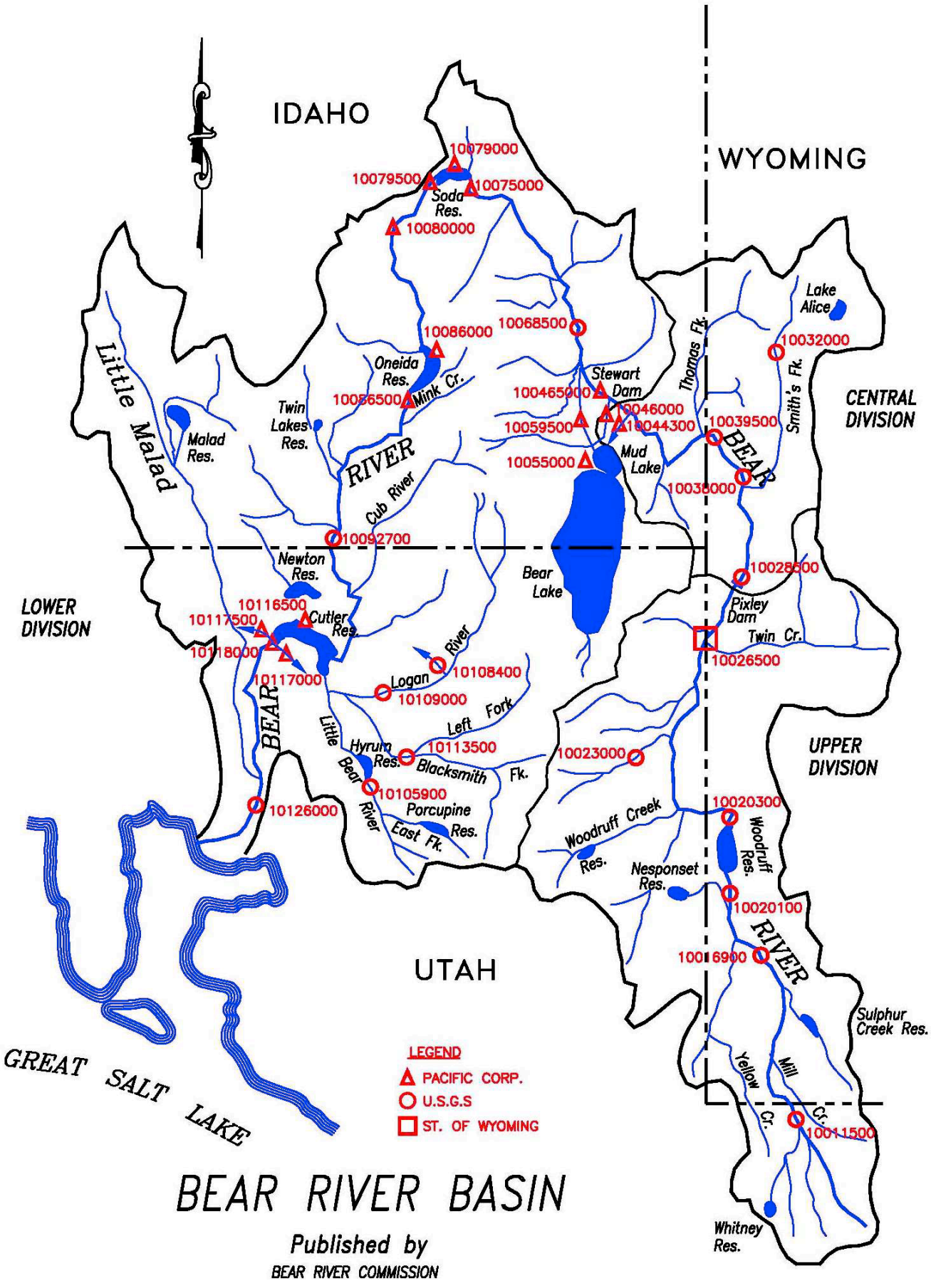

IDAHO
WYOMING
UTAH
LOWER DIVISION
CENTRAL DIVISION
UPPER DIVISION
10079000
10079500
10075000
Soda Res.
10080000
10086000
Oneida Res.
Mink Cr.
10056500
Little Malad
Malad Res.
Twin Lakes Res.
RIVER
Cub River
10092700
10068500
Stewart Dam
10046500
10046000
10044300
10059500
10055000
Mud Lake
Bear Lake
Thomas Fk.
Lake Alice
10032000
Smith's Fk.
10039500
BEAR
10038000
10028500
Pixley Dam
Twin Cr.
10026500
Newton Res.
10116500
10117500
Cutler Res.
10118000
10117000
BEAR
River
10108400
Logan
10109000
Left Fork
Little Bear River
Hyrum Res.
10113500
Blacksmith Fk.
10105900
Porcupine Res.
East Fk.
10126000
10023000
Woodruff Creek
Res.
Nesponset Res.
10020300
Woodruff Res.
10020100
10016900
RIVER
Sulphur Creek Res.
Yellow Cr.
Mill Cr.
10011500
Whitney Res.
GREAT SALT LAKE
LEGEND
PACIFIC CORP.
U.S.G.S
ST. OF WYOMING
BEAR RIVER BASIN
Published by
BEAR RIVER COMMISSION

Figure O.5

In order for water quality streamflow data to be meaningful, there is a need for streamflow information. The Commission financially supports the stream gaging program in cooperation with the USGS which collects basic hydrologic information in the Bear River drainage. The water quality agencies, through the Water Quality Committee, have agreed to financially support a portion of the overall stream gaging costs as well.

In conjunction with the Commission's 20-year Compact review effort, the Water Quality Committee took a look back at its accomplishments, since it was created twenty years earlier, and began a strategic planning process to look at where it wants to direct efforts in the future. It also provided input and guidance to the Commission on comments which were submitted in the 20-year Compact review effort. The Water Quality Committees efforts on its strategic planning process continued through the biennial period.

As reported in previous biennial reports, with the assistance of an EPA grant, a Bear River Water Information System (WIS) was created as a massive repository of hydrologic and water quality information. This valuable tool is housed at Utah State University (USU) (bearriverinfo.org). During the biennial period, the three states, through the Water Quality Committee, continued to financially and functionally support the maintenance of the WIS at USU.

During the biennial period, the Water Quality Committee continued to coordinate and report on TMDL efforts within the states. Many of the discussions of the committee focused on sediment load in the Bear River, including a TMDL in the Upper Bear River Basin in Wyoming. They also looked at sediment issues associated with the Mud Lake complex, along with potential studies. At their meetings they discussed issues with Harmful Algal Blooms within their states and began to plan an intensive synoptic survey of water quality above Bear Lake. Also, during this period, the Water Quality Committee continued a joint effort by USGS, Bear Lake Watch, PacifiCorp and the three state water quality agencies in the maintenance of two water quality platforms on Bear Lake. This five-year effort will seek to better understand changes to water quality within the lake.

At each of the meetings the three states discussed their efforts with respect to water quality administration in the river. This is most valuable as the Bear River winds its way from the headwaters to its terminus in the Great Salt Lake by crossing state lines five times, creating six separate sections of the river in the three states. Continued discussions concerning each state's water quality standards and their TMDL efforts have been most productive, and discussions at the Water Quality Committee meetings and Bear River Water Quality Task Force meetings have helped inform administrators and coordinate efforts.

2019 WATER SUPPLY AND DISTRIBUTION REPORT

2019 Water Supply and Distribution Report

OVERVIEW

The water supply in 2019 was fairly good with irrigation season stream flow varying from 94% to 132% (above the forecasted amount in the Upper Division below in the Central and Lower Divisions). Additionally, summer rains were well below normal until September. With fairly good streamflow the reservoirs fared well storing sufficient water increase the summer water supply and generally ended the irrigation season above where they began. A water emergency was declared in July in the Central Division. Water was fairly distributed between the States pursuant to the Compact.

WATER SUPPLY

Three stream gages, one in each division of the river, have been used by the Commission as indicator gages of the relative supply available for each of the divisions of the river (see Stream Gaging Program section in the Overview chapter). The Utah-Wyoming State Line and Smith's Fork gages measure a major portion of the stream flow in the Upper and Central Divisions, respectively. The Logan River is a major tributary to the Bear River in Cache Valley, which is in the Lower Division. Specific discharges, as measured by the USGS for the three gages during 2019, compared with the long-term averages, are summarized in Figure 2019.1 and are graphically illustrated in Figures 2019.2 through 2019.4 on the subsequent pages.

Figure 2019.1 shows a summary of the volumetric discharge for each of these gages for the water year. As the water supply available during the irrigation season is most critical for filling the natural flow rights, the discharge as measured at these gages during the irrigation season is also shown in Figure 2019.1.

Figures 2019.2 through 2019.4 show hydrographs for each of these three gaging stations. On each hydrograph, the mean daily flow during the irrigation season is plotted against the average of the mean daily flows for the period 1943 through 2019. The area between the 2019 hydrographs and the mean hydrographs represents the difference in volume of water discharged during 2019 versus the long-term average. This volumetric difference is illustrated by the bar charts shown on each of the figures.

2019 Water Supply Summary by Division

2019 WATER YEAR
(Discharge in Acre-feet)

GAGE	AVERAGE (1943-19)	2019	PERCENT
Upper Division (UT-WY State Line)	139,700	176,200	126%
Central Division (Smith's Fork)	137,300	131,300	96%
Lower Division (Logan River)	181,300	169,100	93%

2019 IRRIGATION SEASON
MAY - SEPTEMBER
(Discharge in Acre-feet)

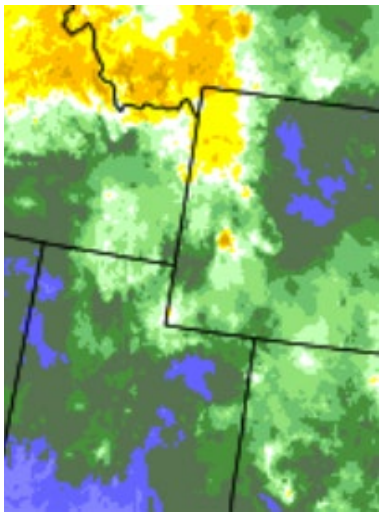
GAGE	AVERAGE (1943-19)	2019	PERCENT
Upper Division (UT-WY State Line)	115,100	152,400	132%
Central Division (Smith's Fork)	102,100	95,900	94%
Lower Division (Logan River)	121,100	115,200	95%

Figure 2019.1

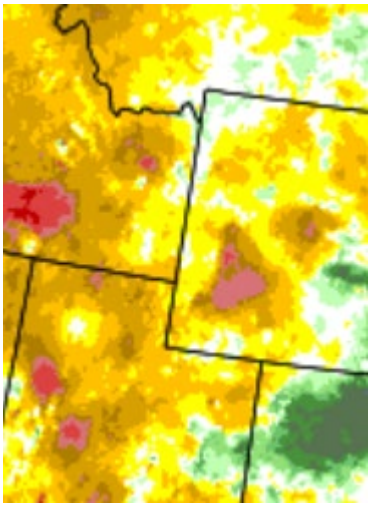
The April 1 streamflow forecasts for the April – September period varied between 110% of average on the Smiths Fork and Logan Rivers to 114% at the Utah Wyoming State Line gage. The actual runoff was 18% higher at the Utah Wyoming State Line gage and 16% and 15% lower at the Smiths Fork and Logan River gages, respectively, as compared to the forecasted amounts.

A closer look at the three hydrographs (Figures 2019.2, 2019.3 and 2019.4) is also insightful when one is trying to understand the natural flow water supply in the spring and summer of 2019. The Utah Wyoming State Line gages show significantly higher flows in June and early July with about normal flows for the remainder of the irrigation season. The Smiths Fork and Logan River gages shows slightly below normal flows in May and slightly above normal in June with really close to normal flows from July to the end of September.

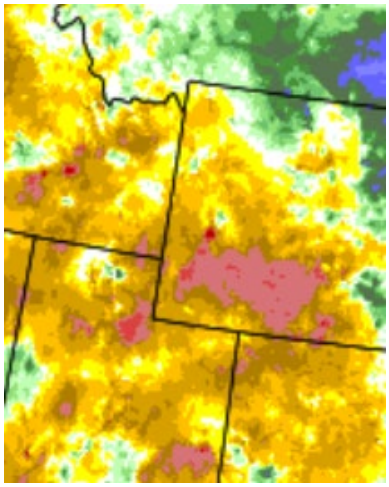
Historically the Commission has focused on the snowpack with its attendant streamflow forecasts as the main indicator of water supply. However, in recent years, the impact of summer precipitation has become more apparent as an important portion of the irrigation water supply. The summer of 2019 started out with significantly above average precipitation in April and May and then turned very dry in June, July and August with above normal precipitation returning in September (see monthly precipitation graphics below).



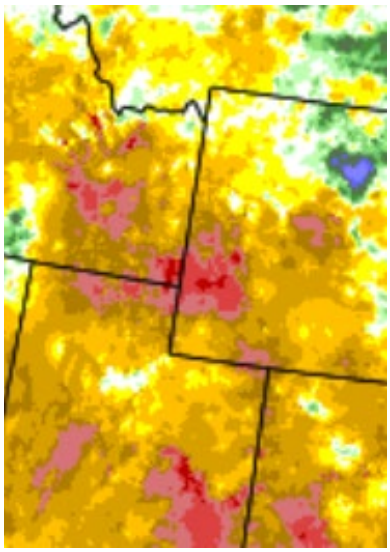
May 2019



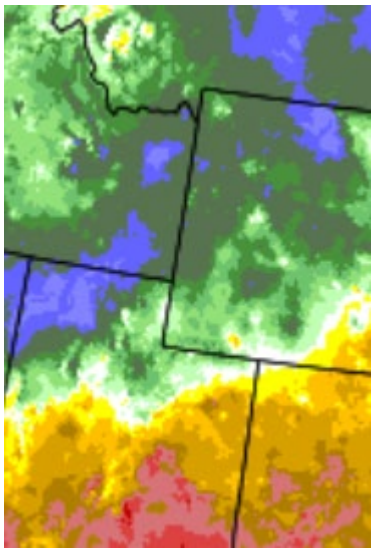
June 2019



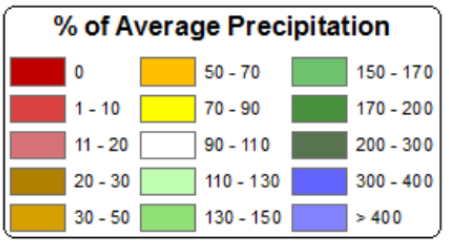
July 2019



August 2019



September 2019



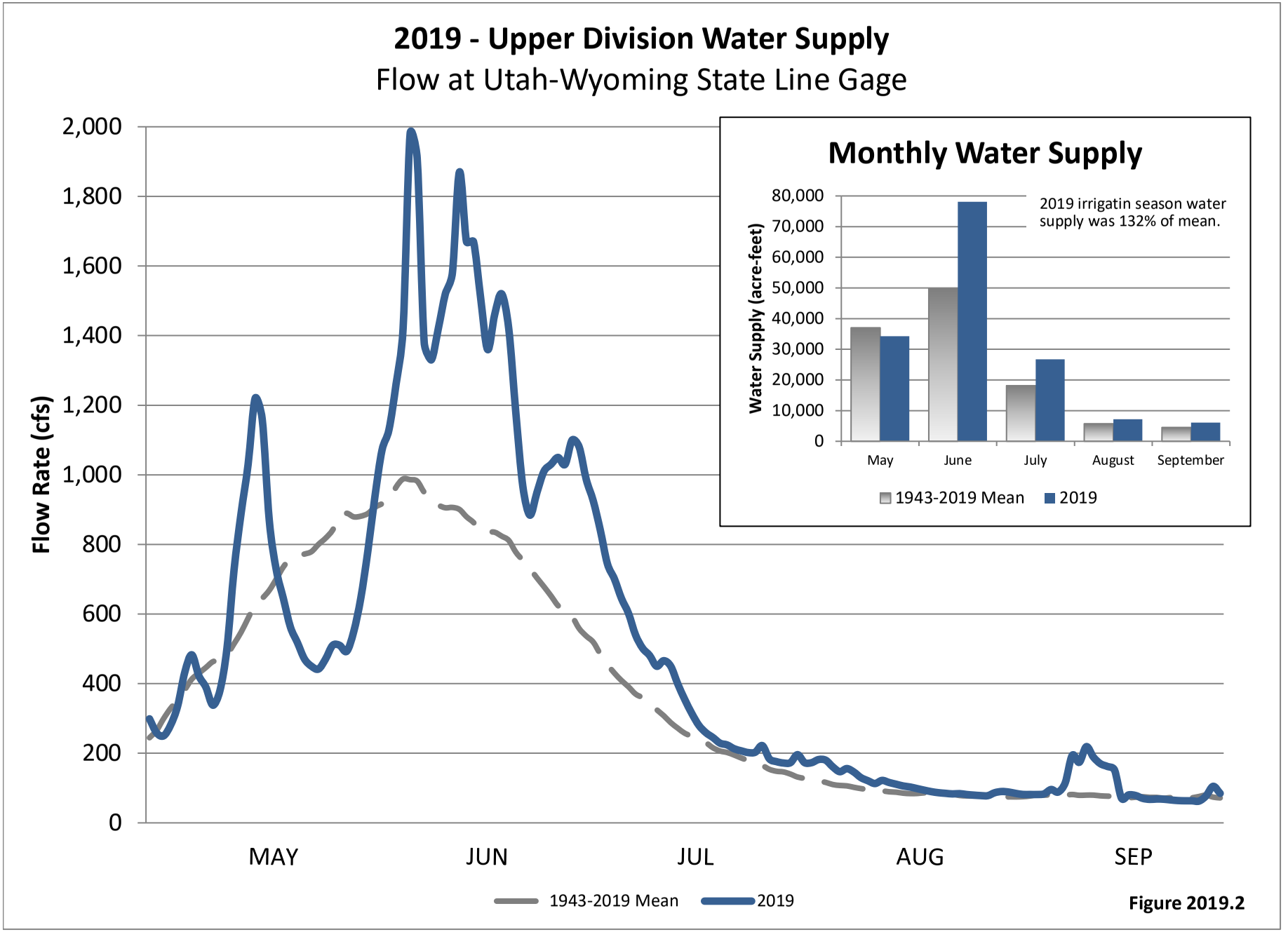


Figure 2019.2

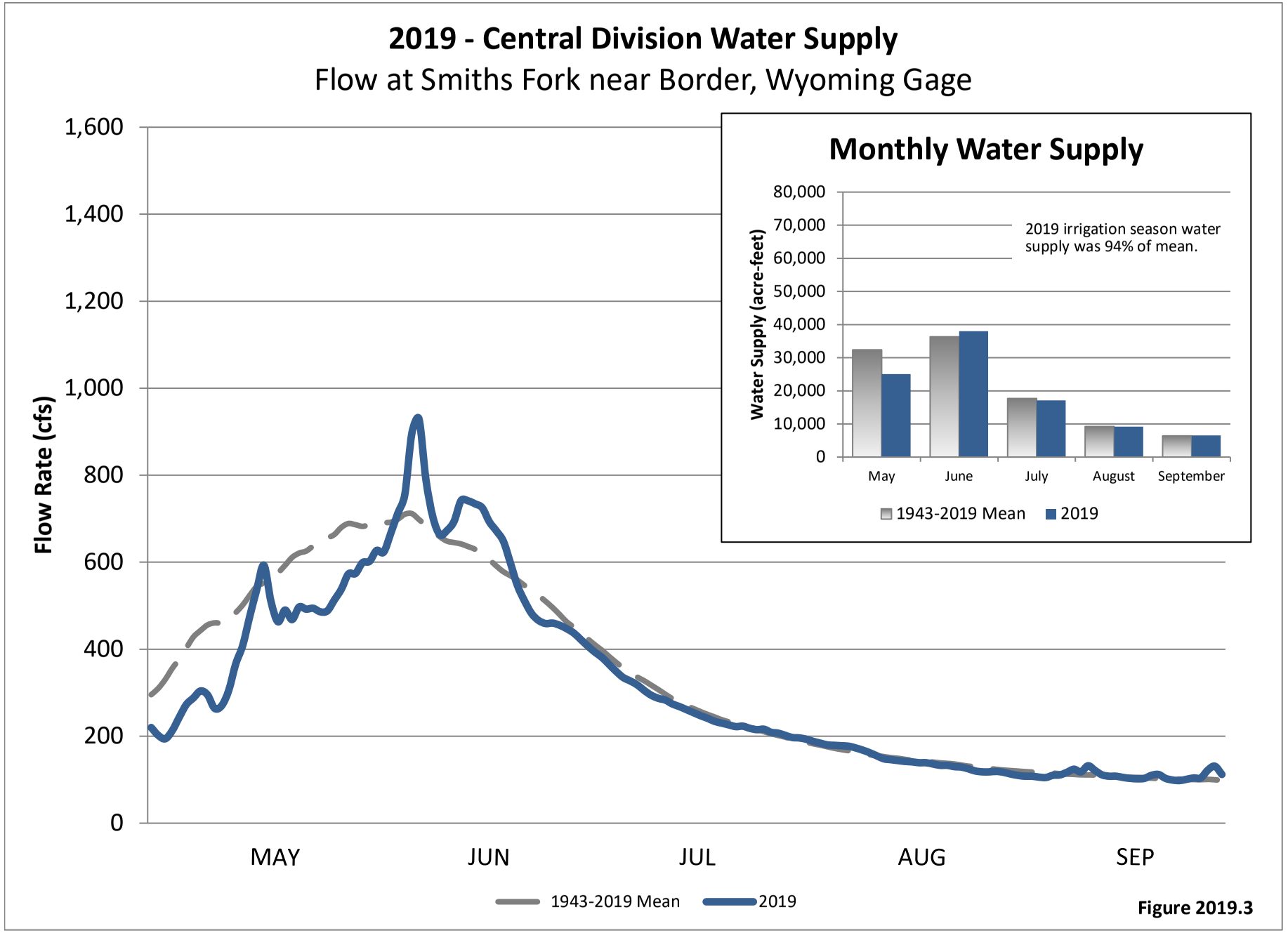


Figure 2019.3

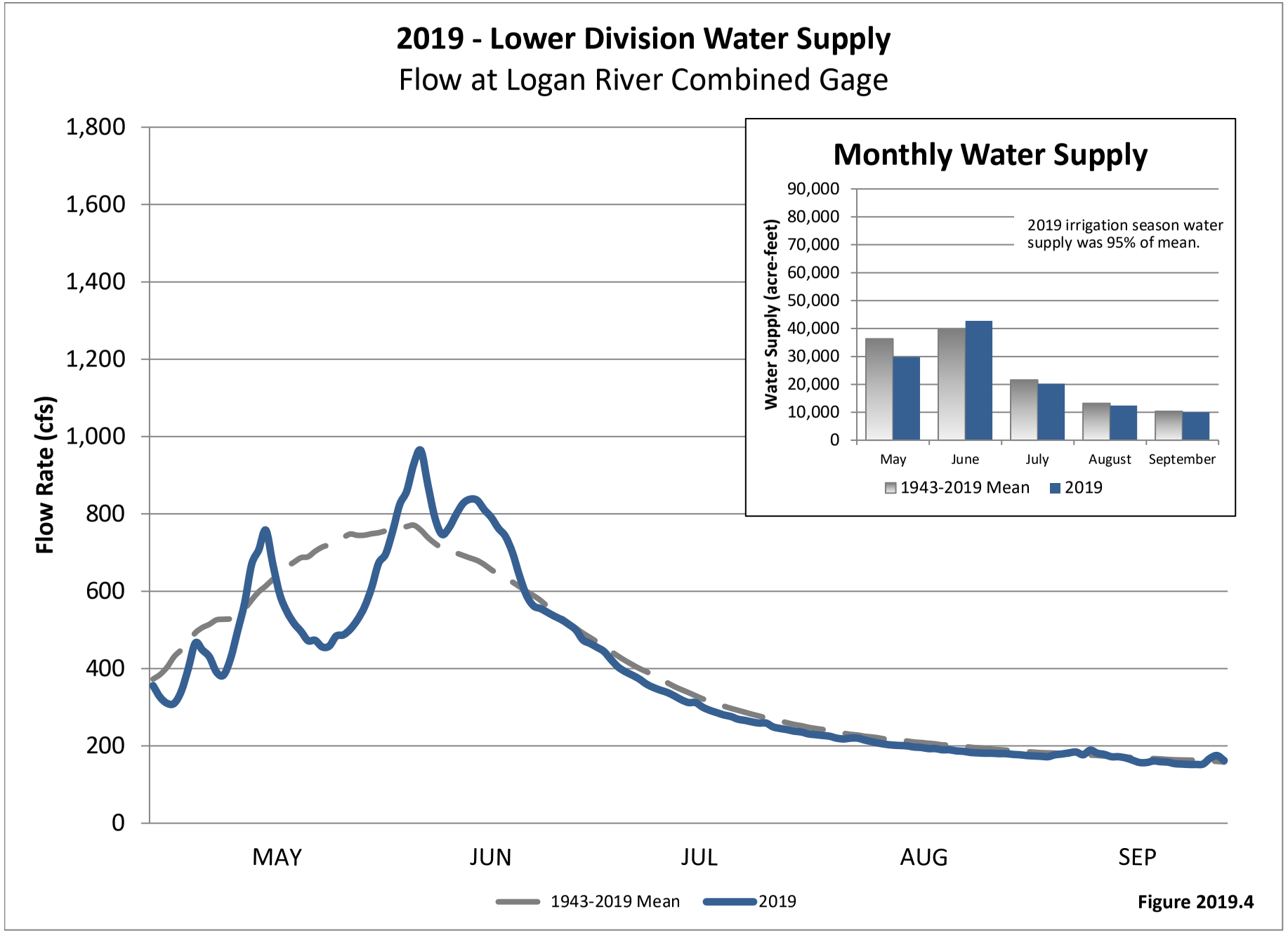


Figure 2019.4

STORAGE

Storage supplies along the Bear River have a notable impact on the water resources available for irrigation each year. Though the prior water year of 2018 somewhat depleted the significant storage from 2017, the good stream flows in 2019 led to fairly good storage. Woodruff Narrows Reservoir is the largest reservoir in the Upper Division. However, Whitney, Sulphur Creek, and Woodruff Creek Reservoirs also provide for notable amounts of winter storage.

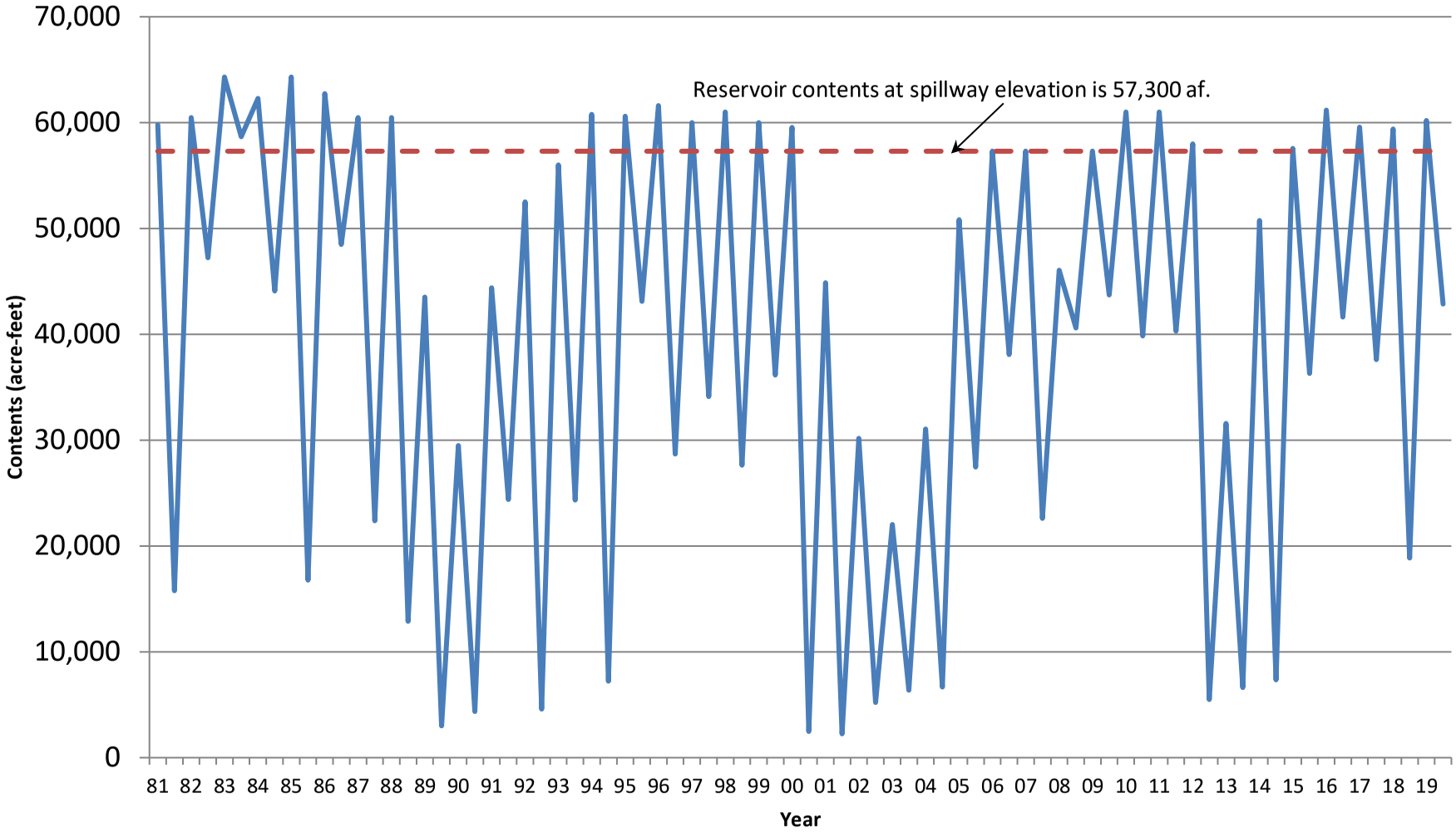
Paragraph B of Article VI of the Amended Compact, which allows for additional storage rights above Stewart Dam, also has a provision which restricts storage to occur if the water surface elevation at Bear Lake is below an elevation of 5911.0 (UP&L Datum). About half of the storage which is assigned to Woodruff Narrows Reservoir, from both the States of Utah and Wyoming, falls under this provision of the Amended Compact. Bear Lake began the storage season above 5916, and therefore, well above the 5911 foot elevation storage restriction and so this limit did not apply during the 2019 storage season.

Prior to 1997 a gage was maintained, with Commission funding, by the USGS on Woodruff Narrows Reservoir. The gage included a recorder which allowed for preservation of daily values. Since this time, periodic measurements have been kept by the Woodruff Narrows Reservoir Company in coordination with the Wyoming State Engineer's Office. In 2013 a real-time water level gage was installed at Woodruff Narrows Reservoir. Figure 2019.5 shows the maximum and minimum contents for the Woodruff Narrows Reservoir since its enlargement in 1980.

The spillway crest of Woodruff Narrows Dam is at an elevation of 6454.5 feet and when the water level is at this elevation, the content is 57,300 acre-feet. Hence, when the reservoir is spilling, the contents above this amount represent uncontrolled storage as this storage is only temporary and cannot be controlled by the reservoir company. Generally, during spill periods, the reservoir company is often releasing significant flows through its outlet works as well. Though the total contents are uncontrolled, the proportion of water discharging from the reservoir through the outlet works versus over the spillway is somewhat under the control of the reservoir company. Both discharge to the Bear River below the dam but above the stream gage, and it makes no difference to the total discharge measured into the Bear River. Though Woodruff Narrows was drafted down to 18,900 acre-feet at the end of the 2018 irrigation season, the above normal runoff in 2019 allowed Woodruff Narrows to easily fill and spill with high contents reaching 60,200 acre-feet and then, with less than 18,00 acre-feet of releases during the 2019 irrigation season, it carried into the 2020 storage season just under 43,000 acre-feet of carry-over storage.

There is no significant storage in the Central Division.

The largest and most significant storage reservoir in the Lower Division, and in the entire watershed, is Bear Lake, which is at the very top of the Lower Division. Bear Lake is operated as a storage reservoir by PacifiCorp. The Compact regulates various aspects of how PacifiCorp can manage the storage of water within Bear Lake. Figure 2019.6 summarizes the 2019 Bear Lake hydrologic information and significant operational events.



Note: Through the 1996 water year a gage with a recorder was maintained by the USGS on Woodruff Narrows Reservoir. From then until 2013 measurements are based on spot observations and estimates by the Woodruff Narrows Reservoir Company and the Wyoming State Engineer's Office. Since 2013, a gage and recorder has been maintained by the Wyoming State Engineer's Office. Contents above 57,300 af represent uncontrolled storage.

Figure 2019.5

Summary of Significant
2019 Bear Lake
Hydrologic Information and Operational Events

Date	Hydrologic Information/Event	Contents (% of Full) Discharge (% of Normal)
10-01-18	Bear Lake Beginning Elevation — 5,916.47 ft	920,664 af (65%)
11-30-18	Bear Lake Low Elevation[1] — 5,916.40 ft[1]	915,885 af (64%)
	Rainbow Inlet Canal Discharge	255,400 af (97%)
	Bear River Discharge Below Stewart Dam	2,600 af
	Bear Lake Net Runoff (Computed Total Inflow less lake Evaporation)	277,000 af (86%)
07-06-19	Bear Lake High Elevation — 5,920.28 ft	1,184,544 af (83%)
	Outlet Canal Releases: 6/20 – 10/5 (86 days irrigation releases)	175,000 af
07-11-19	Outlet Canal Maximum Release – 1,226 cfs	
	Bear Lake Storage Release[2] (irrigation release 70,100 acre-feet)	112,000 af
09-30-19	Bear Lake Ending Elevation — 5,917.90 ft	1,018,948 af (72%)
	Bear Lake Settlement Agreement "System Loss" Volume	33,258 af

[1] Low contents prior to start of storage (occurred in previous water year)

[2] Net irrigation storage release from Bear Lake, subtracting Rainbow inflow and the decreed adjustment for the natural yield of Bear Lake and Mud Lake area. Includes system loss volume.

[3] Due to uncontrolled flow from (welcome) rain events. Whenever water flows below Cutler during the irrigation season, any storage water in the system at Cutler is the first water out. Natural flow goes to irrigators.

Figure 2019.6

Bear Lake began the 2019 water year in storage operations at an elevation of more than 5916 and contents of nearly 921,000 acre-feet. It reached a high elevation of 5920.28 on July 6 before storage releases of 112,000 acre-feet drew it down to an elevation of 5917.90 on September 30. Noteworthy is that the Rainbow Inlet flows were nearly 100% of normal with 255,400 acre-feet and the net runoff to the Lake of 86% of normal. Bear Lake ended the year with 72% contents, higher than it began the year.

Figure 2019.7 is a graph which shows the annual maximum and minimum elevations of Bear Lake since 1915. The beginning storage elevation (or minimum) occurred at the end of November after which Bear Lake gained nearly four feet in elevation and only dropped a little more than two feet by the end of the irrigation season. Figure 2019.8 is an area plot showing the daily contents in Bear Lake over the past ten years. This hydrograph and Figure 2019.7 show the impact of two very significant water years amid average to well below average water years over the last ten-year period.

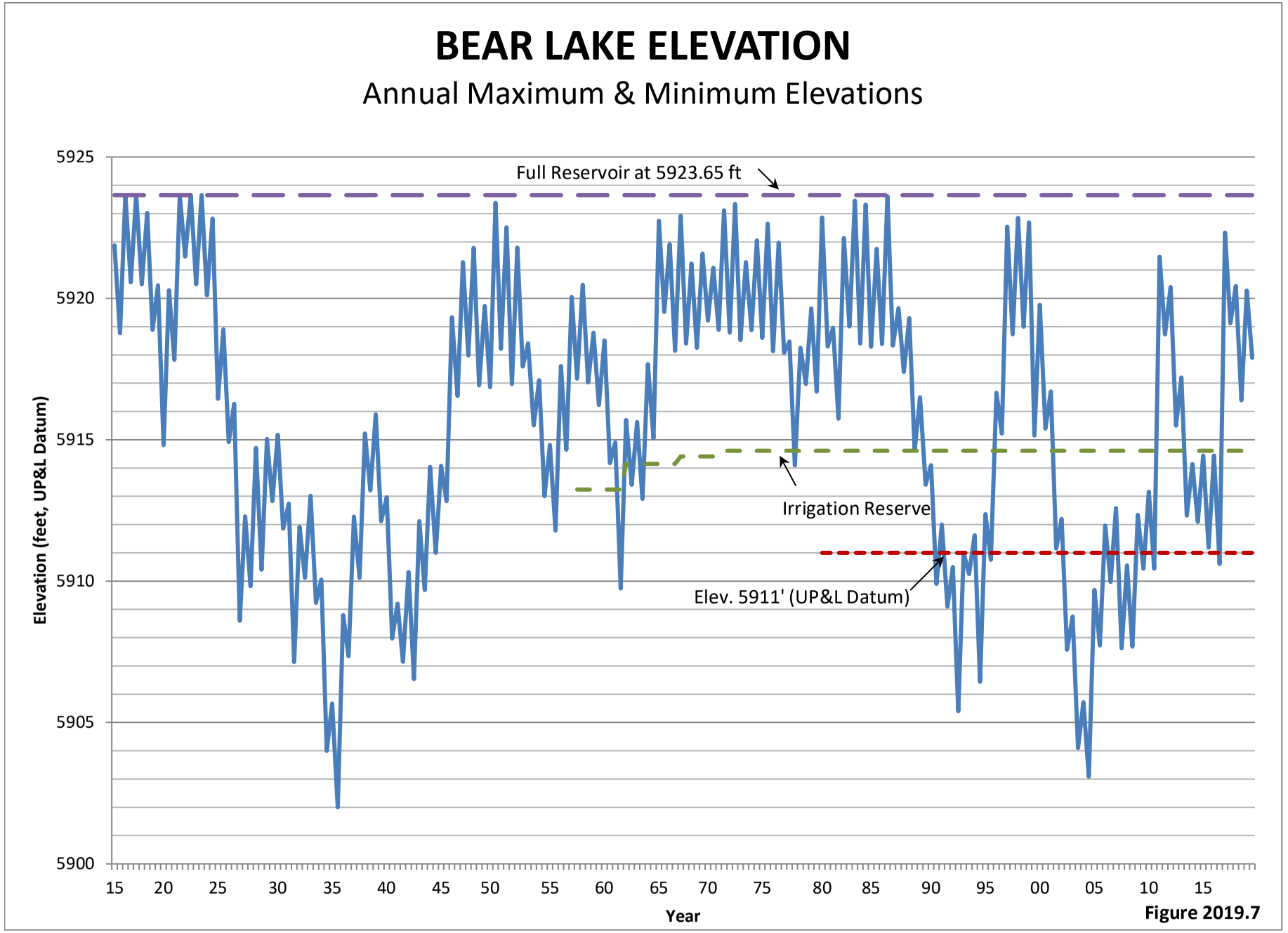


Figure 2019.7

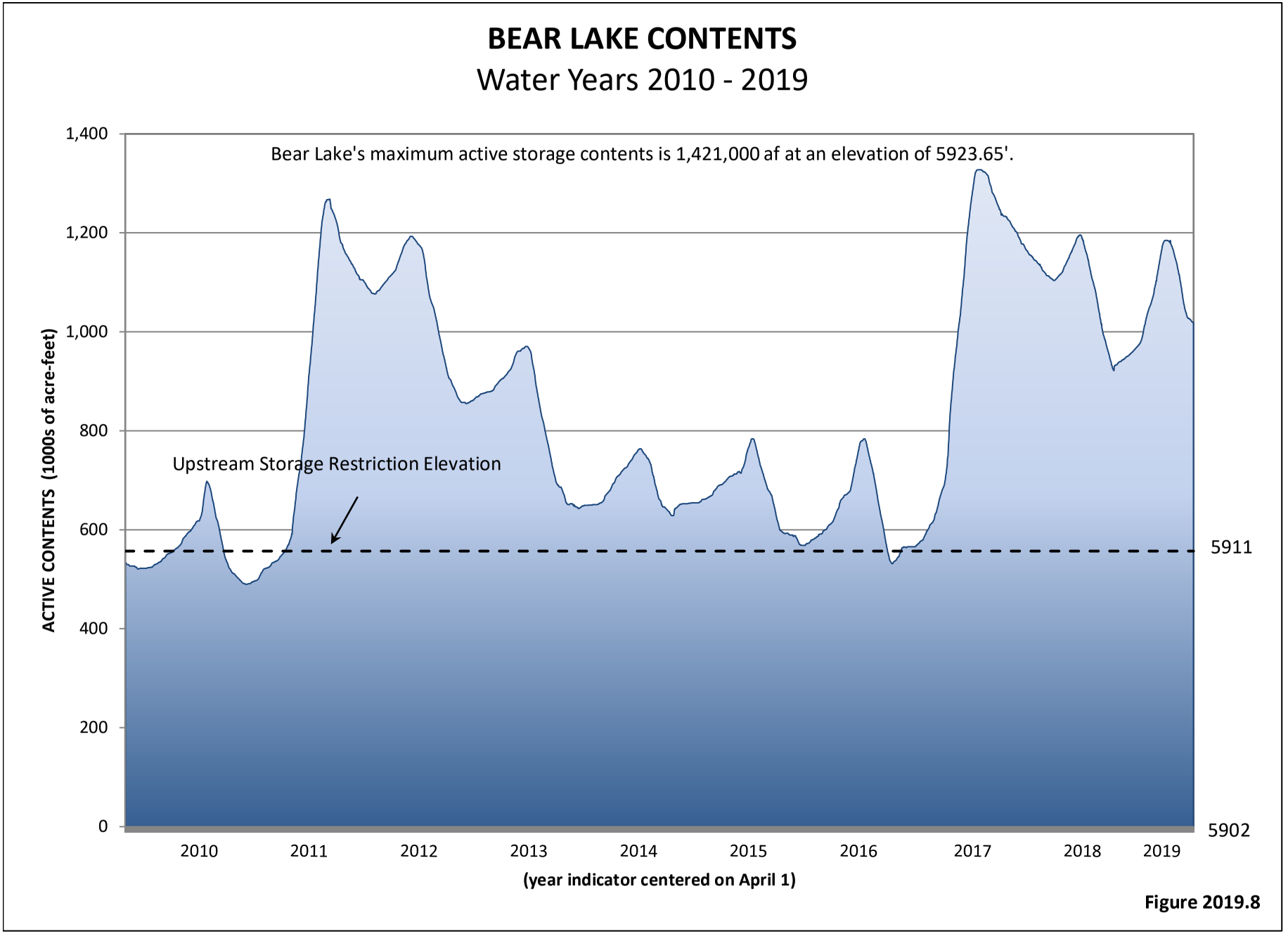


Figure 2019.8

STREAMFLOW DISTRIBUTION

General

The water administration in 2019 in the three divisions remained similar to prior years. There were no changes to the River Commissioners/Watermasters in the other sections from the previous year. Don Barnett continued to serve as Engineer-Manager of the Bear River Commission. Each River Commissioner/Watermaster works under the direction of his State Engineer's office, but coordinates with the Commission's Engineer-Manager with regard to total diversions in each of the various sections as defined by the Compact.

During the 2019 irrigation season, the following River Commissioners/Watermasters measured and distributed water in their sections of the river:

DIVISION	SECTION	RIVER COMMISSIONER/ WATERMASTER
Upper	Upper Utah	Travis McInnis
	Upper Wyoming	Travis McInnis
	Lower Utah	Ron Hoffman
	Lower Wyoming	Ethan Overton
Central	Wyoming	Ethan Overton
	Idaho	Josh Hanks
Lower	Idaho	Josh Hanks
	Utah	Jim Watterson

Upper Division

The Upper Division divertible flow, as defined by the Compact, consists of a summation of the diversions of all of the canals in the four sections, plus waters bypassing Pixley Dam, less that portion of water diverted by the canals which is attributable to storage releases from Whitney, Sulphur Creek, Woodruff Narrows and Grassy Lake Reservoirs. The Compact provides that when the total divertible flow is less than 1250 cfs, a water emergency exists. Given the very high runoff in the Upper Division, the total divertible flow did not drop below this amount until July 11 and then remained below for the rest of the irrigation season. For a period from mid-July through mid-August the Upper Wyoming Section was diverting above what would have been its allocation, nevertheless, there was no request for interstate regulation. The Lower Utah Section received under its allocation from mid-July through the remainder of the season though after mid-August if was not affected by upstream irrigation use. In recent years, users in the Upper Division have at times opted for the flexibility available through unofficial general cooperation and sharing of water rather than direct Compact administration. This occurred in 2019.

During years when a water emergency has been declared, the regulation of the river is based on the weekly diversions as called in by the respective River Commissioners. At the end of each year, these River Commissioners submit to their respective State Engineers a complete written report of water deliveries. It is this information which is presented in the graphs and tables on the following pages and not the weekly totals called in during times of regulation. The weekly call-in totals, which are received during the irrigation season, differ slightly from the year-end data because of timing of call-ins and call-outs, shifts on canal ratings and other factors.

Figures 2019.9 and 2019.10 show the divertible flow and natural flow diversions in the Upper Wyoming and Lower Utah Sections, respectively. Also shown on the graphs (magenta line) is what would have been the Compact allocation had a water emergency been imposed. As can be seen in Figure 2019.10, after the high runoff, diversion in the Lower Utah Section was below what would have been its allocation. Figure 2019.11 is a tabulation by month of canal diversions and shows the calculation of divertible flow (less storage release) and allocations to the respective sections, pursuant to the Compact, had a water emergency been declared. The values shown for each canal and pump in this figure represent total diversion (including both natural flow and storage), and then the storage water is subtracted out of the section totals before computing the total divertible flow.

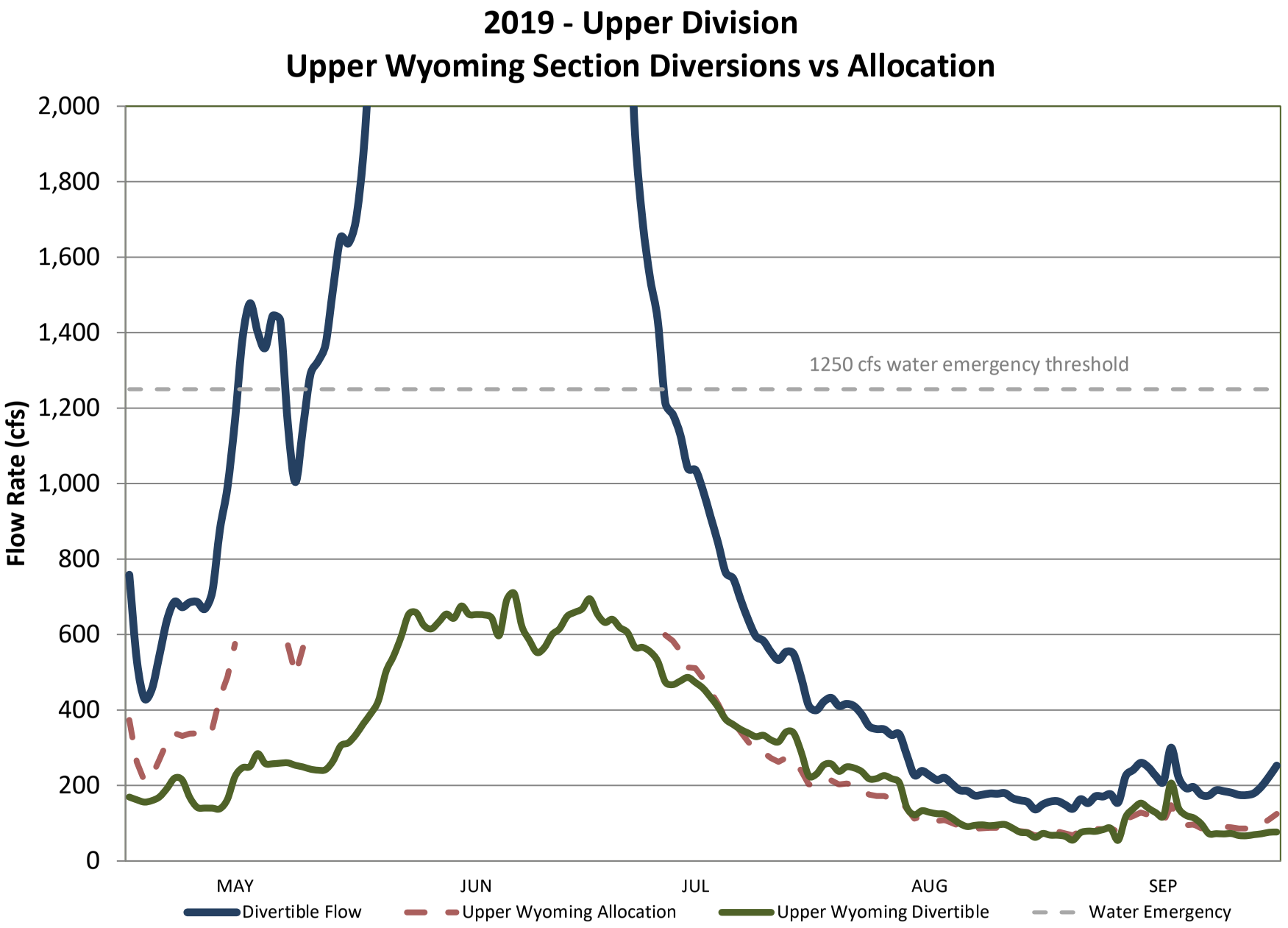


Figure 2019.9

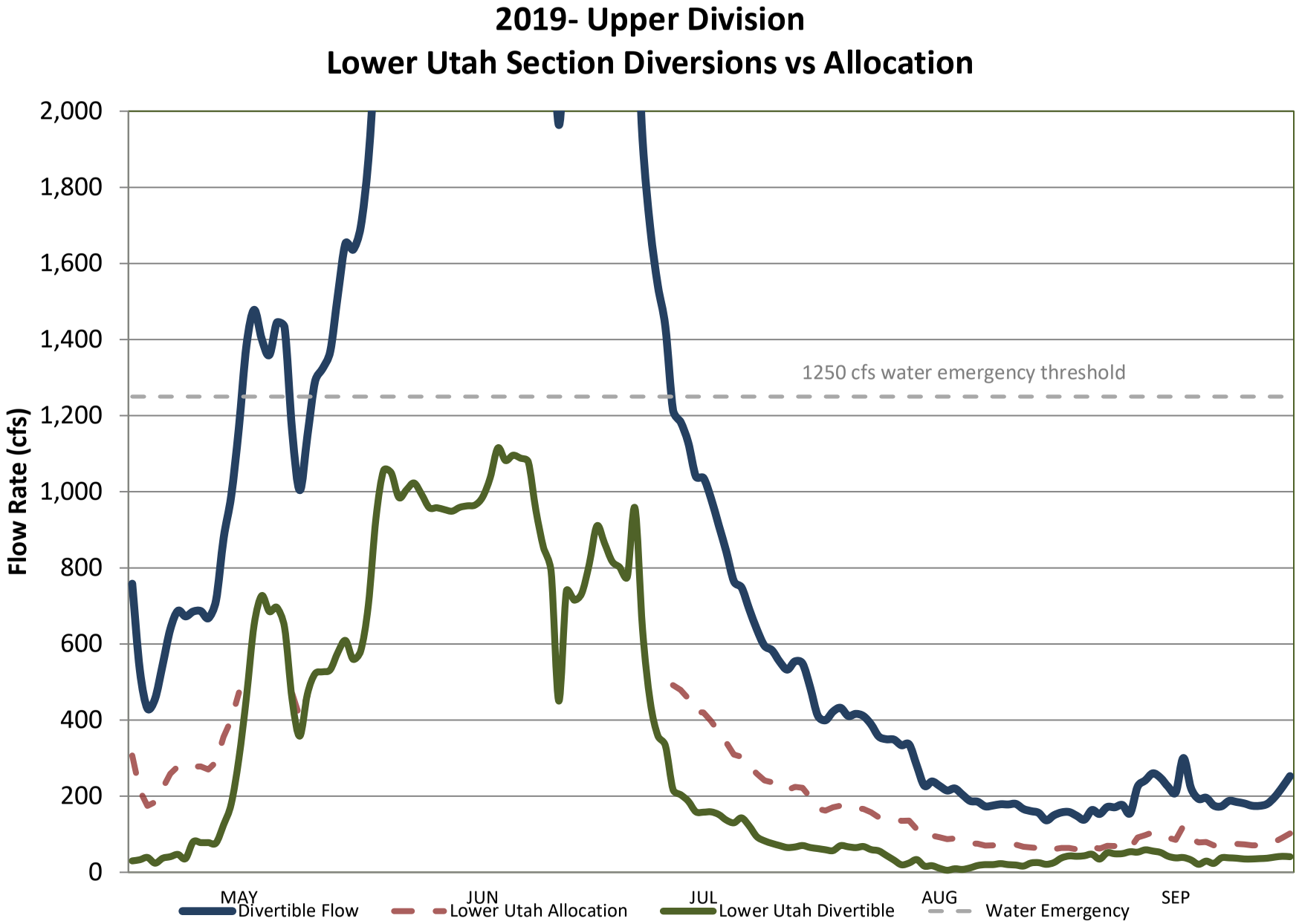


Figure 2018.10

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

May

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
UPPER UTAH SECTION																															
Hovarka (E Fk)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	10	10	10	10	10	10	10	10	10	10	10	10
Hatch (W Fk)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UPPER WYOMING SECTION																															
Hilliard East Fork (E Fk)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lannon & Lone Mtn	0	0	0	0	0	0	6	12	12	12	12	12	12	12	12	14	17	15	14	14	13	13	13	12	12	12	12	12	12	13	13
Hilliard West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	1	1	1
Bear (Bear R)	1	1	1	1	1	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	3	3	3	3	4	4	5	5	5	17
Tropic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	1	1	2	4	1	4	5	4	4	8	8	6	10	11	11	12	3	1	1	5	11	11	9	8	8	8	4	3	3	4	5
Crown & Pine Grove	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
McGraw	1	1	1	1	1	1	5	19	18	17	17	18	16	19	18	19	19	17	12	5	5	5	5	4	4	4	4	3	3	6	14
Lewis (D4)	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Homer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lewis and Blanchard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myers No. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coffman	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Knoder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myers No. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	7	7	4	4	4	5	5	5	3	2	5
Myers Irr	3	6	6	6	6	7	9	9	9	8	8	7	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Evanston Pipeline	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3
Booth	0	0	0	4	10	11	11	11	11	10	10	11	11	12	13	14	5	5	4	4	6	8	8	8	8	8	7	7	8	12	12
Anel Irr	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Cornelison	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
Ev Water Supply (and Anderson)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Knight No. 2 (and No. 1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	7	7	7	8	9	9	12	12	13	15	17
Wilson Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4
Faulkner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Rocky Mtn & Blyth (and Crompton)	1	1	1	1	1	0	0	0	0	0	0	0	0	2	4	8	8	8	7	7	7	7	7	7	7	5	3	3	2	1	1
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5
Sim's Creek Slough Diversion	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	2	3	3	6	10	10	8	10
John Sims	4	4	3	3	4	4	4	4	4	3	3	3	4	4	8	12	9	13	18	17	21	24	22	18	13	13	13	15	19	19	19
Michael Sims	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	10	10	10
S. P.	0	0	0	0	0	3	6	4	4	4	4	3	3	2	2	1	6	17	11	11	11	11	11	11	11	10	11	11	11	11	11
Almy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
Sims, Blight & Turner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	15	15	15	15	15	15	13	13	13	13	13	13	13	20	20	20
Bowns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	10	10	10
Chapman (Headgate)	123	107	98	98	103	114	121	98	53	24	24	24	25	26	28	28	62	107	107	101	93	89	89	88	87	86	87	89	91	92	83
Chapman (Stateline, incl'd above)	121	104	89	83	92	106	111	96	56	20	18	18	17	17	18	19	34	68	71	63	59	56	59	62	64	66	70	74	78	70	62
Morris Bros Irr (Lower)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bowns & Bruce	1	1	1	1	1	2	2	2	2	2	2	2	2	2	15	15	15	15	15	15	15	12	12	12	12	12	12	12	10	10	10
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunnel	1	1	1	1	1	2	2	2	2	3	3	3	4	7	26	36	7	5	3	2	2	1	1	1	1	1	1	13	21	21	21
Francis-Lee	3	3	3	3	3	3	3	2	2	3	3	3	0	14	20	21	22	22	21	22	23	24	24	23	24	24	24	24	28	24	24
Bear River Canal	24	30	30	30	30	30	31	32	33	33	33	33	33	35	36	36	48	63	59	55	52	57	62	61	54	49	49	49	49	49	49
TOTAL UPPER WY DIV.	172	164	159	163	172	195	222	217	172	145	145	143	141	167	227	251	254	321	310	305	305	312	310	304	292	284	285	308	353	356	378
Whitney Storage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulphur Creek Storage	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	3	2	2	2	2	2	2	2	2	2	3
LOWER UTAH																															
Neville	0	0	0	0	0	0	0	0	0	0	1	1	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Booth	0	1	1	0	0	0	0	0	0	0	0	0	2	12	19	21	23	23	21	19	17	19	24	25	23	23	23	23	23	23	23
Rees Land & Livestock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	19	20	21	21	19	18	18	21	22	21	20	20	20	20	21
Crawford-Thompson	9	7	9	7	10	14	8	5	5	5	5	5	5	5	97	160	155	140	155	153	139	138	147	151	149	156	150	150	152	149	150
Randolph-Woodruff	12	12	12	12	12	12	13	15	55	55	55	55	100	145	162	182	203	216	204	186	169	187	225	252	257	274	288	287	294	281	283
Dykens	2	6	8	5	5	5	17	7	10	8	7	6	5	5	6	23	46	53	51	45	40	41	49	54	51	50	51	52	53	51	50
Lazy P Ranch Pump (G.R. Peart)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Randolph-Sage Creek	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	20	111	146	159	163	154	147	144	142	134	131	127	128	130	122	113
Hoffman Brothers Ranch Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	0
McMinn	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	1	1	11	31	33	38	41	40	40	41	44	46	49
Enberg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	9	10	17	22	22	21	21	22	23	23
BQ Westside	2	2	3	4	4	4	4	4	4	4	4	4	4	4	4	32	89	123	146	161	145	117	131	162	193	193	187	191	194	204	200
Burdette Weston Pumps															0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dan Peart Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	1	1	1	0	0	0	0
TOTAL LOWER UT DIV.	30	33	39	34	37	41	47	36	80	78	78	77	125	180	298	461	650	727	764	755	706	713	787	868	897	915	913	919	938	925	916
Woodruff Narrows Storage Release	-363	-132	-25	13	-21	-76	-79	-63	-41	-32	2	-37	-155	-198	-206	-232	-150	40	153	125	127	373	582	544	508	517	508	460	451	489	451
LOWER WYOMING																															
Johnson Pipelines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weston Ranch Pumps	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
McFarland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	15	15	15
B.Q. Dam Slough (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	30	28	28	29	29	29	29	27	28	28
B.Q. Dam East	0	0	0	0	0	0	8	3	0	0	0	0	0	0	10	37	42	48	59	66	79	131	130	141	158	160	157	161	144	135	136
Pixley Irr (East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	26	26	26	26
Pixley Irr (West)	22	23	23	30	35	35	35	38	40	45	48	49	49	47	45	41	39	34	36	43	44	30	28	31	40	43	48	52	62	66	65
C-12 Pipeline and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Willis Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL LOWER WY DIVERSIONS	22	23	23	30	35	35	43	41	40	45	48	49	49	47	55	79	82	82	94	110	132	192	187	202	228	233	235	282	274	270	270
Bear River below Pixley Dam	174	181	187	244	283	294	298	318	355	389	402	411	411	401	385	366	346	315	341	393	409	308	295	310	373	401	436	460	531	567	576
Total Divertible Flow	758	531	430	456	546	639	687	672	685	686	668	714	878	989	1167	1385	1478	1402	1359	1445	1432	1159	1004	1147	1290	1324	1369	1517	1653	1636	1696
Upper UT Allocation	5	3	3	3	3	4	4	4	4	4	4	4	5	6	7							7	6	7							
Upper UT Divertible	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	10	10	10	10	10	10	10	10	10	10	10	10
Upper WY Allocation	374	262	212	225	269	315	339	332	338	338	329	352	433	488	575							571	495	565							
Upper WY Divertible	169	162	156	160	170	193	220	215	169	142	140	140	138	164	224	247	250	285	258	258	259	260	254	249	243	241	242	265	305	313	334
Lower UT Allocation	307	215	174	185	221	259	278	272	277	278	270	289	356	401	473							469	407	465							
Lower UT Divertible	30	33	39	24	37	41	47	36	80	78	78	77	125	180	298	461	650	727	685	696	644	452	358	468	522	527	532	578	609	560	582
Lower WY Allocation	73	51	41	44	52	61	66	65	66	66	64	69	84	95	112							111	96	110							
Lower WY Divertible	22	23	23	28	35	35	43	41	40	45	47	49	49	47	55	79	82	75	68	88	110	128	88	110	142	145	149	204	198	187	194

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2019.11

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

June

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
UPPER UTAH SECTION																														
Hovarka (E Fk)	13	17	18	18	18	18	19	19	18	18	18	18	18	18	18	18	18	18	18	18	18	18	17	17	18	18	18	18	18	18
Hatch (W Fk)	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
UPPER WYOMING SECTION																														
Hilliard East Fork (E Fk)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	25	27	28	30	32
Lannon & Lone Mtn	14	14	15	17	18	19	25	27	23	22	22	23	24	27	21	21	20	20	26	28	24	16	15	15	15	15	17	23	23	23
Hilliard West Side	1	1	2	16	37	38	39	39	37	37	37	37	37	34	32	31	30	29	28	28	26	29	34	33	34	34	34	34	35	35
Bear (Bear R)	46	55	67	73	78	84	76	69	58	59	71	69	68	64	60	58	56	54	54	77	87	82	78	72	86	100	104	100	94	94
Tropic	0	0	0	1	4	6	6	3	3	6	6	5	5	4	4	6	7	6	6	4	4	3	2	1	5	11	8	8	8	8
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	6	8	9	9	9	7	9	3	2	2	2	4	12	11	5	8	7	6	7	11	9	6	5	4	4	3	3	3	3	4
Crown & Pine Grove	2	5	6	16	24	24	18	15	12	15	21	26	21	15	13	12	17	18	20	22	20	15	10	9	9	10	12	17	21	22
McGraw	19	24	27	28	29	32	36	34	28	27	23	15	15	14	11	10	9	8	17	28	27	15	8	8	9	9	12	22	22	22
Lewis (D4)	0	3	4	3	2	2	16	24	23	23	22	22	21	21	20	20	19	18	18	18	17	15	11	7	7	7	7	7	9	8
Homer	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
Lewis and Blanchard	0	0	0	0	0	7	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5	5	5	5	5	5	5	5	5
Myers No. 2	0	0	0	0	1	3	6	7	6	6	6	5	5	6	5	5	4	4	3	3	2	3	3	3	3	3	3	4	4	4
Hare	0	0	0	0	0	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Coffman	1	1	1	1	1	2	3	3	3	3	3	3	3	3	3	3	4	6	6	6	6	6	6	6	6	6	6	6	6	6
Knoder	0	0	0	0	2	3	4	3	1	1	1	2	2	3	4	2	2	2	2	3	4	4	3	3	3	3	3	3	4	4
Myers No. 1	6	6	7	7	7	8	7	6	6	6	7	9	7	6	6	6	5	5	5	5	5	4	4	4	8	5	5	5	5	5
Myers Irr	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	2	2	2	2	2	2	2	2	2
Evanston Pipeline	3	3	3	3	5	6	6	5	5	5	7	9	9	9	8	8	10	11	11	11	9	11	11	11	11	7	2	13	13	13
Booth	13	14	14	13	13	12	10	10	14	15	16	16	21	21	20	19	20	27	23	15	19	19	17	16	16	16	17	17	18	18
Anel Irr	3	4	6	9	11	12	12	8	0	10	15	15	15	15	15	15	15	15	15	16	15	15	15	15	15	15	15	15	15	15
Cornelison	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8	8	8	8	8	8	8	8	8	8	8	8
Ev Water Supply (and Anderson)	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Knight No. 2 (and No. 1)	0	0	0	0	0	0	0	0	0	2	7	7	7	6	6	5	3	3	3	3	2	2	2	2	2	2	3	9	9	9
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	18	17	16	15	14	16	18	22	19	17	17	17	15	22	21	20	20	20	18	18	18	20	18	16	16	19	19	19	19	19
Wilson Irr	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5
Faulkner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rocky Mtn & Blyth (and Crompton)	1	1	1	1	1	1	1	5	8	8	8	7	8	17	17	16	16	15	15	15	15	15	15	13	12	10	9	8	6	5
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7
Sim's Creek Slough Diversion	10	9	9	9	9	10	10	10	9	8	8	8	8	9	9	9	8	8	8	9	9	8	8	7	8	8	8	8	8	8
John Sims	21	22	25	23	21	19	16	15	31	30	30	32	34	30	15	15	15	14	15	15	15	15	14	14	14	13	12	12	11	11
Michael Sims	10	10	10	10	10	10	10	10	10	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	5	5	5	5	5	5
S. P.	11	10	12	15	14	15	14	9	7	6	6	5	5	5	6	6	5	6	7	7	7	6	5	4	5	8	8	9	9	8
Almy	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5
Sims, Blight & Turner	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	12	12	12	12	12	12
Bowns	1	1	1	1	1	1	1	1	1	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	5	5	5	5	5	5
Chapman (Headgate)	70	74	76	78	80	94	138	150	138	122	120	123	128	137	147	144	142	134	132	136	149	156	146	136	135	135	139	136	141	142
Chapman (Stateline, incl'd above)	48	49	51	51	52	57	91	110	111	93	88	92	90	82	95	83	79	71	66	68	73	81	79	73	69	77	78	74	71	71
Morris Bros Irr (Lower)	0	0	0	0	0	0	0	1	1	0	0	2	4	7	8	8	7	5	2	2	2	1	1	0	0	0	1	1	1	1
Bowns & Bruce	10	10	10	10	10	10	10	10	10	10	10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunnel	23	25	28	29	29	31	34	39	40	29	22	22	23	24	26	25	25	23	22	23	22	21	19	17	17	17	17	17	25	30
Francis-Lee	24	24	24	24	24	24	24	24	24	24	24	24	0	24	23	24	25	26	30	31	30	30	29	28	27	28	29	29	0	28
Bear River Canal	49	49	49	49	47	49	49	49	49	50	50	50	50	50	53	61	66	67	64	62	62	61	59	57	57	57	58	59	60	61
TOTAL UPPER WY DIV.	407	434	468	504	547	599	659	663	630	620	640	663	652	684	661	661	659	653	664	700	716	690	650	614	627	659	671	705	688	726
Whitney Storage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulphur Creek Storage	3	3	3	3	4	5	5	5	5	5	6	9	9	8	8	7	7	9	8	9	7	8	8	8	9	5	0	0	0	0
LOWER UTAH																														
Neville	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5
Booth	23	23	23	23	23	23	23	23	23	23	23	23	23	24	24	27	30	30	26	24	23	23	22	21	22	24	25	26	26	26
Rees Land & Livestock	22	22	22	22	22	22	21	21	21	21	21	22	22	22	22	22	23	25	32	38	37	37	36	33	30	20	16	14	12	10
Crawford-Thompson	150	150	153	154	155	156	158	151	147	146	146	148	150	157	158	144	147	157	151	156	163	161	152	139	153	164	165	165	166	166
Randolph-Woodruff	285	286	276	261	269	270	277	276	279	292	297	290	288	290	290	305	318	313	307	310	309	304	297	299	299		309	305	302	308
Dykens	51	51	52	52	53	52	54	53	53	53	54	55	56	46	38	42	49	52	52	51	50	51	50	47	45	45	47	49	49	51
Lazy P Ranch Pump (G.R. Peart)	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1
Randolph-Sage Creek	113	113	114	119	129	131	130	107	74	73	73	72	73	74	97	112	112	118	116	110	109	107	106	104	100	97	97	106	105	111
Hoffman Brothers Ranch Pump	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
McMinn	53	54	54	56	58	59	61	60	61	61	61	73	77	70	67	68	71	76	81	86	88	88	87	86	84	82	81	82	84	85
Enberg	22	23	24	25	27	29	30	30	25	22	21	21	21	21	21	21	22	24	31	34	22	15	15	41	30	2	0	0	0	0
BQ Westside	224	324	346	330	241	255	260	263	266	258	248	240	243	252	241	235	257	312	280	280	280	290	290	282	260	255	224	211	276	333
Burdette Weston Pumps	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	2	3	3	5	2	0	0	3	1	0	0	1
Dan Peart Pump	0	0	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3
TOTAL LOWER UT DIV.	948	1051	1072	1050	985	1005	1023	993	958	958	953	949	959	963	965	986	1037	1115	1082	1096	1088	1085	1064	1059	1030	700	973	966	1029	1100
Woodruff Narrows Storage Release	345	194	68	-48	-69	-186	-373	-877	-1046	-460	-306	-382	-490	-560	-830	-580	-300	0	70	-50	-80	80	204	312	352	366	349	370	392	419
LOWER WYOMING																														
Johnson Pipelines	0	0	0	2	6	6	1	0	0	2	6	7	6	7	7	7	7	6	6	6	5	6	7	7	7	6	6	4	1	0
Weston Ranch Pumps	0	0	0	0	0	0	0	0	0	0	1	3	3	3	3	3	3	3	4	6	2	3	1	5	6	5	7	6	3	3
McFarland	15	15	15	15	15	11	11	11	11	11	14	14	14	14	14	14	14	14	13	13	13	13	13	13	13	13	13	5	5	5
B.Q. Dam Slough (West)	28	28	28	27	27	27	28	28	27	27	27	26	26	24	22	22	21	23	26	26	23	22	23	23	22	21	17	14	15	14
B.Q. Dam East	135	135	138	140	137	138	154	159	158	158	157	153	150	143	139	132	128	134	145	154	154	145	145	143	139	130	113	103	103	104
Pixley Irr (East)	26	26	26	26	26	34	34	34	34	34	34	34	34	34	34	34	34	34	31	31	31	31	31	31	31	31	31	31	31	31
Pixley Irr (West)	65	65	65	66	66	66	68	68	68	68	68	68	67	65	64	62	60	60	62	64	65	68	69	69	69	68	65	62	58	56
C-12 Pipeline and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	2	1	2	0
Willis Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4
TOTAL LOWER WY DIVERSIONS	270	270	272	276	276	281	297	300	299	300	307	305	299	290	283	274	267	274	291	305	299	293	293	297	294	279	259	231	223	218
Bear River below Pixley Dam	581	584	588	591	592	584	598	609	615	618	620	617	614	603	593	578	565	566	580	596	619	659	683	693	693	676	645	610	580	548
Total Divertible Flow	1871	2159	2347	2488	2487	2672	2967	3460	3565	2973	2841	2930	3027	3114	3346	3093	2844	2622	2561	2761	2817	2660	2499	2364	2304	1964	2221	2164	2149	2195
Upper UT Allocation																														
Upper UT Divertible	13	17	18	22	22	22	23	23	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22	22	22	22	22	22
Upper WY Allocation																														
Upper WY Divertible	364	391	425	501	543	594	654	658	625	615	633	654	643	676	653	653	652	644	597	692	709	622	585	552	566	600	616	648	659	668
Lower UT Allocation																														
Lower UT Divertible	702	930	1056	1050	985	1005	1023	993	958	958	953	949	959	963	965	986	1037	1115	1082	1096	1088	1078	951	853	790	450	739	715	732	810
Lower WY Allocation																														
Lower WY Divertible	211	237	261	276	276	281	297	300	299	300	307	305	299	290	283	274	267	274	280	305	299	279	258	244	234	217	199	168	156	147

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2019.11 (cont.)

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

July

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
UPPER UTAH SECTION																															
Hovarka (E Fk)	18	18	18	17	17	17	17	17	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	15	15
Hatch (W Fk)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
UPPER WYOMING SECTION																															
Hilliard East Fork (E Fk)	33	33	32	31	30	30	29	29	29	29	30	30	30	30	30	30	30	30	29	29	29	29	29	29	29	29	29	28	12	0	0
Lannon & Lone Mtn	23	22	21	23	21	22	21	21	21	21	21	21	21	21	21	21	20	20	19	19	19	19	19	19	19	19	19	16	12	12	12
Hilliard West Side	35	34	34	33	32	32	31	30	28	26	24	25	30	30	30	29	29	28	28	27	27	27	27	27	27	26	27	28	20	1	1
Bear (Bear R)	93	91	92	96	89	85	78	84	91	98	105	105	106	106	104	103	101	90	73	72	71	70	70	69	69	69	70	68	49	11	10
Tropic	8	8	7	7	5	3	3	3	4	8	9	6	6	6	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	7	8	7	6	7	11	9	4	3	3	4	5	13	13	11	8	8	9	9	8	5	6	7	7	7	7	8	6	8	5	3
Crown & Pine Grove	22	20	19	20	21	20	19	18	16	15	15	16	21	27	27	26	26	25	24	21	19	18	17	16	15	15	20	15	15	14	10
McGraw	22	21	20	19	18	21	24	23	21	20	19	18	18	19	18	16	14	13	13	14	14	13	12	11	10	10	11	10	11	14	11
Lewis (D4)	9	8	7	8	9	9	7	6	10	20	20	20	19	19	19	17	17	11	6	5	4	4	4	4	3	3	4	3	3	7	7
Homer	4	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	4	4	4	4	4	2	0	0	0	0	0	0	0	0
Lewis and Blanchard	5	12	12	12	12	12	12	12	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Myers No. 2	4	4	4	3	2	2	1	3	5	4	4	3	2	4	2	1	3	5	4	4	3	3	2	2	2	2	3	2	2	6	6
Hare	5	5	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Coffman	6	6	6	5	4	3	3	3	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	4
Knoder	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	4	3	3	3	4	4	4	4	4	4	4	4	4
Myers No. 1	5	5	4	4	3	3	4	4	6	3	2	3	3	4	2	3	3	3	3	3	3	3	3	4	3	2	4	4	3	4	4
Myers Irr	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1
Evanston Pipeline	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Booth	18	17	17	17	17	17	17	17	16	17	17	17	16	16	16	16	18	17	16	15	15	15	17	17	16	16	18	18	15	16	17
Anel Irr	15	15	14	14	13	13	12	12	11	11	11	11	10	10	10	9	8	8	8	7	7	7	7	7	6	6	7	7	7	8	8
Cornelison	8	8	8	8	8	8	8	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1	1	1
Ev Water Supply (and Anderson)	5	5	4	4	4	4	4	4	5	5	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Knight No. 2 (and No. 1)	9	9	9	8	7	6	6	5	5	5	5	5	4	5	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	5	5
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	21	20	19	18	17	17	17	23	20	18	16	15	15	16	16	14	12	10	8	7	6	6	6	7	6	6	7	8	7	9	10
Wilson Irr	5	5	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Faulkner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rocky Mtn & Blyth (and Crompton)	4	4	4	28	28	26	26	25	24	23	22	22	21	22	21	20	19	17	14	12	12	10	8	8	7	6	6	6	6	6	6
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	7	7	4	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sim's Creek Slough Diversion	8	8	8	7	8	8	8	8	7	8	8	8	7	8	7	6	5	3	2	2	2	1	1	2	1	1	2	1	0	0	1
John Sims	11	14	17	15	16	16	15	13	12	11	10	9	7	7	6	5	4	9	16	16	13	12	11	13	12	12	12	11	9	9	9
Michael Sims	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S. P.	9	9	8	8	8	7	6	5	4	4	3	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Almy	5	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sims, Blight & Turner	12	10	10	10	10	10	10	10	10	10	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bowns	5	5	5	5	5	5	5	5	5	5	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	5	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chapman (Headgate)	156	143	132	124	118	113	107	102	93	90	84	82	80	80	79	77	73	65	58	55	54	52	48	53	51	49	57	67	62	65	73
Chapman (Stateline, incl'd above)	83	83	77	72	66	62	56	54	49	42	37	36	39	43	42	40	39	36	33	33	33	33	30	29	30	27	31	41	43	44	55
Morris Bros Irr (Lower)	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	1	1	1	2
Bowns & Bruce	20	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunnel	33	31	31	29	27	26	24	30	31	22	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Lee	29	29	29	28	28	20	15	16	15	7	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	12	0	0
Bear River Canal	62	63	63	64	65	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL UPPER WY DIV.	754	715	692	701	679	636	566	566	554	530	474	467	477	487	473	458	434	408	375	362	349	339	329	333	321	316	342	339	289	226	230
Whitney Storage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulphur Creek Storage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOWER UTAH																															
Neville	5	5	5	4	4	4	2	2	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Booth	26	26	26	26	27	19	11	11	10	7	5	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rees Land & Livestock	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	5	10	9	9	7
Crawford-Thompson	166	166	166	165	164	115	8	9	11	12	11	12	12	12	11	11	11	10	10	10	11	12	12	12	11	11	11	12	12	12	12
Randolph-Woodruff	309	309	310	309	310	193	19	19	21	21	19	18	18	19	19	19	18	16	16	21	21	19	18	18	18	18	18	18	17	17	18
Dykens	52	53	55	57	59	57	21	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Lazy P Ranch Pump (G.R. Peart)	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
Randolph-Sage Creek	128	128	128	128	128	129	126	114	109	105	99	94	90	86	83	82	81	80	77	74	51	32	30	30	30	30	30	30	29	29	29
Hoffman Brothers Ranch Pump	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
McMinn	86	88	91	94	91	87	86	79	72	59	22	16	15	10	14	22	19	18	17	16	14	13	13	12	9	6	3	1	0	0	0
Enberg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BQ Westside	330	338	356	373	388	400	357	231	164	134	58	53	45	25	24	23	22	20	16	14	12	11	19	18	19	17	16	15	12	11	10
Burdette Weston Pumps	3	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	2	7	6	6	4	4	4	4	3	3	2	
Dan Peart Pump	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
TOTAL LOWER UT DIV.	1115	1122	1138	1157	1172	1007	638	471	395	346	220	204	187	159	158	163	156	154	141	143	122	100	105	102	97	92	93	96	88	87	84
Woodruff Narrows Storage Release	318	382	459	501	550	97	-33	26	43	16	3	-5	-6	-3	-6	5	5	20	13	-8	-7	8	27	32	32	32	32	31	28	30	30
LOWER WYOMING																															
Johnson Pipelines	0	0	0	0	0	0	0	0	0	0	0	1	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Weston Ranch Pumps	3	3	3	0	0	2	1	1	3	2	0	1	3	3	3	3	5	3	5	6	5	6	3	6	7	7	5	3	3	3	1
McFarland	5	5	6	6	6	6	6	6	6	6	2	2	2	2	2	2	2	2	5	5	5	5	2	2	2	2	2	2	2	2	0
B.Q. Dam Slough (West)	14	14	14	15	17	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B.Q. Dam East	103	105	108	109	114	87	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pixley Irr (East)	31	31	26	26	26	26	26	26	26	26	19	19	19	19	19	19	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0
Pixley Irr (West)	53	52	52	52	54	55	58	56	49	42	38	36	30	23	17	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0
C-12 Pipeline and Pivot	0	2	0	1	1	0	0	1	2	2	2	1	0	1	1	2	2	1	1	2	0	0	0	1	2	2	1	2	2	0	0
Willis Pipeline	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
TOTAL LOWER WY DIVERSIONS	214	217	212	213	222	194	98	96	92	83	66	64	62	60	54	42	44	40	23	25	21	23	17	20	23	22	20	19	18	16	8
Bear River below Pixley Dam	531	520	521	526	545	556	569	567	523	470	437	423	376	311	326	304	264	242	219	192	174	165	152	140	126	116	112	106	99	94	89
Total Divertible Flow	2318	2213	2126	2117	2090	2317	1925	1694	1542	1433	1215	1183	1129	1040	1036	982	912	842	764	748	692	639	596	583	554	533	554	549	486	412	399
Upper UT Allocation											7	7	7	6	6	6	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2
Upper UT Divertible	22	22	22	21	21	21	21	21	21	20	20	20	20	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Upper WY Allocation											599	583	556	513	511	484	450	415	377	369	341	315	294	288	273	263	273	270	240	203	197
Upper WY Divertible	695	654	632	640	618	605	566	566	554	530	474	467	477	487	473	458	434	408	375	362	349	339	329	333	321	316	342	339	289	226	230
Lower UT Allocation											492	479	457	421	420	398	369	341	310	303	280	259	241	236	224	216	224	222	197	167	162
Lower UT Divertible	910	865	817	802	776	957	638	449	359	333	218	204	187	159	158	159	152	137	130	143	122	94	83	76	70	65	67	70	65	62	59
Lower WY Allocation											117	114	108	100	99	94	88	81	73	72	66	61	57	56	53	51	53	53	47	40	38
Lower WY Divertible	160	152	134	128	129	177	98	91	85	80	65	64	62	60	54	41	43	36	20	25	21	22	12	15	17	17	15	14	14	11	3

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2019.11 (cont.)

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

August

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
UPPER UTAH SECTION																															
Hovarka (E Fk)	15	15	15	15	15	15	15	15	15	15	15	9	4	5	5	5	5	5	5	5	5	5	4	1	1	1	1	1	1	1	1
Hatch (W Fk)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5
UPPER WYOMING SECTION																															
Hilliard East Fork (E Fk)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lannon & Lone Mtn	12	12	12	12	12	12	10	7	6	6	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hilliard West Side	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	5	3	3	1	1	3	3
Bear (Bear R)	10	10	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Tropic	3	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	3	3	3	3	3	6	10	10	10	9	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crown & Pine Grove	10	11	11	11	11	11	10	10	10	10	10	10	10	10	10	10	10	10	10	9	8	7	7	7	7	8	9	9	10	12	12
McGraw	10	9	9	9	9	9	9	10	10	11	11	9	3	4	4	3	3	3	3	3	4	4	4	4	4	4	4	4	2	0	0
Lewis (D4)	8	8	8	8	8	8	7	7	7	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	5	5
Homer	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
Lewis and Blanchard	1	1	1	1	1	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myers No. 2	5	3	3	3	3	3	3	3	3	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hare	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coffman	4	4	4	4	4	4	4	4	4	4	4	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Knoder	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Myers No. 1	4	3	3	3	3	2	2	3	3	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myers Irr	2	2	1	2	1	1	1	1	1	1	1	1	1	2	2	3	3	3	3	3	2	2	2	2	2	2	1	2	1	1	1
Evanston Pipeline	13	13	13	13	13	14	14	14	14	14	14	14	20	11	12	12	13	9	11	11	8	13	11	11	11	11	13	13	13	13	13
Booth	19	19	18	19	19	18	17	17	17	17	17	13	11	12	11	11	13	12	12	12	12	12	12	12	12	10	7	8	8	8	8
Anel Irr	9	9	9	9	9	8	8	8	8	8	8	6	4	4	4	4	4	4	4	4	4	4	4	4	4	5	6	6	6	6	6
Cornelison	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2
Ev Water Supply (and Anderson)	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Knight No. 2 (and No. 1)	6	6	5	6	6	6	5	5	5	5	5	5	5	4	3	3	3	3	3	3	2	2	2	2	2	2	1	0	0	0	0
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	13	14	12	15	13	12	10	10	11	10	9	8	9	10	7	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3
Wilson Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Faulkner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rocky Mtn & Blyth (and Crompton)	5	3	2	2	3	1	1	1	1	1	1	1	2	2	2	2	2	2	4	4	4	4	2	4	5	5	5	4	4	3	2
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sim's Creek Slough Diversion	2	1	2	2	2	3	2	2	2	3	3	2	2	3	3	2	2	2	2	2	1	1	0	0	0	0	0	0	0	1	2
John Sims	9	9	8	9	8	8	7	7	7	7	7	6	7	7	5	5	6	6	5	6	6	6	6	6	6	5	4	4	4	4	4
Michael Sims	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S. P.	0	0	0	1	1	1	1	4	8	10	10	10	10	8	2	2	2	2	2	2	3	3	2	1	1	1	1	2	2	5	3
Almy	0	0	0	0	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sims, Blight & Turner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bowns	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chapman (Headgate)	92	99	86	94	93	87	73	70	73	67	60	55	57	69	58	49	48	46	38	30	30	29	26	22	22	16	11	10	10	7	5
Chapman (Stateline, incl'd above)	71	86	75	78	81	76	62	51	55	51	44	40	36	44	43	38	33	28	27	22	22	21	17	12	9	6	0	0	0	0	0
Morris Bros Irr (Lower)	2	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Bowns & Bruce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunnel	0	2	1	1	1	0	2	3	2	3	5	4	3	3	5	6	5	4	3	3	3	2	2	2	2	3	3	3	3	3	3
Francis-Lee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	11	10	11	11	11	11	11	11	11	11	11	11	11	0	12	12
Bear River Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	12	21	23	23	23	23	24	24	23	23	24	23	23	23	23	23	23	23
TOTAL UPPER WY DIV.	254	257	237	249	247	237	218	218	226	218	208	181	168	178	172	169	169	161	153	148	144	145	139	138	139	131	127	126	114	127	123
Whitney Storage	0	0	0	0	0	0	0	0	0	0	0	15	15	15	15	15	15	15	15	15	11	13	13	13	13	17	17	17	16	16	16
Sulphur Creek Storage	0	0	0	0	0	0	0	0	0	0	0	25	31	30	28	28	28	31	36	39	36	35	31	27	27	24	31	33	36	36	36
LOWER UTAH																															
Neville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Booth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rees Land & Livestock	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crawford-Thompson	12	12	12	12	12	12	9	4	4	4	3	3	3	3	3	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2
Randolph-Woodruff	18	18	18	19	19	18	18	19	18	18	18	19	19	19	11	10	12	13	16	16	16	17	18	16	14	14	14	15	15	15	16
Dykens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lazy P Ranch Pump (G.R. Peart)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Randolph-Sage Creek	29	29	29	29	29	29	29	29	16	5	18	21	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Hoffman Brothers Ranch Pump	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
McMinn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enberg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	9
BQ Westside	9	9	8	7	7	7	7	6	9	8	5	5	6	7	7	7	6	6	7	8	8	8	10	12	13	11	9	9	7	4	5
Burdette Weston Pumps	4	6	6	7	6	1	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
Dan Peart Pump	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	0	0
TOTAL LOWER UT DIV.	80	82	81	82	81	75	74	69	57	43	52	61	45	46	38	29	30	30	34	35	35	36	40	39	38	36	34	35	35	34	39
Woodruff Narrows Storage Release	28	14	17	21	16	19	21	30	30	28	33	33	35	34	33	30	27	29	29	23	20	22	23	25	26	27	15	15	17	14	5
LOWER WYOMING																															
Johnson Pipelines	6	6	7	7	7	7	5	1	0	0	0	0	0	0	0	0	0	0	0	1	3	3	5	7	6	7	6	7	7	7	7
Weston Ranch Pumps	4	2	3	6	4	7	5	4	4	7	2	1	7	7	6	2	4	4	1	1	3	1	0	1	2	1	1	3	3	3	3
McFarland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B.Q. Dam Slough (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B.Q. Dam East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	0	0	0	0	1
Pixley Irr (East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pixley Irr (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-12 Pipeline and Pivot	2	2	2	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Willis Pipeline	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
TOTAL LOWER WY DIVERSIONS	13	10	12	16	14	17	12	11	8	11	6	5	11	11	10	7	9	9	6	6	6	4	6	9	12	12	8	10	11	11	11
Bear River below Pixley Dam	84	78	78	71	67	60	56	63	69	71	85	93	76	74	74	74	74	71	67	65	47	50	54	53	52	50	50	44	39	37	35
Total Divertible Flow	422	432	411	416	410	389	357	350	349	334	336	281	227	239	227	215	220	204	188	185	173	175	179	178	180	166	161	156	137	150	157
Upper UT Allocation	3	3	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Upper UT Divertible	19	19	19	19	19	19	19	19	18	18	18	13	8	9	9	9	9	9	9	9	8	8	7	5	5	5	5	5	6	6	6
Upper WY Allocation	208	213	203	205	202	192	176	172	172	165	166	138	112	118	112	106	109	101	92	91	85	87	88	88	89	82	79	77	67	74	78
Upper WY Divertible	254	257	237	249	247	237	218	218	226	218	208	141	122	133	129	125	124	113	99	91	94	96	94	95	97	87	76	74	63	73	68
Lower UT Allocation	171	175	166	169	166	157	145	142	141	135	136	114	92	97	92	87	89	83	76	75	70	71	72	72	73	67	65	63	55	61	64
Lower UT Divertible	57	70	67	65	68	60	56	44	32	20	24	33	16	17	10	5	9	8	12	18	20	20	23	20	19	16	24	25	21	25	38
Lower WY Allocation	41	41	39	40	39	37	34	34	33	32	32	27	22	23	22	21	21	20	18	18	17	17	17	17	17	16	16	15	15	13	14	15
Lower WY Divertible	8	8	9	13	11	13	8	6	3	6	0	0	5	5	5	2	4	4	1	2	3	1	2	5	7	8	5	8	8	9	11

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2019.11 (cont.)

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

September

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
UPPER UTAH SECTION																															
Hovarka (E Fk)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1,436
Hatch (W Fk)	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	470
UPPER WYOMING SECTION																															
Hilliard East Fork (E Fk)	0	0	0	0	1	2	2	2	6	19	31	30	27	25	23	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,177
Lannon & Lone Mtn	0	0	2	6	6	6	6	7	7	6	6	6	6	6	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,719
Hilliard West Side	3	3	3	2	3	2	1	1	16	25	25	25	24	24	24	6	3	3	3	2	2	2	2	3	5	7	10	11	11	11	2,049
Bear (Bear R)	8	8	9	11	11	11	11	11	44	67	69	68	67	67	67	35	21	21	21	21	21	21	21	21	21	21	21	21	21	21	5,899
Tropic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	309
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	653
Crown & Pine Grove	12	12	12	13	13	15	15	17	16	9	8	6	6	6	6	6	8	8	9	8	9	8	8	8	7	5	5	5	4	4	1,690
McGraw	0	0	1	4	3	3	3	3	4	4	4	4	4	4	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1,608
Lewis (D4)	5	5	5	4	4	4	5	5	10	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	0	0	0	1	1	878
Homer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147
Lewis and Blanchard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	280
Myers No. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242
Hare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	254
Coffman	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	318
Knoder	3	3	3	2	2	2	2	2	3	3	3	3	3	3	3	2	2	2	2	1	1	1	1	1	0	0	0	0	0	0	326
Myers No. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	391
Myers Irr	1	1	1	1	1	1	1	1	3	2	2	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	2	3	284
Evanston Pipeline	13	13	13	13	13	13	13	13	13	13	11	11	11	11	11	11	11	11	11	11	11	11	11	11	5	5	5	5	5	5	1,444
Booth	8	8	8	8	7	8	8	8	8	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1,802
Anel Irr	6	6	6	6	6	6	6	6	4	1	1	1	1	1	1	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	990
Cornelison	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	340
Ev Water Supply (and Anderson)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	309
Knight No. 2 (and No. 1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	348
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1,381
Wilson Irr	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	191
Faulkner	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
Rocky Mtn & Blyth (and Crompton)	2	1	1	1	0	0	0	1	0	0	0	0	1	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	930
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	234
Sim's Creek Slough Diversion	2	2	1	1	1	1	2	2	3	2	2	2	2	1	1	1	0	0	1	0	0	1	0	0	1	1	1	1	2	2	580
John Sims	4	4	4	4	4	5	7	7	7	7	7	6	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	4	1,565
Michael Sims	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	370
S. P.	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	671
Almy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183
Sims, Blight & Turner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	960
Bowns	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	220
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	379
Chapman (Headgate)	5	5	4	13	16	13	17	17	30	73	83	100	91	84	79	75	49	42	46	31	5	5	5	5	5	5	5	5	5	5	11,219
Chapman (Stateline, incl'd above)	0	0	0	0	0	0	0	0	5	11	32	67	65	57	51	46	32	17	21	15	0	0	0	0	0	0	0	0	0	0	7,175
Morris Bros Irr (Lower)	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134
Bowns & Bruce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	795
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Tunnel	3	3	4	7	8	9	9	10	10	11	10	9	8	7	6	6	5	4	2	2	2	2	2	2	1	1	1	0	0	0	1,462
Francis-Lee	12	12	12	12	13	12	10	11	10	10	11	10	10	10	10	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1,747
Bear River Canal	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	21	10	1	1	1	1	1	1	1	1	1	1	1	1	4,139
TOTAL UPPER WY DIV.	121	120	125	143	147	149	153	157	228	290	309	321	303	291	283	206	140	121	114	99	72	72	72	73	67	67	70	72	76	77	50,724
Whitney Storage	16	16	30	30	30	30	30	30	117	117	117	117	117	117	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,323
Sulphur Creek Storage	36	36	36	34	34	38	38	38	56	56	54	50	46	46	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,525
LOWER UTAH																															
Neville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	248
Booth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,312
Rees Land & Livestock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,194
Crawford-Thompson	2	2	2	2	4	7	6	6	8	7	9	10	9	8	7	6	5	3	5	5	5	5	4	4	4	4	4	5	5	5	8,737
Randolph-Woodruff	16	16	15	15	16	18	18	18	18	18	20	20	20	19	18	17	15	11	14	14	15	15	14	14	14	14	14	15	16	16	16,218
Dykens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,721
Lazy P Ranch Pump (G.R. Peart)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Randolph-Sage Creek	4	5	6	9	9	9	10	7	5	5	5	5	5	5	5	5	5	5	6	5	6	6	6	6	6	8	8	8	8	8	8,228
Hoffman Brothers Ranch Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
McMinn	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3,660
Enberg	9	9	11	14	14	13	14	12	13	13	13	13	12	13	16	11	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1,037
BQ Westside	5	5	5	4	4	5	5	6	7	7	9	9	9	8	8	12	15	12	17	12	12	12	12	11	11	10	10	11	13	12	14,625
Burdette Weston Pumps	7	6	5	4	2	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165
Dan Peart Pump	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	316
TOTAL LOWER UT DIV.	43	43	44	48	49	62	60	53	54	53	59	60	58	56	57	54	41	32	42	36	38	38	37	35	35	36	37	40	42	41	58,529
Woodruff Narrows Storage Release	1	4	5	4	22	16	15	6	1	-9	0	6	9	18	25	18	10	13	15	15	-3	-19	-20	-19	-18	-18	-19	-25	-30	-59	3,770
LOWER WYOMING																															
Johnson Pipelines	7	7	7	7	7	7	6	6	5	5	0	0	2	3	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	461
Weston Ranch Pumps	1	2	3	3	2	3	2	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	299
McFarland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537
B.Q. Dam Slough (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,092
B.Q. Dam East	1	4	10	10	9	8	6	7	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	6,684
Pixley Irr (East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,478
Pixley Irr (West)	0	0	0	0	1	1	2	2	3	2	2	2	3	2	2	2	2	3	3	4	4	4	4	4	4	4	4	5	7	7	3,981
C-12 Pipeline and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Willis Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242
TOTAL LOWER WY DIVERSIONS	9	13	21	20	19	19	16	15	17	12	2	3	4	5	5	8	4	3	3	4	5	4	4	4	4	5	5	5	7	7	14,838
Bear River below Pixley Dam	32	23	14	16	18	19	20	21	22	27	35	43	46	46	46	46	42	46	47	48	50	49	48	46	46	46	46	52	65	66	42,380
Total Divertible Flow	158	149	138	164	153	172	171	177	155	225	242	260	248	225	210	300	221	193	196	175	173	188	185	181	175	175	180	198	224	253	161,758
Upper UT Allocation	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	261
Upper UT Divertible	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	1,905
Upper WY Allocation	78	73	68	81	76	85	84	87	76	111	119	128	122	111	104	148	109	95	97	87	86	92	91	89	86	86	89	98	110	125	21,463
Upper WY Divertible	68	65	55	75	79	79	83	87	55	117	139	153	140	128	119	206	140	121	114	99	72	72	72	73	67	67	70	72	76	77	46,213
Lower UT Allocation	64	60	56	66	62	69	69	72	63	91	98	105	101	91	85	122	90	78	79	71	70	76	75	73	71	71	73	80	91	102	17,631
Lower UT Divertible	43	42	44	47	35	51	49	49	54	53	59	56	52	42	38	39	33	21	29	23	38	38	37	35	35	36	37	40	42	41	49,797
Lower WY Allocation	15	14	13	16	15	16	16	17	15	22	23	25	24	22	20	29	21	19	19	17	17	18	18	17	17	17	17	19	21	24	4,179
Lower WY Divertible	9	12	20	19	15	17	14	14	17	12	2	1	3	2	1	4	2	0	0	1	5	4	4	4	4	5	5	5	7	7	12,709

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2019.11 (cont.)

Central Division

The Compact provides that a water emergency shall be deemed to exist when the divertible flow in the Central Division drops below 870 cfs. A water emergency shall also be deemed to exist in the Central Division if the flow rate at the Border Gage drops below 350 cfs. The Compact provides that once a water emergency is deemed to exist, diversions in the State of Wyoming are to be limited to 43 percent of the total divertible flow. The remaining 57 percent is available for use within Idaho.

During the irrigation season, the Engineer-Manager, in coordination with the state river commissioners/Watermasters, watches the flows in the Central Division to determine when a water emergency is being approached. Weekly call-ins of diversion data began on June 14 and were found to be far in excess of the water emergency thresholds. Based on call-ins on July 26 it was determined that both the flow at the Border Gage and the total divertible flow had dropped below their respective water emergency thresholds and weekly call-in/call-out of diversion data and interstate regulation commenced. Figure 2018.12 shows the weekly call-in/call-out information for the Central Division. Shown with the black triangles is the total divertible flow as defined by the Compact. The green dots show Wyoming diversion data with the solid dots showing actual diversions and the hollow dots showing Wyoming's allocation (43%). Similarly, the brown squares show the Idaho data with the hollow squares showing Idaho's allocation (57%) and the solid squares showing total water available to Idaho. These values include not only diversions to Idaho canals and pumps but also water bypassing Stewart Dam as well as water flowing into the Rainbow Inlet Canal. The grey diamonds show the calculated gains/losses in the Idaho Section of the River which is determined by subtracting the flows at the Border Gage from the sum of the Idaho diversions plus discharge into the Rainbow Inlet Canal and flows bypassing Stewart Dam. The red triangles represent the forecasted divertible flow each week. The solid dark blue line is the flow at the Border Gage. It is important to note that, though efforts are made to ensure the quality of data, these values represent the preliminary, real-time flow and diversion data that are available each week as the irrigation season progresses. In order to adjust for lag-time in flows from Wyoming to Idaho, the typical weekly process is for Wyoming to measure/regulate its diversions on Monday and Tuesday, Idaho to do its diversions on Thursday and then for the call-out/regulation for the next week to occur on Friday. In 2019 the weekly call-in/call-out practice commence on June 14. On July 26 a water emergency was declared, and interstate regulation commenced. This continued until September 20 when the water emergency was lifted.

After the close of the irrigation season final diversion and flow data are tabulated. Figures 2019.13 and 2019.14 graphically illustrate the Central Division's divertible flow and the respective allocations and diversions by the Wyoming and Idaho Sections under a water emergency. The flow passing the Border Gage is not illustrated on these figures as it confuses the diversion and allocation data. It is important to note that on Figure 2019.14 the line labeled as "Available to Idaho" represents the summation of diversions within the State of Idaho, as well as flow passing Stewart Dam and diversion to the Rainbow Inlet Canal. As the Compact provides that 57 percent of the Central Division's divertible flow shall be available for use within Idaho, this line is used to show whether such provision of the Compact was met.

However, the Compact also provides that if Idaho elects to not divert into its canals its full entitlement, a portion of its allocation can pass into the Lower Division via the Rainbow Inlet Canal or Stewart Dam. Data for these hydrographs are based on the River Commissioners'/ Watermasters' annual reports to their respective state water agencies.

Figure 2019.15 shows a compilation of daily canal diversions as provided by the respective River Commissioners/Watermasters. The Wyoming and Idaho Sections' diversions and allocations are tabulated and summarized at the bottom of each page. The pages are divided such that there is one month's data per page. As the flow of the Bear River at the Border Gage could also be critical to the declaration of a water emergency, as defined by the Compact, this gage's data are also shown in these tables. During the period of interstate regulation there was very good cooperation between the Wyoming and Idaho River Commissioners/watermasters in administering water distribution throughout this irrigation season.

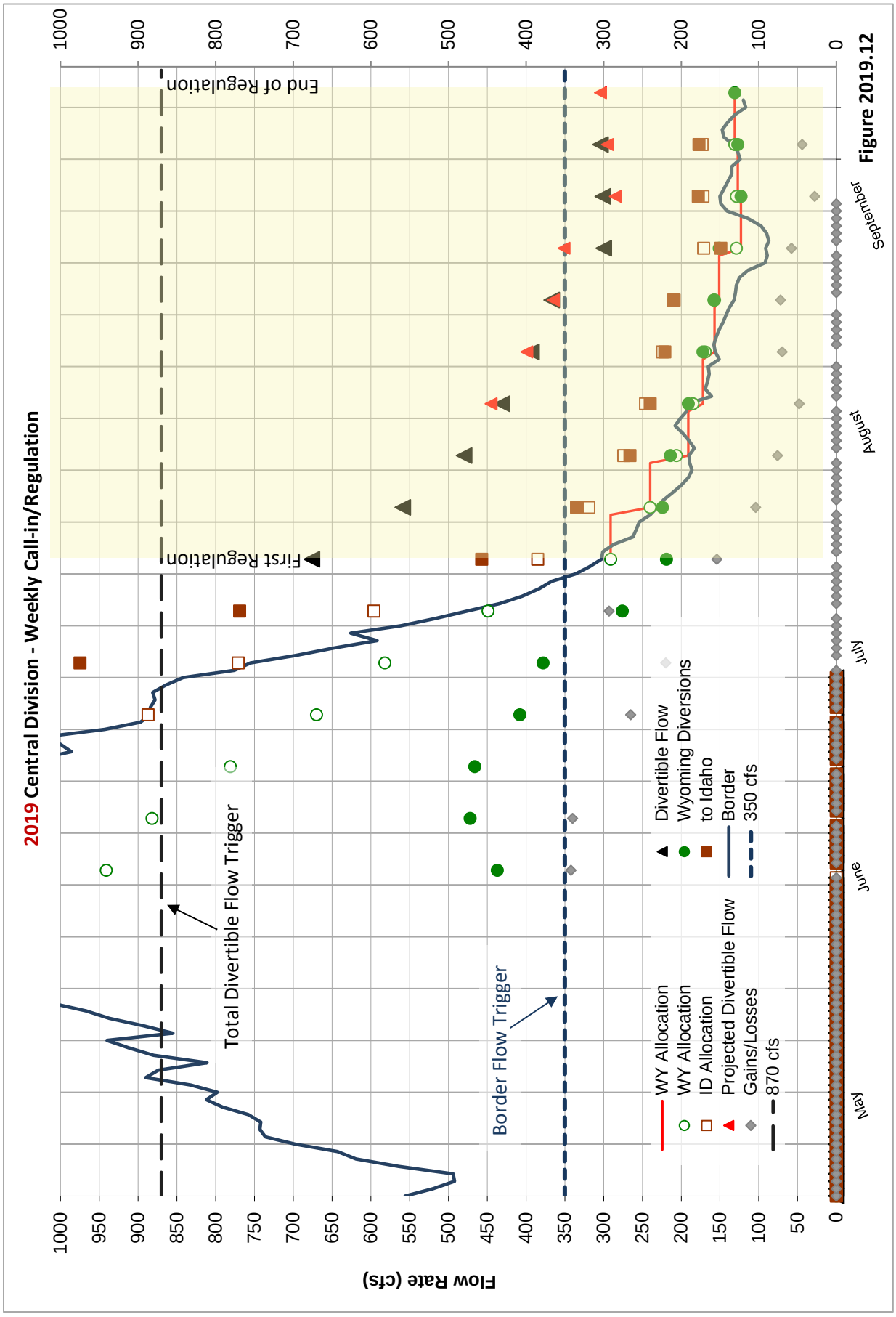


Figure 2019.12

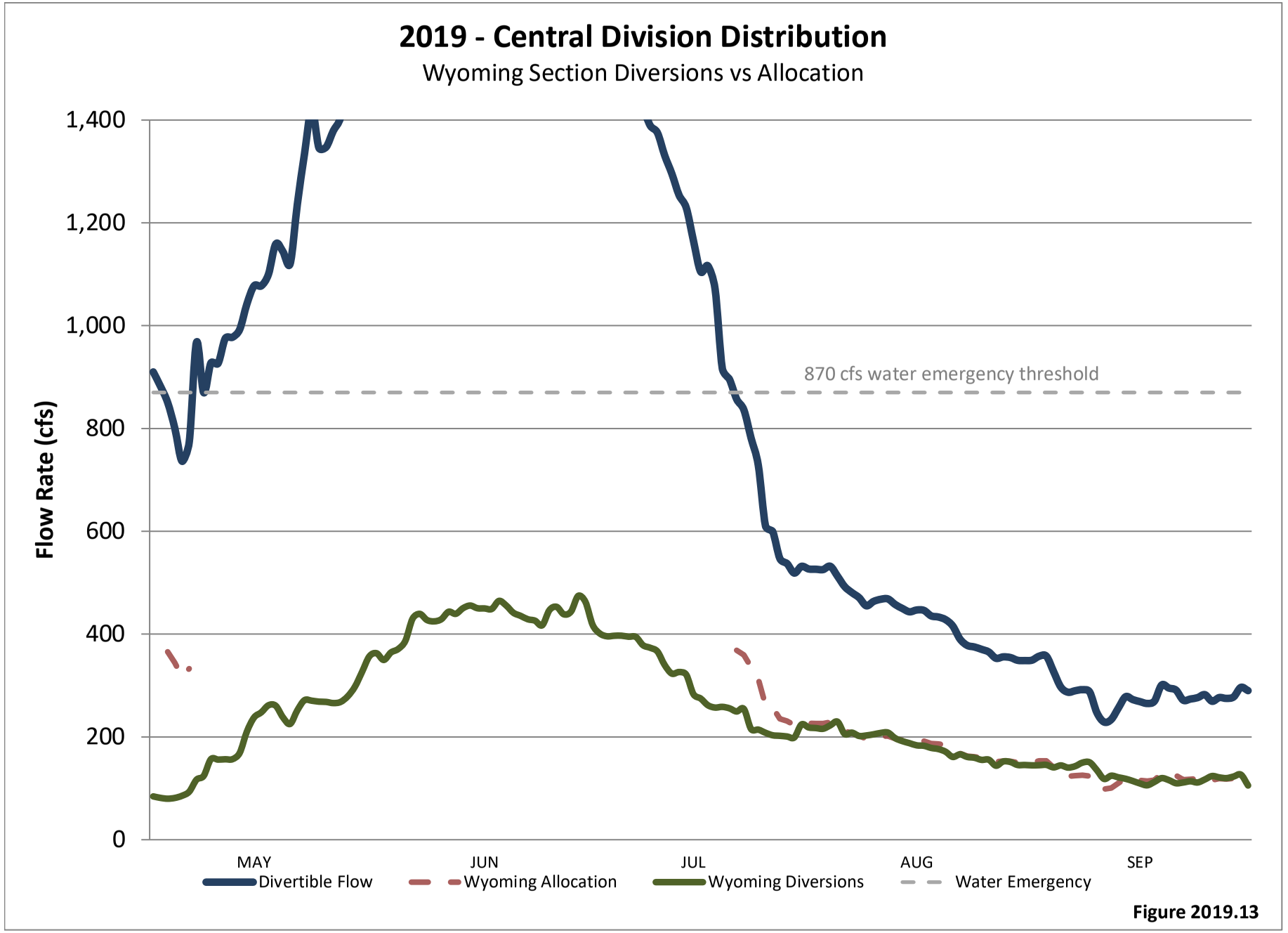


Figure 2019.13

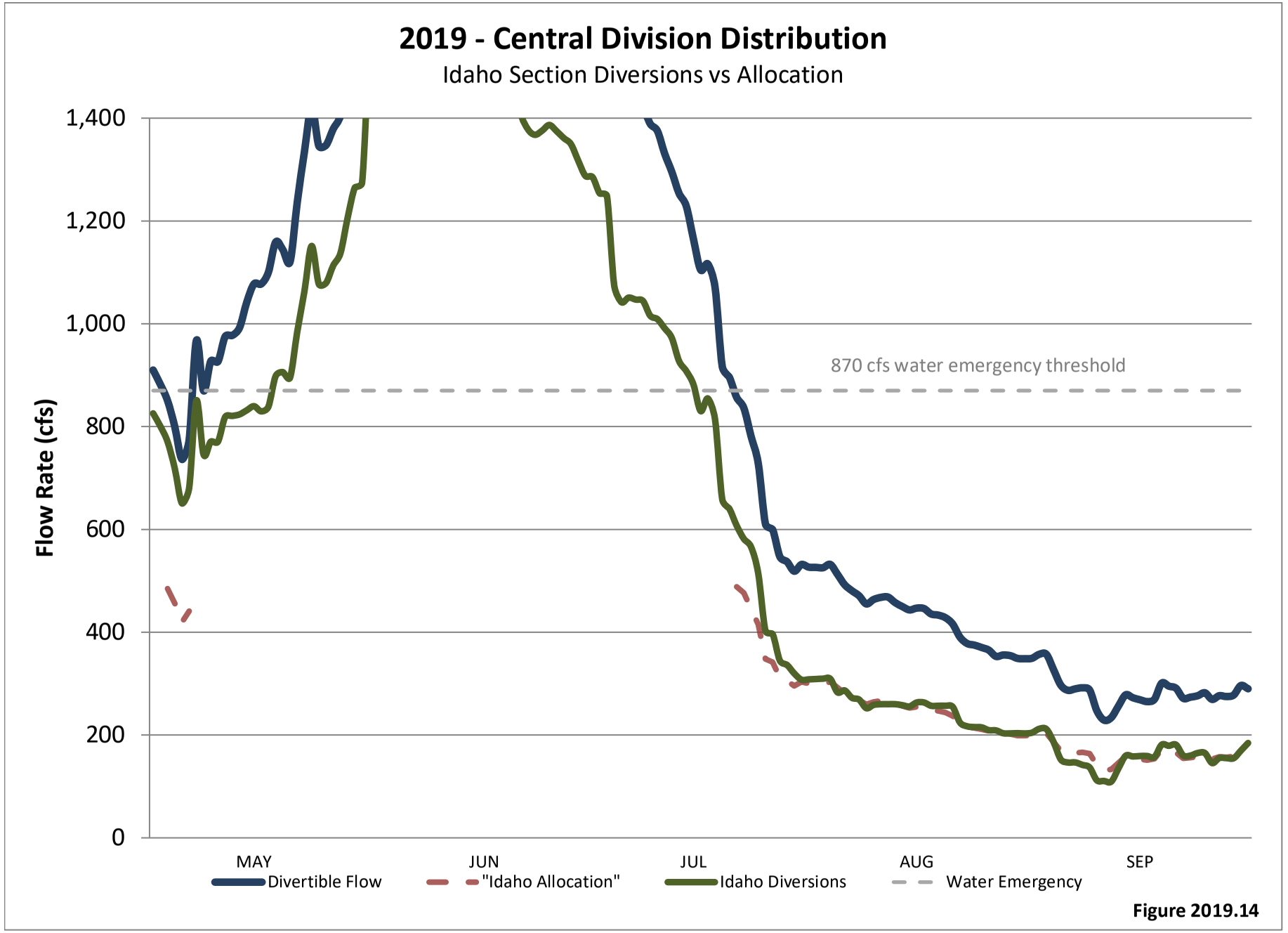


Figure 2019.14

2019

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

May

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
WYOMING DIVERSIONS																															
BEAR RIVER CANALS																															
Thornock Pump and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	7	11	11	11	13	13	13	12	12	12	12	12	13	14	14	16
Wyman No. 1 (East)	0	0	0	0	0	5	20	17	18	19	19	19	20	21	21	22	22	22	13	0	0	0	0	0	0	0	0	0	0	5	26
Wyman No. 2 (West)	1	1	1	1	1	1	1	8	36	36	36	37	35	32	32	33	34	33	22	3	3	3	3	3	3	3	3	3	4	5	5
Oscar E. Snyder	30	27	25	26	29	30	28	29	30	30	31	32	33	33	33	34	35	34	34	37	37	36	35	35	37	38	36	37	39	40	40
Rocky Point (D2)	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7	7	7	7	7	28	28	28	28	28	28	28	28	28	31	31
Cook Bros	8	8	8	8	8	8	8	8	8	8	8	8	8	8	10	13	13	13	13	24	35	46	52	53	54	56	57	59	61	63	64
John R. Richards Terr	2	2	2	2	2	3	3	4	5	5	5	4	4	4	4	5	5	7	8	9	12	17	16	16	16	15	15	16	16	13	11
TRIBUTARY DIVERSIONS																															
Abraham Stoner (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Ditch (Sublette Cr)	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	8	8	8	8	8	8	10	10	10	10
Grade (Grade Canyon Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
D.C.P. (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Curtis Pump (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goodell (Pine Cr)	0	0	0	0	0	0	0	1	1	1	1	1	1	2	5	8	3	2	8	8	6	6	5	5	5	5	5	5	6	6	5
V.H. (Pine Cr)	10	10	10	10	10	10	10	10	9	9	9	9	9	10	11	8	12	12	8	8	10	11	12	12	12	12	12	12	11	11	12
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMITH'S FORK DIVERSIONS																															
Quinn-Bourne	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	2	1	0	0
Bar-O-Bar	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	12	12	12
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C.B.D. N0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C.B.D. No 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Button Flat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Progress	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	1	1	2	2	1	1	1	1	1	1	1	1	1	4	8	7	7	6	5	5	5	5	5	5	5	5	5	5	8	11	12
Seven C Ranch North Pivot Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooper	0	0	0	0	0	0	0	0	0	0	0	0	3	9	15	18	22	20	16	15	9	9	9	9	9	9	9	9	10	15	16
Wheelock	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	6	6	6
Covey (Headgate)	4	5	5	6	6	7	7	7	8	8	9	10	11	19	29	28	32	37	37	38	36	36	31	26	25	22	23	25	28	28	27
Covey (Bruner Cr)	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5	5	5	5	5	6	6	6	6	6	5	5	5	6	5	5	5
Covey (Spring Cr)	6	5	5	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	7	6	6	6	6	6	6	6
Whites Water	4	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
South Branch Irr (N Branch)	2	1	1	1	1	2	2	2	2	2	1	1	2	2	3	4	3	2	1	2	1	1	1	1	1	1	1	1	1	1	1
Reed Ditch (N Branch)	8	8	8	8	8	8	7	7	7	7	7	7	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Stoner & Nichols (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Minnie Roberts (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastenanga South (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Gastenanga North (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
N Cokeville / Morgan (M Branch)	1	1	1	1	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	12	12
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith's Fork Ditch (M Branch)	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Petersen Pump (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Forgeon Irr (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL WYOMING DIVERSIONS	84	81	80	81	86	94	117	124	157	156	157	157	169	210	238	248	262	261	238	225	252	271	270	269	268	266	268	279	298	327	357
IDAHO DIVERSIONS																															
Miller Ditch	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Rigby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	0	0	0
Nuffer Canal	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	15	15	15	15	15	15	15	15	15	15	15
Sorensen Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Williamson (Jensen) Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J Smith (Loyd) Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dingle Irrigation Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ream Crockett Canal	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	59	59	59	59	59	59	59	59	59
Black Otter Canal	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	7	8	9	10	11	12	13	14	15	16	17
Preston Montpelier Canal	0	0	0	0	0	0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11
Keetch (LaRocco Kent) Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F Keetch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Fork Canal	0	0	0	0	0	0	0	0	0	0	10	12	15	23	31	39	47	55	63	71	79	86	94	102	110	118	126	134	142	150	150
J Keetch (Pugmire) Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL IDAHO DIVERSIONS	57	57	57	57	57	57	67	67	67	67	77	79	82	90	98	106	114	123	131	140	149	158	206	215	224	233	242	251	260	269	270
Total Divertible Flow	910	882	851	800	736	774	967	870	927	927	975	977	993	1042	1078	1077	1100	1159	1144	1120	1236	1334	1422	1346	1347	1379	1405	1485	1563	1601	1872
Wyoming Diversions	84	81	80	81	86	94	117	124	157	156	157	157	169	210	238	248	262	261	238	225	252	271	270	269	268	266	268	279	298	327	357
Wyoming Allocation (43%)			366	344	317	333																									
Idaho Diversions	57	57	57	57	57	57	67	67	67	67	77	79	82	90	98	106	114	123	131	140	149	158	206	215	224	233	242	251	260	269	270
Rainbow Inlet Canal-Bear Lake	765	740	710	660	590	620	780	675	700	700	738	738	738	738	738	720	720	770	770	750	830	900	940	857	850	875	890	950	1000	1000	1240
Bear River below Stewart Dam	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sub Total	826	801	771	719	651	681	851	746	771	771	819	821	824	832	840	830	839	898	906	895	984	1063	1151	1077	1079	1113	1137	1206	1265	1274	1515
Idaho Allocation (57%)			485	456	420	441																									
Bear River @ Border WY	556	520	492	494	564	619	643	698	736	743	742	758	791	812	798	832	890	874	811	880	912	940	855	893	937	967	1010	1100	1170	1250	1280

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2019.15

2019 DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

June

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
WYOMING DIVERSIONS																														
BEAR RIVER CANALS																														
Thornock Pump and Pivot	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	3	3	3	3	3	3
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	17	18	18	17	17	16	17	20	22	21	20	20	20	20	20	20	19	19	19	18	19	19	19	19	19	20	19	18	18	17
Wyman No. 1 (East)	26	12	1	1	4	14	14	12	10	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	10	16	16
Wyman No. 2 (West)	6	7	8	7	11	24	24	24	24	23	22	22	22	17	3	3	3	3	3	2	2	2	2	2	2	2	2	14	42	42
Oscar E. Snyder	41	42	44	45	46	46	45	33	41	43	45	45	45	45	46	45	45	41	40	40	38	38	39	39	38	37	36	36	35	35
Rocky Point (D2)	31	31	31	32	32	32	32	32	32	33	33	33	33	33	33	33	30	30	30	30	30	30	30	30	27	27	27	27	27	27
Cook Bros	64	65	65	60	57	57	58	58	56	52	51	50	50	43	38	38	39	45	41	37	37	37	42	48	48	47	47	47	46	45
John R. Richards Terr	12	12	14	12	13	11	12	12	12	12	12	11	11	10	10	9	9	8	8	7	7	6	6	6	5	5	5	4	4	4
TRIBUTARY DIVERSIONS																														
Abraham Stoner (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	10	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	6	6	6	6	6	6	6	6	5	5	5	5	5	5
Grade (Grade Canyon Cr)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
D.C.P. (Bruner Cr)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Curtis Pump (Bruner Cr)	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
Goodell (Pine Cr)	7	9	8	8	8	8	8	8	6	6	5	6	6	5	5	6	3	2	6	5	3	6	10	11	11	11	10	10	10	9
V.H. (Pine Cr)	11	10	11	11	12	12	12	12	13	14	13	12	13	13	12	12	12	12	12	13	14	12	9	8	8	8	8	8	9	10
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
SMITH'S FORK DIVERSIONS																														
Quinn-Bourne	0	0	0	1	1	2	4	9	9	9	11	12	13	13	13	13	13	13	13	13	12	12	12	11	11	11	11	11	11	11
Bar-O-Bar	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	8	8	8	8	8	8	8
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	0	0	0	0	3	13	15	15	14	13	10	8	8	9	8	8	8	8	8	7	7	6	6	5	5	4	4	4	4	4
C.B.D. N0 3	0	0	0	0	0	0	0	0	0	0	13	13	13	13	13	13	13	13	13	13	13	13	13	8	8	8	8	8	8	8
C.B.D. No 7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Button Flat	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3
Progress	3	3	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	7	7	7	7	7	7	8	8	8	8	8	8	8
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	12	12	11	12	14	17	23	21	17	16	15	14	13	11	10	8	6	12	15	15	15	15	14	14	15	15	14	10	10	7
Seven C Ranch North Pivot Pump	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
Cooper	16	15	15	14	18	17	10	4	2	2	2	2	15	26	27	27	27	27	16	10	10	10	9	8	8	8	8	7	9	4
Wheelock	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5
Covey (Headgate)	27	27	40	46	46	54	59	69	72	72	73	73	72	73	72	76	77	80	81	81	82	84	84	84	84	83	85	85	87	87
Covey (Bruner Cr)	5	5	5	5	5	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Covey (Spring Cr)	6	6	6	6	6	6	6	5	5	6	6	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	5	5	5	5
Whites Water	5	5	6	6	7	8	7	6	6	8	9	9	9	9	10	10	9	9	12	12	11	6	0	0	20	30	15	15	13	13
South Branch Irr (N Branch)	1	1	14	18	20	20	18	14	12	10	9	9	8	15	28	31	30	29	28	27	26	24	22	20	18	18	18	18	18	18
Reed Ditch (N Branch)	9	9	11	11	11	11	11	11	11	10	10	10	10	10	10	10	8	8	8	8	8	8	8	8	1	1	1	1	1	1
Stoner & Nichols (M Branch)	6	3	2	1	2	1	1	1	1	3	8	8	8	9	9	7	7	7	6	5	5	5	4	4	4	4	4	3	0	0
Minnie Roberts (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastenanga South (M Branch)	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Gastenanga North (M Branch)	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	10	10	10	10
N Cokeville / Morgan (M Branch)	12	12	10	10	10	10	10	10	10	6	6	6	6	6	6	6	8	8	8	8	8	8	8	8	9	9	9	9	9	9
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith's Fork Ditch (M Branch)	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8	8	8	8	8	8	8	8	5	5	5	5	5	5
Petersen Pump (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	2
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	0	0	0	0	0	0	0	0	0	6	6	6	6	6	6	6	8	8	8	8	8	8	8	8	18	18	18	18	18	18
Forgeon Irr (S Branch)	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	8	8	8	8	8	8
TOTAL WYOMING DIVERSIONS	363	350	364	371	387	430	439	427	425	429	443	439	450	456	450	450	449	465	456	441	436	429	426	417	447	453	439	444	474	463
IDAHO DIVERSIONS																														
Miller Ditch	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	15	15	14	14	13	13	13	12
Rigby	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
Nuffer Canal	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Sorensen Ditch	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4
Williamson (Jensen) Ditch	0	0	0	0	0	0	0	0	0	0	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
J Smith (Loyd) Ditch	0	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	7	7	7	7	6	6	6	6
Dingle Irrigation Ditch	4	4	4	4	4	4	4	4	4	4	4	4	40	41	41	42	42	43	43	44	44	45	30	30	29	29	28	28	28	27
Ream Crockett Canal	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	55	54	53	53	52	51	50	49
Black Otter Canal	18	19	20	21	22	23	24	25	25	25	25	24	24	24	24	23	23	23	23	22	22	22	20	21	21	22	22	23	23	24
Preston Montpelier Canal	11	11	11	11	11	11	11	25	25	25	25	50	50	50	30	30	30	30	29	29	29	29	40	40	40	40	40	40	40	40
Keetch (LaRocco Kent) Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F Keetch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	2	2	2	2	0	0	0	0
West Fork Canal	150	151	151	152	152	153	153	154	154	155	155	156	156	157	157	158	158	159	159	160	160	150	150	149	149	148	148	147	147	
J Keetch (Pugmire) Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	0	0	0	0	0	0	0	0
TOTAL IDAHO DIVERSIONS	276	282	284	285	287	289	290	305	311	311	318	343	379	380	361	362	363	369	370	371	371	372	346	344	342	340	336	334	333	331
Total Divertible Flow	1904	1932	1978	1986	2008	2074	2105	2182	2216	2245	2266	2247	2260	2268	2048	2039	2014	2026	2017	1984	1848	1808	1794	1793	1833	1828	1800	1793	1792	1751
Wyoming Diversions	363	350	364	371	387	430	439	427	425	429	443	439	450	456	450	450	449	465	456	441	436	429	426	417	447	453	439	444	474	463
Wyoming Allocation (43%)																														
Idaho Diversions	276	282	284	285	287	289	290	305	311	311	318	343	379	380	361	362	363	369	370	371	371	372	346	344	342	340	336	334	333	331
Rainbow Inlet Canal-Bear Lake	1260	1290	1320	1320	1324	1345	1365	1440	1476	1500	1500	1460	1425	1425	1229	1220	1195	1185	1185	1165	1034	1000	1015	1025	1035	1025	1015	1005	975	950
Bear River below Stewart Dam	5	10	10	10	10	10	10	10	5	5	5	5	5	7	7	7	7	7	7	7	7	7	7	7	10	10	10	10	10	7
Sub Total	1541	1582	1614	1615	1621	1644	1665	1755	1792	1816	1823	1808	1809	1812	1597	1589	1565	1561	1562	1543	1412	1379	1368	1376	1387	1375	1361	1349	1318	1288
Idaho Allocation (57%)																														
Bear River @ Border WY	1350	1400	1430	1410	1460	1470	1560	1670	1680	1590	1500	1450	1450	1450	1470	1430	1370	1360	1310	1290	1280	1280	1280	1300	1290	1250	1230	1170	1070	1030

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2019.15 (cont.)

2019 DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

July

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
WYOMING DIVERSIONS																															
BEAR RIVER CANALS																															
Thornock Pump and Pivot	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	17	18	17	16	16	16	15	15	14	13	12	12	11	10	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wyman No. 1 (East)	16	15	14	13	14	14	14	14	14	13	12	12	11	11	9	9	9	9	9	9	4	1	1	1	1	0	0	0	0	0	0
Wyman No. 2 (West)	21	11	11	11	11	11	11	11	12	11	11	13	19	15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Oscar E. Snyder	35	36	34	33	33	33	34	34	32	31	30	29	27	28	19	4	3	2	2	1	1	1	1	1	1	1	1	2	2	2	1
Rocky Point (D2)	27	31	31	31	31	31	31	31	32	32	32	32	32	32	32	35	35	35	35	35	35	35	0	0	0	0	0	0	0	0	0
Cook Bros	57	65	63	62	62	62	61	61	60	58	33	16	15	15	14	14	13	13	13	12	12	12	12	11	11	11	11	13	17	17	17
John R. Richards Terr	4	3	3	3	2	3	4	4	4	4	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	0	0	0	0	0	0
TRIBUTARY DIVERSIONS																															
Abraham Stoner (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Grade (Grade Canyon Cr)	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
D.C.P. (Bruner Cr)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Curtis Pump (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Goodell (Pine Cr)	9	7	4	5	9	9	9	9	9	9	10	10	11	11	11	10	10	10	10	11	11	11	11	10	10	10	10	10	10	10	9
V.H. (Pine Cr)	10	11	13	12	9	10	10	10	10	9	7	7	7	7	7	8	8	8	7	6	5	5	6	7	7	7	7	7	7	7	8
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
SMITH'S FORK DIVERSIONS																															
Quinn-Bourne	11	12	13	12	12	12	11	11	11	11	10	10	10	11	10	10	10	10	10	11	11	11	11	11	10	10	10	10	10	10	10
Bar-O-Bar	8	8	8	8	8	8	8	7	7	7	7	7	7	7	3	3	3	3	3	3	3	2	2	2	2	2	2	2	1	1	1
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	4	4	4	4	3	3	3	3	3	2	2	2	2	3	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4
C.B.D. N0 3	8	8	8	8	8	8	8	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C.B.D. No 7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Button Flat	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	5	5	5	5	5	5	5	2	2	2
Progress	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	3	3	3	3	1	1	1
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	5	5	5	5	6	8	9	10	10	9	10	14	14	14	13	13	13	12	12	12	12	12	11	12	11	11	12	11	11	10	10
Seven C Ranch North Pivot Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1
Cooper	4	5	7	14	13	11	10	9	9	7	5	5	5	6	5	4	4	4	5	5	5	6	7	7	6	7	6	5	5	5	5
Wheelock	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2
Covey (Headgate)	86	84	85	85	84	84	84	82	82	80	78	76	76	75	73	70	66	65	68	67	66	65	65	65	61	57	58	57	56	57	56
Covey (Bruner Cr)	5	5	6	6	5	4	5	5	5	5	5	5	5	6	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4
Covey (Spring Cr)	5	5	6	6	6	6	6	6	6	5	6	6	5	5	5	5	5	5	6	6	5	5	6	6	5	5	5	5	5	5	5
Whites Water	13	12	11	12	12	12	11	10	10	11	12	13	13	14	14	14	13	13	15	14	14	13	12	11	10	9	8	8	11	17	15
South Branch Irr (N Branch)	18	17	16	15	15	13	13	12	12	11	11	10	9	9	8	8	7	7	6	5	5	5	4	4	4	4	4	4	4	4	4
Reed Ditch (N Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stoner & Nichols (M Branch)	0	0	0	0	0	0	0	0	0	4	8	8	9	9	9	8	8	7	7	7	7	6	6	6	6	6	7	6	6	6	5
Minnie Roberts (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastenanga South (M Branch)	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Gastenanga North (M Branch)	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	6	6	6	6	6	6	6	6	6	6
N Cokeville / Morgan (M Branch)	9	11	11	11	11	11	11	1	1	1	1	1	1	1	1	9	9	9	9	9	9	7	7	7	7	7	7	7	7	8	8
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith's Fork Ditch (M Branch)	5	1	1	1	1	1	1	0	0	0	0	0	0	0	0	3	3	3	3	3	3	2	2	2	2	2	2	2	2	4	4
Petersen Pump (S Branch)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	10	10	10	10	10	10	10	5	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	16	16
Forgeon Irr (S Branch)	0	0	0	0	0	0	0	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5
TOTAL WYOMING DIVERSIONS	418	401	396	397	397	395	395	378	373	366	340	323	326	321	283	275	262	257	258	256	249	254	215	214	208	203	202	201	199	224	218
IDAHO DIVERSIONS																															
Miller Ditch	12	12	11	11	10	10	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	6	6	6	6	6
Rigby	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	1	1
Nuffer Canal	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	0	0	0	0	0	0	0
Sorensen Ditch	4	4	4	4	4	4	4	4	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Williamson (Jensen) Ditch	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	4	4	4	4	4	4	4	3	3	3	3	3	3	3
J Smith (Loyd) Ditch	6	6	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0	0	0	0	0	2	2	2	2	2	2
Dingle Irrigation Ditch	27	26	26	26	25	25	24	24	24	23	23	22	22	40	41	41	42	43	43	44	45	45	46	47	47	48	49	49	50	46	46
Ream Crockett Canal	49	48	47	46	45	45	44	43	42	41	41	40	39	38	37	36	36	35	34	33	32	32	31	30	29	28	28	27	26	20	20
Black Otter Canal	24	25	25	26	26	27	27	28	28	29	29	30	30	25	24	22	21	20	18	17	15	14	13	11	10	10	8	7	5	5	5
Preston Montpelier Canal	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	41	42	43	44	46	47	48	49	50	55	49	42	36	32	33
Keetch (LaRocco Kent) Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	2	2	2	2	2	0	0	0	2	2	2
F Keetch	0	0	0	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	3	3
West Fork Canal	146	146	145	20	18	17	15	13	11	10	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
J Keetch (Pugmire) Ditch	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	3	3
TOTAL IDAHO DIVERSIONS	328	326	325	200	197	196	192	189	187	184	181	177	175	180	181	179	179	178	178	179	176	176	175	159	158	162	154	145	139	127	127
Total Divertible Flow	1703	1655	1644	1472	1439	1446	1442	1423	1389	1375	1331	1296	1254	1229	1165	1105	1116	1071	917	896	857	836	781	728	611	599	547	537	519	532	527
Wyoming Diversions	418	401	396	397	397	395	395	378	373	366	340	323	326	321	283	275	262	257	258	256	249	254	215	214	208	203	202	201	199	224	218
Wyoming Allocation (43%)																					368	360	336	313	263	258	235	231	223	229	226
Idaho Diversions	328	326	325	200	197	196	192	189	187	184	181	177	175	180	181	179	179	178	178	179	176	176	175	159	158	162	154	145	139	127	127
Rainbow Inlet Canal-Bear Lake	950	922	919	870	840	850	850	850	824	820	805	790	750	725	700	650	675	635	480	460	430	405	390	350	239	229	190	190	180	180	180
Bear River below Stewart Dam	7	5	5	5	5	5	5	5	5	5	5	5	3	3	1	1	1	1	1	1	1	1	1	5	5	5	1	1	1	1	1
Sub Total	1285	1253	1249	1075	1042	1051	1047	1044	1016	1009	991	972	928	908	882	830	855	814	659	640	607	582	566	514	402	396	345	336	320	308	308
Idaho Allocation (57%)																					488	477	445	415	348	342	312	306	296	303	300
Bear River @ Border WY	1040	1060	982	935	922	921	916	919	901	836	768	746	687	637	579	612	546	503	462	420	390	368	352	332	314	298	295	281	255	251	246

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2019.15 (cont.)

2019

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

August

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
WYOMING DIVERSIONS																															
BEAR RIVER CANALS																															
Thornock Pump and Pivot	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	3	3	3	3	3
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wyman No. 1 (East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Wyman No. 2 (West)	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	3	5	7	7	6	5	5	5	5	6	4	3	3
Oscar E. Snyder	2	2	10	18	18	20	17	17	17	17	17	18	17	20	19	21	18	15	14	16	19	18	19	18	19	19	19	18	17	17	16
Rocky Point (D2)	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0
Cook Bros	17	17	17	17	20	25	25	25	28	32	33	30	23	23	23	23	22	22	22	18	13	12	12	12	13	12	12	13	13	13	13
John R. Richards Terr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIBUTARY DIVERSIONS																															
Abraham Stoner (Sublette Cr)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade (Grade Canyon Cr)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
D.C.P. (Bruner Cr)	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
Curtis Pump (Bruner Cr)	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goodell (Pine Cr)	9	9	9	9	10	10	10	10	10	9	9	8	8	8	7	6	6	6	6	6	6	6	6	7	9	10	10	10	10	10	10
V.H. (Pine Cr)	8	8	8	8	7	7	7	7	7	7	8	9	9	9	10	11	11	11	10	10	10	10	10	9	6	5	5	5	5	5	6
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
SMITH'S FORK DIVERSIONS																															
Quinn-Bourne	10	9	9	9	9	9	8	8	8	8	8	11	14	13	12	12	12	12	10	9	10	8	7	6	6	9	10	8	5	7	8
Bar-O-Bar	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	4	4	4	4	4	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C.B.D. N0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C.B.D. No 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Button Flat	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Progress	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	10	10	10	9	9	9	9	9	9	9	8	8	7	6	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Seven C Ranch North Pivot Pump	2	2	2	2	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0
Seven C Ranch South Pump & Pipeline	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooper	5	5	5	5	5	5	5	5	4	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheelock	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covey (Headgate)	56	56	55	56	53	48	49	49	49	48	48	47	45	46	46	46	46	46	45	45	46	46	46	46	45	45	45	45	45	45	45
Covey (Bruner Cr)	4	4	4	4	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Covey (Spring Cr)	5	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6
Whites Water	14	12	12	12	11	10	9	10	11	10	7	7	8	10	10	10	9	9	11	12	12	11	9	8	8	8	9	8	8	7	6
South Branch Irr (N Branch)	4	4	4	3	3	4	3	3	3	3	4	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
Reed Ditch (N Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stoner & Nichols (M Branch)	5	5	5	5	5	5	5	5	5	6	8	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Minnie Roberts (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastenanga South (M Branch)	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1
Gastenanga North (M Branch)	6	6	6	6	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N Cokeville / Morgan (M Branch)	8	8	8	8	8	8	8	8	8	8	8	1	4	4	4	4	4	4	4	0	4	4	4	4	4	1	1	1	1	1	1
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith's Fork Ditch (M Branch)	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3	3
Petersen Pump (S Branch)	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	16	16	16	16	8	10	10	10	10	10	10	9	9	8	8	8	8	8	3	5	5	5	9	9	9	3	8	8	8	8	8
Forgeon Irr (S Branch)	5	5	5	5	4	4	4	4	4	4	4	5	5	5	5	5	5	5	4	4	4	4	4	0	0	0	0	0	0	0	0
TOTAL WYOMING DIVERSIONS	217	216	222	230	206	208	202	203	205	208	208	198	192	188	184	183	179	176	171	161	166	161	159	155	156	144	152	151	145	145	145
IDAHO DIVERSIONS																															
Miller Ditch	6	5	5	5	5	5	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4
Rigby	1	1	0	0	0	0	1	1	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nuffer Canal	0	0	0	0	0	0	0	26	26	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	21	20	20	20	20	20	19
Sorensen Ditch	0	0	0	0	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Williamson (Jensen) Ditch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	1	1	1
J Smith (Loyd) Ditch	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Dingle Irrigation Ditch	46	46	46	34	34	34	34	34	34	36	36	37	37	38	38	38	39	39	40	40	37	36	40	40	40	40	40	40	40	40	40
Ream Crockett Canal	20	20	21	21	21	21	21	5	5	8	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	5	5	5
Black Otter Canal	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6
Preston Montpelier Canal	34	34	35	36	37	37	38	7	42	48	48	47	47	47	46	46	46	45	45	45	44	44	40	40	40	40	40	40	40	40	40
Keetch (LaRocco Kent) Canal	2	2	2	2	2	2	2	2	2	3	3	3	3	0	0	0	0	0	0	2	0	0	3	3	3	3	3	0	0	0	0
F Keetch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0
West Fork Canal	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
J Keetch (Pugmire) Ditch	3	3	3	3	3	3	3	3	3	0	0	0	0	0	1	1	3	3	3	3	3	3	0	0	0	0	0	3	3	3	3
TOTAL IDAHO DIVERSIONS	128	129	128	117	121	121	123	102	138	139	139	139	139	137	135	135	138	138	138	136	130	129	128	127	127	126	126	125	125	124	124
Total Divertible Flow	526	526	532	513	492	481	471	455	464	468	468	458	450	443	447	446	435	433	428	416	390	378	375	370	365	353	356	354	349	348	349
Wyoming Diversions	217	216	222	230	206	208	202	203	205	208	208	198	192	188	184	183	179	176	171	161	166	161	159	155	156	144	152	151	145	145	145
Wyoming Allocation (43%)	226	226	229	220	212	207	202	196	199	201	201	197	193	191	192	192	187	186	184	179	168	163	161	159	157	152	153	152	150	150	150
Idaho Diversions	128	129	128	117	121	121	123	102	138	139	139	139	139	137	135	135	138	138	138	136	130	129	128	127	127	126	126	125	125	124	124
Rainbow Inlet Canal-Bear Lake	180	180	180	165	165	150	145	145	116	116	116	116	116	116	125	125	116	116	116	116	91	85	85	85	80	80	75	77	78	78	77
Bear River below Stewart Dam	1	1	1	1	1	1	1	5	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	4
Sub Total	309	310	309	283	287	272	269	252	259	260	260	260	258	256	263	263	257	257	257	255	224	217	216	215	210	209	204	203	204	203	205
Idaho Allocation (57%)	300	300	303	292	281	274	268	259	264	267	267	261	256	253	255	254	248	247	244	237	223	215	214	211	208	201	203	202	199	199	199
Bear River @ Border WY	232	223	214	202	190	181	177	179	179	172	178	185	195	187	179	174	161	169	166	164	165	151	156	158	155	151	146	142	138	132	130

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2019.15 (cont.)

2019 DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

September

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
WYOMING DIVERSIONS																															
BEAR RIVER CANALS																															
Thornock Pump and Pivot	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	985
Wyman No. 1 (East)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	850
Wyman No. 2 (West)	3	3	3	3	2	2	2	2	1	1	2	2	2	2	2	2	2	5	5	3	3	3	3	8	14	13	11	11	11	10	1233
Oscar E. Snyder	17	17	14	12	11	11	11	11	12	8	5	5	5	3	3	2	9	14	12	8	7	6	6	8	11	11	10	10	11	11	3551
Rocky Point (D2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2024
Cook Bros	13	13	16	23	23	26	33	34	39	39	41	40	40	40	40	40	39	39	40	40	40	40	39	38	39	40	40	41	42	25	4821
John R. Richards Terr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	591
TRIBUTARY DIVERSIONS																															
Abraham Stoner (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Teichert Bro's Spreader Dk (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	408
Grade (Grade Canyon Cr)	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	222
D.C.P. (Bruner Cr)	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	202
Curtis Pump (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Goodell (Pine Cr)	10	10	9	9	9	9	9	9	7	8	9	9	9	9	9	9	5	0	0	0	0	0	0	0	0	1	3	3	3	3	1035
V.H. (Pine Cr)	6	6	6	6	6	6	6	7	10	9	8	7	7	7	7	7	10	13	13	13	13	12	11	11	12	11	10	10	10	10	1433
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
SMITH'S FORK DIVERSIONS																															
Quinn-Bourne	8	8	8	7	6	4	3	3	1	2	7	7	6	5	3	5	7	7	5	2	5	9	9	9	5	2	1	1	1	1	1044
Bar-O-Bar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	592
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	350
C.B.D. N0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	310
C.B.D. No 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
Button Flat	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	197
Progress	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	269
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	3	3	3	2	2	2	2	2	2	2	3	3	2	2	2	3	4	4	4	4	4	4	4	4	4	5	5	6	9	7	1142
Seven C Ranch North Pivot Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	0	0	132
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Cooper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	862
Wheelock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446
Covey (Headgate)	45	45	46	46	45	46	48	48	29	16	21	21	20	20	19	14	12	12	12	12	12	12	11	11	11	11	11	11	11	11	7116
Covey (Bruner Cr)	4	4	4	4	4	4	4	4	5	5	6	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	5	5	4	749
Covey (Spring Cr)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	848
Whites Water	6	6	10	10	9	9	9	8	8	7	6	5	4	3	3	2	2	2	3	4	4	4	5	5	5	4	4	4	4	4	1262
South Branch Irr (N Branch)	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	958
Reed Ditch (N Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	497
Stoner & Nichols (M Branch)	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	376
Minnie Roberts (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastenanga South (M Branch)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	152
Gastenanga North (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	207
N Cokeville / Morgan (M Branch)	1	1	0	0	0	0	0	0	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	827
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Smith's Fork Ditch (M Branch)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	397
Petersen Pump (S Branch)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	8	8	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	768
Forgeon Irr (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	355
TOTAL WYOMING DIVERSIONS	145	146	141	145	140	143	150	151	135	118	125	121	119	114	109	106	112	120	116	110	111	114	111	117	124	121	120	123	127	105	37838
IDAHO DIVERSIONS																															
Miller Ditch	4	4	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1574
Rigby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Nuffer Canal	19	19	19	19	19	19	19	19	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	2172
Sorensen Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	169
Williamson (Jensen) Ditch	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	382
J Smith (Loyd) Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	299
Dingle Irrigation Ditch	40	40	29	29	29	28	28	28	5	5	5	5	4	4	4	4	4	4	4	4	3	3	3	3	4	4	4	3	3	3	3360
Ream Crockett Canal	5	5	20	20	20	20	20	20	35	35	35	35	35	35	35	35	35	35	35	35	6	6	6	6	6	6	6	6	6	6	4673
Black Otter Canal	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5	5	5	1863
Preston Montpelier Canal	40	40	25	25	25	25	25	25	20	19	18	16	15	14	15	15	15	15	15	16	16	16	16	16	7	7	7	7	7	7	4225
Keetch (LaRocco Kent) Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
F Keetch	0	0	2	2	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122
West Fork Canal	5	5	5	5	5	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7215
J Keetch (Pugmire) Ditch	3	3	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121
TOTAL IDAHO DIVERSIONS	123	123	115	115	116	116	116	111	86	85	83	82	81	79	80	80	80	80	80	80	51	51	51	51	42	41	41	41	41	41	26290
Total Divertible Flow	357	357	327	297	287	290	292	288	247	229	234	256	278	273	269	265	270	301	295	291	271	274	276	282	269	277	275	278	296	290	150409
Wyoming Diversions	145	146	141	145	140	143	150	151	135	118	125	121	119	114	109	106	112	120	116	110	111	114	111	117	124	121	120	123	127	105	37838
Wyoming Allocation (43%)	154	154	141	128	123	125	125	124	106	98	101	110	120	117	115	114	116	129	127	125	117	118	119	121	116	119	118	119	127	125	13788
Idaho Diversions	123	123	115	115	116	116	116	111	86	85	83	82	81	79	80	80	80	80	80	80	51	51	51	51	42	41	41	41	41	41	26290
Rainbow Inlet Canal-Bear Lake	85	85	70	36	30	30	25	25	25	25	25	52	75	75	75	75	73	97	95	97	105	105	110	110	100	110	110	110	125	140	85639
Bear River below Stewart Dam	4	4	1	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	642
Sub Total	212	212	186	152	147	147	142	137	112	111	109	135	160	158	159	159	157	181	179	181	160	160	165	165	146	155	155	155	170	185	112571
Idaho Allocation (57%)	203	204	186	169	164	165	166	164	141	131	133	146	159	155	153	151	154	172	168	166	155	156	158	161	154	158	157	158	169	165	18277
Bear River @ Border WY	129	125	114	92	89	90	87	90	97	114	141	149	150	146	140	135	135	124	127	133	145	147	140	131	117	120	121	129	158	186	94753

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2019.15 (cont.)

Lower Division

The Compact provides that a Utah Lower Division water user can petition the Commission for interstate regulation if he believes that he is being deprived of water to which he is justly entitled due to diversions in Idaho. If, upon review, the Commission finds such to be the case, then the Compact provides for the declaration of a water emergency and that it shall put into effect water delivery schedules based on priority of rights without regard to the state line. The Commission has never received such a petition. However, with growing concern for such a possibility, the Commission, over a several-year period, determined how it would receive and review such a petition and implement water delivery should a water emergency be declared. At its November meeting in 1997, the Commission adopted *Interim Procedures for Lower Division Water Delivery*. Appendix B to the procedures, which was revised with the procedures in April 2004, provides for the accounting and distribution method to be used in a water emergency.

Also appended to the procedures is *Water Delivery Schedule No. 1* which was revised by the Commission in 2015 and which includes the mainstem Lower Division water rights in both Idaho and Utah. After adoption of the water delivery schedule, both states began using this common schedule of water rights in their water right accounting programs. Hence, though not regulated by the Commission, the distribution in the Lower Division is cooperatively managed by the states of Idaho and Utah through their respective Watermasters and River Commissioners. Such distribution was facilitated in 2019 with weekly conference calls with the state agencies, large water users and PacifiCorp. Figure 2019.16 shows the delivery of water in the Lower Division as reported by the two state agencies.

2019 Lower Division Irrigation Water Deliveries

Canal/Group	Natural Flow (af)	Storage Use (af)	Total Diversion (af)
Idaho			
Gentile Valley	10,164	1,114	11,278
West Cache	34,732	495	35,227
Cub River Pumps	6,413	9,891	16,304
Last Chance and Bench B	69,801	13,192	82,993
Idaho Small Irrigators	14,891	1,977	16,868
Utah			
Bear River Canal Company	200,458	43,540	243,998
Utah Small Irrigators	4,443	4,061	8,504

Figure 2019.16

Allocation and deliveries of Bear Lake storage water are significant in most years to the total water diverted in the Lower Division. In 1995, PacifiCorp, the irrigators and Bear Lake interests entered into a settlement agreement as to the allocation of storage water from Bear

Lake. In 2004 the parties entered into an *Amended and Restated Bear Lake Settlement Agreement.* PacifiCorp tracks deliveries pursuant to the settlement agreement. Figure 2019.17 shows such deliveries in 2019. The below values represent the portion of the release that was purposeful to irrigation demands.

2019 Bear Lake Storage Deliveries

Irrigation Storage Allocation	245,000 af
Bear Lake Storage Release	112,000 af
Lake Recovery Volume	133,000 af
Decreed Transit Losses[1]	4,000 af
System Losses[2]	33,300 af
Delivered Bear Lake Storage	74,700 af

[1]Approximate, 3.6% of total storage release per Dietrich Decree, based on average rate for all irrigators

[2]Water that passes below Cutler Dam that is accounted for as storage water release

Figure 2018.17

STATE WATER ACTIVITIES

Article XI of the Amended Compact provides that applications for appropriation or change in water use within each state shall be in accordance with individual state law, except no such application shall be approved if the effect will deprive water users within another state or increase the depletion beyond that which is provided for under the Compact. This article further requires that state officials report, in a format and at intervals established by the Commission, the status of their respective allocations and uses. The Commission has determined the best format for reporting such changes in use is the Biennial Report. Figure O.3 in the Overview section of this report provides the most recent depletion information. This portion of the Biennial Report provides a summary of major water and water right related activities in each of the states during the 2019 water year.

Idaho

Water Activities

On November 9, 2018, the Idaho Department of Water Resources issued an order creating the Malad Valley Water Measurement District and requiring the installation of measuring devices on ground water diversions in Malad Valley. Measuring devices were to be installed prior to January 1, 2021 for non-irrigation diversions and prior to April 1, 2021 for irrigation diversions. The deadlines for installing measuring devices have been extended to 2022.

Water right permits were issued in Basins 11, 13 and 15 as shown in the table below. Permits 11-7843, 11-7844 and 11-7847 include conditions requiring the permit holders to mitigate for depletions.

Right No.	Priority Date	Rate (cfs)	Source	Water Use
11-7843	5/29/2018	0.60	GROUND WATER	MUNICIPAL
11-7844	6/22/2018	1.00	WASTE WATER	AESTHETIC STORAGE
11-7847	10/18/2018	1.14	GROUND WATER	DOMESTIC
11-7852	3/27/2019	0.04	SPRING	DOMESTIC, STOCKWATER
13-8023	6/28/2018	3.60	SPRING	IRRIGATION STORAGE
13-8027	8/20/2018	0.04	UNNAMED SPRING	STOCKWATER

Utah

Water Activities

In the December 2018 board meeting, the Board of Water Resources committed $5 million for the early acquisition of land for the right-of-way corridor. Currently, UTA and the Division are in discussion with several landowners concerning purchase of properties.

The Utah Division of Water Resources completed the latest study regarding the Bear River Development (BRD) project in November 2019. The study includes 13 potential reservoir combinations and pipeline alignments, as well as updated costs for the different scenarios range from $1.5 to $2.8 billion. This latest feasibility study builds on previous studies and

includes updated hydrology data and updated population and water use projections. The current projected need for water from the BRD is 2050. To review the feasibility study, please visit water.utah.gov/bear-river/.

Since March 2019 the Utah Division of Water Resources has worked together with the Idaho Department of Water Resources and PacifiCorp to develop a river system simulation model of the lower Bear River. The model is built in RiverWare, a water resource modeling software. The model is capable of representing reservoir operations of the lower Bear from 1980 – 2018 remarkably well. Model status, process and details were shared with basin stakeholders including Bear Lake Watch and Bear River Water Users Association as well as over 20 Utah stakeholder groups. The model was developed to answer questions about making changes to flood control operations and to assess impacts to Bear Lake storage and resulting downstream effects. However, during development the model was set-up so that it could be improved with a minimal amount of effort for river basin planning and to answer future questions. The parties involved in the model development are now running scenarios and analyzing the results. A report on the findings is expected to be released April 2020.

A cloud seeding project to increase snowpack has been ongoing since 1989 in the Lower Division in Eastern Box Elder County and Cache County. The winter storm systems in these areas were seeded with 21 ground-based generators using silver iodide at a total cost of $89,100. Bear River Water Conservancy District and Cache County cost shared (50/50) with the Utah Board of Water Resources in the cloud seeding project during the 2019 water year. The indicated average increase in the eastern Box Elder/Cache County target area due to seeding activity is 6%.

Water Rights

There were 56 applications to appropriate that were approved in Utah during 2019 for ground water for “ordinary domestic and stockwatering” purposes and associated irrigation use for 51 homes. In the Upper Division, three applications to appropriate to divert 1170 acre-feet of water ground water for supplemental irrigation use on 390 acres were approved. In the Lower Division, one application to appropriate ground water for irrigation of 71 acres was approved. Change applications were also approved to change the points of diversion, nature and/or place of use of historic water rights.

Wyoming

Water Activities

This year, Wyoming’s State Engineer, Patrick Tyrell, formally retired after 18 years with the agency. Pat served a little over 14 years as a Bear River Commissioner, and his instrumental experience and knowledge in water resource management will be missed. Wyoming welcomed Sam Swartz to the State Engineer’s Interstate Streams Division, and she has been appointed as a member of the TAC.

The Upper Division received an instate call for regulation from a canal below Woodruff Narrows Reservoir. This call came after Woodruff Narrows had filled to capacity. The regulation was in effect for the remainder of the 2019 irrigation season.

Wyoming continues to gather data for supplemental depletion analysis. Wyoming is awaiting direction from the Commission before moving forward with the data.

A new flume and automated gaging station was installed on Yellow Creek. The state has an interest in the flow at this location. A permit renewal process revealed that the historic flow based on a USGS gaging station was considerably lower than current estimates. The City of Evanston has agreed to monitor flows on the Yellow Creek in order to establish the minimum flows needed for their water treatment plant permitting.

Water Rights

New water right permits subject to Compact depletions issued from Wyoming's allocation are as follows:

Permit No.	Appropriator	Priority Date
P34663D	Lynn and Susan Jackson; Samuel and Christine Jackson	March 1, 2011
P35491D	Willis Land Wyoming LLC; Wyoming Board of Land Commissioners	May 4, 2015
P7811E	Willis Land Wyoming LLC	May 4th, 2015

STREAM GAGING

As was indicated in the Overview chapter of this report, under the subsection concerning the Stream Gaging Program, the Bear River Commission participates in a cooperative contract with the USGS for the maintenance of stream gages on the Bear River and significant tributaries. Also, the states, PacifiCorp and, at times, others participate in stream gaging on the Bear River and its tributaries. The Commission believes the collection of data concerning stream flows in the Bear River system is very important and allocates a significant portion of its annual budget in support of the cooperative stream gaging program with the U.S. Geological Survey. However, costs continue to increase and so the Commission is constantly reviewing the stream gaging program to determine if all of the stations supported are necessary for the Commission to fulfill the responsibilities assigned to it by the Compact.

During 2019, a total of 33 gages were maintained on the Bear River system. Of these 33 gages, 5 were part of a cooperative effort between the Bear River Commission and the USGS, and the USGS funded 7 gages under its Ground and Surface Water Information Program (GSWIP). PacifiCorp maintained 15 gages on the Bear River system during 2019. Three additional gages were maintained under the USGS Cooperative Program with the State of Utah (2 gages) and the State of Idaho (1 gage). Additionally, the State of Wyoming maintained 1 gage on the Bear River and the USFWS funded 1 USGS gage. The Bear Lake water quality platforms were funded as described in the footnote with the table below. Figure 2019.18 shows a tabulation of these gages and the entities which participated in the operation and funding of each gage. The approximate locations of the stream gages are shown on Figure O.5 in the Overview section of this report.

Publication of the streamflow records for 12 of the gages in this report were considered to be of significant value to the Commission and are included on pages 18-38 through 18-49.

BEAR RIVER SYSTEM STREAM GAGING STATIONS

STREAM GAGES MAINTAINED DURING THE 2019 WATER YEAR

STATION #	STATION NAME	OPERATED BY	FUNDED BY
10011500✪	Bear River near UT-WY state line	USGS	USGS
10016900✪	Bear River at Evanston WY	USGS-WY	USGS
10020100✪	Bear River above reservoir near Woodruff UT	USGS	USGS
10020300	Bear River below reservoir near Woodruff UT	USGS	BRC/USGS
10023000	Big Creek near Randolph UT	USGS	UTDNR/USGS
10026500	Bear River near Randolph UT	WSE	State of WY
10028500[1]	Bear River below Pixley Dam near Cokeville WY	USGS	BRC/USGS
10032000	Smiths Fork near Border WY	USGS	BRC/USGS
10038000✪	Bear River below Smiths Fork near Cokeville WY	USGS	USGS
10039500	Bear River at Border WY	USGS	BRC/USGS
10044300[2]	Dingle Inlet Canal near Dingle ID	PacifiCorp	PacifiCorp
10046000	Rainbow Inlet Canal near Dingle ID	PacifiCorp	PacifiCorp
10046500[2,3]	Bear River below Stewart Dam near Montpelier ID	PacifiCorp	PacifiCorp
	Bear Lake Water Quality Platforms	USGS	(see below)[4]
10055500	Bear Lake at Lifton near St. Charles ID	PacifiCorp	PacifiCorp
10059500	Bear Lake Outlet Canal near Paris ID	PacifiCorp	PacifiCorp
10068500	Bear River at Pescadero ID	USGS	IDDNR/USGS
10075000	Bear River at Soda Springs ID	PacifiCorp	PacifiCorp
10079000	Soda Point Reservoir at Alexander ID	PacifiCorp	PacifiCorp
10079500	Bear River at Alexander ID	PacifiCorp	PacifiCorp
10080000	Bear River below Grace Dam near Grace ID	PacifiCorp	PacifiCorp
10086000	Oneida Narrows Reservoir at Oneida ID	PacifiCorp	PacifiCorp
10086500	Bear River below PacifiCorp Tailrace at Oneida ID	PacifiCorp	PacifiCorp
10092700	Bear River at ID-UT state line	USGS	BRC/USGS
10105900	Little Bear River at Paradise UT	USGS	UTDNR/USGS
10108400✪	Logan, Hyde Park, Smithfield Canal near Logan UT	USGS	USGS
10109000✪[5]	Logan River above State Dam near Logan UT	USGS	USGS
10113500✪	Blacksmith Fork abv Upper & Lower Dam Near Hyrum UT	USGS	USGS
10116500	Cutler Reservoir near Collinston UT	PacifiCorp	PacifiCorp
10117000	Hammond (East Side) Canal near Collinston UT	PacifiCorp	PacifiCorp
10117500	West Side Canal near Collinston UT	PacifiCorp	PacifiCorp
10118000	Bear River near Collinston UT	PacifiCorp	PacifiCorp
10126000	Bear River near Corinne UT	USGS	USFWS

Notes:

✪ GSWIP site – Ground and Surface Water Information Program

Underlined station numbers indicate those gages for which stream flow data are published in this report.

[1] This gage is operated seasonally from April 1 until September 30 each year.

[2] Data for these gages are generated by PacifiCorp but not formally published

[3] Discharge measurements below Stewart Dam are required for interstate regulation pursuant to the Compact. However, flow is general only a few cfs. PacifiCorp maintains this gage and reports discharge to the Idaho watermaster. The data are included with the Central Division's canal diversion data herein.

[4] These two water quality platforms are jointly funded by Bear Lake Watch, Idaho Department of Environmental Quality, Utah Division of Water Quality, PacifiCorp and USGS.

[5] Gage 10109001 represents a summation of the Logan River discharge (10109000) and canal diversions (10108400) upstream of the gage. This is not a physical river gage. Gages 10109000 and 10108400 are part of the GSWIP.

Figure 2019.18

10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°57'55'', long 110°51'10'' referenced to North American Datum of 1927, in SE ¼ NW ¼ SE ¼ sec.30, T.3 N., R.10 E., Summit County,UT, Hydrologic Unit 16010101, on left bank 400 ft downstream from West Fork and 2.8 mi upstream from Utah-Wyoming State line.
DRAINAGE AREA.--172 mi^2.
PERIOD OF RECORD.--July 1942 to current year.
REVISED RECORDS.--WDR UT-74-1: Drainage area.
GAGE.--Water-stage recorder. Elevation of gage is 7,965 ft above NGVD of 1929, from river-profile map. Prior to October 1, 1986 at datum 3.0 ft higher.
REMARKS.-- Records good except for estimated daily discharges which are poor and other periods as noted. Records fair May 20, 2014 through Jun. 17, 2014 due to variable control conditions from snow-melt runoff. Flow regulated slightly by Whitney Reservoir, total capacity, 4,700 acre-ft since 1966. Three diversions above station for irrigation of about 265 acres above and 2,600 acres below station.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,390 ft^3/s, Jun 30, 2011, gage height, 7.82 ft; minimum, 6.8 ft^3/s, Apr 12, 1984, result of upstream ice jam.

DISCHARGE, CUBIC FEET PER SECOND
YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	35.5	52.4	e36.1	e26.7	e31.4	e38.2	e32.9	299	781	1,080	196	84.6
2	38.1	54.4	e34.5	e27.6	e34.0	e35.5	e45.7	259	937	987	173	81.7
3	64.4	54.6	e32.5	e30.3	e35.7	e33.9	50.4	250	1,070	925	173	81.6
4	72.9	48.3	e29.0	e33.4	e36.2	e34.8	54.4	281	1,130	841	182	81.5
5	106	51.4	e25.6	e35.8	e35.8	e37.7	61.2	336	1,260	745	180	83.3
6	73.4	46.3	e24.4	e37.6	e36.1	e40.3	67.6	432	1,420	701	161	95.9
7	64.7	43.7	e30.3	e37.2	e35.1	e40.9	65.9	483	1,980	645	147	88.5
8	59.9	38.0	e49.0	e36.2	e34.0	e39.9	77.1	423	1,910	602	156	115
9	55.4	38.8	e41.9	e35.2	e33.6	e39.0	92.1	390	1,380	540	146	194
10	59.9	45.3	e38.1	e34.2	e35.0	e40.2	70.1	338	1,330	502	130	174
11	58.4	41.3	e36.8	e33.4	e37.1	e42.4	63.4	380	1,420	481	121	219
12	55.9	41.0	e38.1	e31.6	e38.8	e44.5	78.0	502	1,520	450	113	189
13	57.2	47.3	e40.1	e29.6	e39.4	e46.4	75.7	726	1,580	466	122	170
14	57.1	47.3	e38.8	e29.7	e37.4	e45.0	73.1	889	1,870	450	116	162
15	44.9	44.4	e33.4	e32.5	e34.9	e43.4	77.5	1,030	1,670	399	111	152
16	52.9	43.4	e30.2	e34.4	e33.8	e43.6	77.2	1,220	1,670	354	106	70.4
17	51.7	41.3	e29.2	e32.9	e33.9	e43.7	73.0	1,160	1,510	314	103	80.4
18	53.3	42.5	e29.3	e31.2	e33.9	e40.7	82.2	870	1,360	280	98.4	78.6
19	51.0	53.1	e29.3	e34.1	e30.1	e37.5	108	727	1,460	259	93.9	70.4
20	50.1	54.5	e29.2	e36.6	e29.7	e35.1	143	645	1,520	245	89.7	67.5
21	51.5	44.8	e29.3	e36.4	e31.8	e33.7	161	563	1,420	229	86.7	68.5
22	52.0	38.4	e29.8	e35.8	e35.4	e34.0	165	518	1,180	224	84.9	67.9
23	64.1	38.9	e32.3	e36.3	e38.9	e35.8	178	471	967	213	83.2	65.8
24	59.7	e38.8	e31.9	e37.1	e41.0	e34.6	223	450	884	207	84.0	64.1
25	58.9	e32.7	e30.9	e37.2	e42.9	e33.4	289	442	949	202	81.5	63.5
26	55.0	e31.2	e29.8	e35.9	e43.9	e33.9	381	471	1,010	203	79.8	63.4
27	54.9	e28.7	e27.9	e34.5	e43.6	e35.3	484	510	1,030	222	78.4	62.6
28	54.7	e34.4	e26.8	e32.4	e41.4	e34.7	520	510	1,050	184	78.1	77.6
29	53.7	e40.3	e27.0	e31.2		e32.4	478	493	1,030	176	86.7	105
30	50.4	e39.7	e26.7	e30.5		e29.4	378	550	1,100	172	90.1	84.7
31	42.4		e26.3	e29.8		e29.0		646		173	88.5	
Total	1,760	1,297	994	1,037	1,015	1,169	4,726	17,260	39,400	13,469	3,640	3,063
Mean	56.8	43.2	32.1	33.5	36.2	37.7	158	557	1,313	435	117	102
Max	106	54.6	49.0	37.6	43.9	46.4	520	1220	1980	1080	196	219
Min	35.5	28.7	24.4	26.7	29.7	29.0	32.9	250	781	172	78.1	62.6
Ac-ft	3,491	2,572	1,973	2,057	2,013	2,318	9,373	34,240	78,140	26,720	7,220	6,074

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943-2019, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	66.4	55.1	45.6	41.5	39.7	44.6	116	602	836	295	93.2	75.9
Max	208	106	94.9	72.4	64.3	99.5	316	1,044	1,990	1,371	244	229
(WY)	(1983)	(1984)	(1984)	(1984)	(1984)	(2017)	(1946)	(1984)	(1986)	(2011)	(1965)	(1983)
Min	30.8	32.5	27.7	28.9	21.1	26.0	37.2	162	204	67.4	31.0	23.9
(WY)	(1959)	(1955)	(1960)	(2007)	(2003)	(1964)	(1944)	(1977)	(1992)	(1961)	(2002)	(1956)

Figure 2019.18 (cont.)

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°26'04", long 111°01'01" referenced to North American Datum of 1927, in NE ¼ NW ¼ NW ¼ sec.29, T.17 N., R.120 W., Uinta County, WY, Hydrologic Unit 16010101, on right bank 4.8 mi upstream from Woodruff Narrows Dam and 9.6 mi southeast of Woodruff.
DRAINAGE AREA.--755 mi^2.
PERIOD OF RECORD.--October 1961 to current year.
REVISED RECORDS.--WDR UT-74-1: Drainage area.
GAGE.--Water-stage recorder. Elevation of gage is 6,455 ft above NGVD of 1929, from river-profile map.
REMARKS.-- Diversion for irrigation of about 43,500 acres above station. Records are good except for discharges below 15 cfs which are fair and estimated daily discharges which are poor.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,150 ft^3/s, Jun 2, 1983, gage height, 6.17 ft; minimum, no flow several days during Aug, Sep 1988, and Sep 2002.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5.64	5.54	38.0	e24.6	e32.6	e42.0	116	562	611	678	15.3	50.8
2	7.55	5.46	36.4	e26.7	e35.2	e40.7	142	461	762	608	28.7	47.5
3	16.8	4.22	33.6	e30.5	e36.2	e39.3	143	374	891	526	26.1	47.2
4	20.2	4.34	31.5	e32.5	e35.6	e38.2	158	324	1,010	476	21.9	47.1
5	40.4	5.34	26.6	e34.1	e34.8	e39.9	135	353	1,030	421	26.1	29.9
6	60.2	5.77	21.4	e35.0	e33.7	e40.9	264	430	1,150	366	23.6	35.0
7	51.6	5.48	26.3	e35.7	e32.2	e40.9	454	492	1,340	322	21.6	35.5
8	41.4	5.28	50.5	e35.8	e32.4	e39.8	619	527	1,850	272	13.1	43.9
9	33.8	5.23	47.2	e35.5	e32.8	e39.4	828	526	2,030	221	12.6	48.5
10	18.7	4.76	37.7	e34.5	e34.1	e40.5	677	530	1,450	184	14.1	58.4
11	7.55	4.61	35.2	e32.7	e35.9	e42.1	460	475	1,300	160	8.86	48.5
12	6.14	4.63	38.1	e30.3	e39.6	e44.1	428	509	1,380	136	8.85	41.7
13	5.71	3.44	44.4	e29.1	e41.2	e43.9	416	663	1,490	127	7.87	39.5
14	5.52	2.58	40.4	e29.7	e38.2	e42.5	401	828	1,570	124	7.81	29.5
15	5.50	5.55	29.0	e31.3	e35.3	e41.7	688	976	1,870	e127	13.9	22.9
16	5.03	11.0	25.0	e32.7	e34.4	e43.5	924	1,130	1,860	e116	21.5	19.5
17	4.58	15.9	e22.1	e31.8	e34.3	e45.1	697	1,230	1,800	e88.0	23.6	17.5
18	4.26	18.2	e22.9	e31.4	e34.2	e45.2	612	1,100	1,520	e61.7	21.1	9.97
19	4.33	14.6	e23.7	e34.9	e34.4	e44.5	659	808	1,320	e52.7	20.7	5.87
20	4.45	12.1	e23.3	e36.5	e35.1	e44.7	716	686	1,360	e51.3	27.0	5.72
21	3.92	14.2	e23.0	e35.6	e36.0	e48.3	705	579	1,380	e49.7	29.8	24.0
22	3.70	14.1	e23.7	e34.8	e37.0	e49.0	658	550	1,180	e35.7	28.6	39.7
23	3.88	19.7	e24.5	e36.0	e38.1	e48.6	535	518	946	e16.2	26.8	40.6
24	3.80	27.3	e27.2	e38.0	e39.5	e48.0	504	496	738	11.5	24.9	39.4
25	4.42	28.5	e27.0	e35.4	e42.0	e47.5	539	478	658	10.7	23.8	38.8
26	5.63	26.4	e25.3	e33.6	e42.7	e48.3	600	464	644	10.6	22.9	38.1
27	5.86	20.6	e25.1	e34.7	e42.8	e53.3	716	471	661	11.1	35.6	39.3
28	5.76	27.8	e25.1	e34.0	e42.6	57.3	748	516	630	12.1	35.5	45.7
29	5.60	38.7	e25.0	e32.3		60.7	721	520	608	15.5	33.8	50.6
30	5.35	35.3	e24.8	e30.6		67.4	659	477	581	13.3	37.3	79.8
31	5.32		e24.7	e30.1		82.9		511		13.2	46.3	
Total	403	397	929	1,019	1,023	1,450	15,920	18,560	35,620	5,316	710	1,120
Mean	13.0	13.2	30.0	32.9	36.5	46.8	531	599	1,187	172	22.9	37.3
Max	60.2	38.7	50.5	38.0	42.8	82.9	924	1230	2030	678	46.3	79.8
Min	3.70	2.58	21.4	24.6	32.2	38.2	116	324	581	10.6	7.81	5.72
Ac-ft	799	787	1,842	2,024	2,029	2,876	31,580	36,820	70,650	10,550	1,407	2,222

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 -2019, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	64.6	63.5	62.9	61.5	72.9	155	312	766	796	181	45.4	45.5
Max	437	198	181	147	312	627	671	1,957	2,564	1,355	340	288
(WY)	(1983)	(1974)	(1984)	(1984)	(1986)	(1986)	(1969)	(1984)	(1986)	(2011)	(1983)	(1983)
Min	3.03	6.06	7.21	6.76	10.4	26.8	77.7	104	47.3	4.41	.68	.49
(WY)	(1965)	(1989)	(1989)	(1989)	(2003)	(1977)	(1977)	(1977)	(2012)	(2000)	(2000)	(1988)

Figure 2019.18 (cont.)

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'20", long 111°00'50" referenced to North American Datum of 1927, in NE ¼ NE ¼ NW ¼ sec.32, T.18 N., R.120 W., Uinta County, WY, Hydrologic Unit 16010101, on right bank 1,100 ft downstream from Woodruff Narrows Dam, 1.6 mi upstream from Salt Creek, 5.4 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi^2.

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR UT-74-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,398.96 ft above NGVD of 1929. Prior to September 26, 1962, at site 175 ft upstream at same datum.

REMARKS.-- Flow regulated by Woodruff Narrows Reservoir (station 10020200) beginning January 1962. Diversions for irrigation of about 43,500 acres above station. Records are good, except estimated daily discharges which are poor, and other exceptions as noted. Aug 4 to Sep 30, 2014 records are fair (due to variable control conditions from rain storm event).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft^3/s, Jun 2, 1983, gage height, 8.26 ft; no flow Jul 4, 5, 1962, Aug 30, 31, Sep 1, 2, 6, 7, 1979, Oct 30, 1980.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	16.7	17.1	16.6	16.4	15.3	15.7	17.1	199	956	996	43.0	51.5
2	16.9	16.7	16.6	16.3	15.3	15.9	17.2	329	956	990	43.0	51.8
3	16.8	16.2	16.7	16.3	15.6	16.2	17.0	349	959	985	42.9	51.7
4	16.8	16.7	16.9	16.2	15.7	15.8	17.2	337	962	977	42.5	51.5
5	16.7	16.7	16.6	16.3	15.4	16.2	17.5	332	961	971	42.1	51.5
6	16.5	16.7	16.3	16.2	15.4	16.2	17.8	354	964	463	42.1	50.7
7	16.7	16.7	16.4	15.9	16.0	16.2	18.0	413	967	289	42.8	50.3
8	16.7	16.7	16.8	15.7	16.1	15.8	18.5	464	973	298	42.7	50.3
9	16.8	16.7	16.4	15.7	15.9	15.7	18.8	485	984	264	42.5	49.3
10	17.3	16.7	16.3	15.7	15.7	15.8	18.9	498	990	200	42.1	49.0
11	17.2	16.7	16.2	15.8	15.7	16.2	18.9	477	994	163	42.1	48.3
12	17.1	16.7	16.3	15.8	15.7	16.2	18.9	472	998	131	42.1	48.1
13	17.1	16.7	16.2	16.0	15.7	16.2	19.0	508	1,000	121	42.4	48.0
14	17.2	16.7	16.2	16.0	15.7	16.2	19.6	630	1,010	121	42.3	47.9
15	17.1	16.7	16.2	15.6	15.5	16.2	19.7	770	1,040	121	47.1	48.0
16	16.9	16.7	16.4	15.6	16.1	16.5	19.4	898	1,280	121	51.4	37.8
17	17.2	16.7	16.6	15.7	16.2	16.2	19.3	1,080	1,500	92.9	50.9	27.6
18	16.8	16.7	16.2	15.5	16.2	16.6	19.3	1,140	1,520	82.0	50.5	23.2
19	16.8	16.7	16.1	15.5	16.2	16.7	19.5	961	1,390	65.8	50.1	21.0
20	16.9	16.6	16.1	15.9	16.2	16.7	19.5	811	1,310	43.7	50.1	20.9
21	17.1	16.6	16.4	15.9	16.1	16.7	19.9	706	1,300	43.2	50.1	20.6
22	17.3	16.8	16.5	15.9	16.2	16.7	20.4	923	1,260	43.2	50.1	20.6
23	17.0	16.7	16.5	15.8	16.2	16.7	20.5	1,100	1,150	43.0	50.1	20.5
24	16.8	16.6	16.5	16.0	16.2	16.8	20.7	1,040	1,050	43.0	50.3	20.5
25	17.1	16.5	16.5	15.9	16.2	16.7	20.8	986	1,010	43.0	49.8	20.4
26	16.7	16.5	16.4	15.9	16.2	16.8	20.9	981	1,010	43.0	49.8	20.3
27	16.7	16.5	16.4	15.9	16.2	17.2	20.6	979	1,010	43.0	50.5	20.4
28	16.7	16.5	16.4	16.0	16.0	17.3	20.6	976	1,000	43.0	50.5	20.4
29	16.7	16.5	16.4	16.3		16.9	20.7	971	1,000	43.0	50.7	20.4
30	16.8	16.4	16.4	16.0		16.7	44.7	966	1,000	43.0	50.9	20.7
31	17.2		16.4	15.3		16.7		962		43.0	50.9	
Total	524	499	509	493	445	508	601	22,100	32,500	7,969	1,448	1,083
Mean	16.9	16.6	16.4	15.9	15.9	16.4	20.0	713	1,083	257	46.7	36.1
Max	17.3	17.1	16.9	16.4	16.2	17.3	44.7	1140	1520	996	51.4	51.8
Min	16.5	16.2	16.1	15.3	15.3	15.7	17.0	199	956	43.0	42.1	20.3
Ac-ft	1,040	991	1,009	978	882	1,008	1,192	43,830	64,470	15,809	2,873	2,148

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2019, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	50.2	45.6	40.2	37.8	39.5	89.5	244	741	951	257	69.2	54.9
Max	425	421	184	153	171	648	891	1,828	2,437	1,339	331	278
(WY)	(1983)	(1983)	(1983)	(1985)	(1971)	(2017)	(1985)	(1984)	(1983)	(2011)	(1983)	(1983)
Min	3.89	.12	4.28	4.37	4.71	4.70	.34	27.8	357	10.4	3.91	3.65
(WY)	(1990)	(1981)	(1978)	(1978)	(1978)	(1978)	(1977)	(1977)	(2002)	(2002)	(1979)	(1979)

Figure 2019.18 (cont.)

10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY

LOCATION.--Lat 41°56'20", long 110°59'05" referenced to North American Datum of 1927, in SW ¼ SE ¼ SE ¼ sec.25, T.23 N., R.120 W., Lincoln County, WY, Hydrologic Unit 16010102, 800 ft downstream from Pixley Dam, 11 mi south of Cokeville, and 17.5 mi downstream from Twin Creek.

DRAINAGE AREA.--2,032 mi².

PERIOD OF RECORD.--October 1941 to November 1943 (published as Bear River near Cokeville), October 1952 to September 1956, May 1958 to current year (seasonal only). Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,185 ft above NGVD of 1929, from river-profile map. October 31, 1941 to November 30, 1943, at site 200 ft downstream at different datum. September 24, 1952 to August 31, 1994 at site 50 ft downstream at same datum. May 7, 2015 to August 14, 2015 at site 850 ft upstream at same datum.

REMARKS.-- Natural flow of stream affected by diversions for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs. Records are fair except for estimated daily discharges which are poor and other periods as noted. 6/20/14 - 7/12/14; records are poor due to variable control conditions from backwater. 5/6/15 - 9/30/16, 3/18/16 – 5/16/16, 6/8/16 – 10/4/16, 3/21/17 – 10/2/17, 3/14/18 – 4/24/18; records are good.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,300 ft³/s, Mar 25, 1956; minimum daily discharge, 0.09 ft³/s, Sep 8, 2002.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	18.4	---	---	---	---	---	e157	174	581	531	83.7	32.4
2	10.7	---	---	---	---	---	e159	181	584	520	78.4	23.1
3	11.9	---	---	---	---	---	e167	187	588	521	78.2	13.8
4	18.0	---	---	---	---	---	181	244	591	526	70.6	16.3
5	24.6	---	---	---	---	---	215	283	592	545	66.5	18.2
6	26.6	---	---	---	---	---	297	294	584	556	59.9	18.9
7	27.8	---	---	---	---	---	354	298	598	569	56.3	19.7
8	33.1	---	---	---	---	---	377	318	609	567	62.6	20.9
9	46.1	---	---	---	---	---	415	355	615	523	68.5	22.4
10	48.4	---	---	---	---	---	438	389	618	470	71.4	26.8
11	---	---	---	---	---	---	435	402	620	437	85.1	34.8
12	---	---	---	---	---	---	462	411	617	423	93.4	42.6
13	---	---	---	---	---	---	452	411	614	376	75.6	46.4
14	---	---	---	---	---	---	419	401	603	311	74.1	45.8
15	---	---	---	---	---	---	389	385	593	326	74.0	45.6
16	---	---	---	---	---	---	396	366	578	304	74.0	45.7
17	---	---	---	---	---	---	402	346	565	264	73.9	42.1
18	---	---	---	---	---	---	365	315	566	242	70.8	45.8
19	---	---	---	---	---	e55.1	329	341	580	219	67.2	47.1
20	---	---	---	---	---	e63.3	310	393	596	192	65.2	47.6
21	---	---	---	---	---	e72.4	297	409	619	174	47.3	50.2
22	---	---	---	---	---	e80.5	340	308	659	165	50.3	48.8
23	---	---	---	---	---	e88.6	403	295	683	152	53.7	47.5
24	---	---	---	---	---	e97.5	345	310	693	140	53.1	45.8
25	---	---	---	---	---	e107	305	373	693	126	51.6	45.9
26	---	---	---	---	---	e119	271	401	676	116	50.0	45.9
27	---	---	---	---	---	e128	246	436	645	112	49.8	45.5
28	---	---	---	---	---	e139	230	460	610	106	44.2	51.5
29	---	---	---	---		e141	206	531	580	99.3	39.3	64.6
30	---	---	---	---		e145	179	567	548	93.8	36.8	65.6
31	---		---	---		e153		576		88.7	34.8	
Total							9,541	11,160	18,300	9,795	1,960	1,167
Mean							318	360	610	316	63.2	38.9
Max							462	576	693	569	93.4	65.6
Min							157	174	548	88.7	34.8	13.8
Ac-ft							18,920	22,140	36,290	19,430	3,888	2,315

Figure 2019.18 (cont.)

10032000 SMITHS FORK NEAR BORDER, WY

LOCATION.--Lat 42°17'36", long 110°52'18" referenced to North American Datum of 1927, in NE ¼ SW ¼ SW ¼ sec.28, T.27 N., R.118 W., Lincoln County, WY, Hydrologic Unit 16010102, on left bank 4.9 mi upstream from Howland Creek, 5.6 mi downstream from Hobble Creek, and 12.4 mi northeast of Border.

DRAINAGE AREA.--165 mi^2.

PERIOD OF RECORD.--May 1942 to current year.

REVISED RECORDS.--WSP 1734: 1952(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,720 ft above NGVD of 1929, from topographic map. Prior to October 16, 1945, at site 1.2 mi downstream at different datum. October 16, 1945 to November 1986 at site 0.4 mi downstream at different datum.

REMARKS.-- Records good except for estimated daily discharges which are poor. One diversion for irrigation of about 200 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft^3/s, Jun 4, 1986, gage height, 5.66 ft; minimum, 19 ft^3/s, Feb 28, 2007.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	87.1	80.3	71.6	e135	e59.3	52.6	57.8	220	602	422	196	110
2	88.2	81.9	e68.9	e140	e63.9	51.9	59.1	202	627	407	193	108
3	97.4	83.9	e71.3	e138	61.9	49.1	60.7	194	623	393	188	108
4	101	82.9	e71.4	e137	59.6	e63.3	63.3	213	666	381	184	106
5	107	80.8	e71.2	e133	57.5	e70.7	71.3	244	712	365	180	105
6	93.8	79.8	e70.9	e134	64.3	55.5	79.7	273	755	349	179	110
7	91.5	78.5	e70.6	e118	66.4	53.4	74.0	288	896	335	178	111
8	90.2	76.1	e70.4	e106	64.7	51.5	73.9	304	930	327	177	117
9	93.0	e69.3	e70.5	e96.1	e106	51.1	87.0	295	790	318	173	124
10	92.7	76.5	e70.6	e104	e91.3	53.1	82.7	264	703	305	168	118
11	89.5	71.7	e70.5	e98.7	88.9	51.7	76.4	270	663	294	162	132
12	87.8	e75.7	e70.2	e99.6	e124	52.1	73.7	305	673	287	155	121
13	87.7	e77.9	e69.8	e93.0	e108	50.1	73.1	366	694	283	148	111
14	87.7	e76.1	e69.5	e85.9	73.0	49.6	75.4	409	742	274	146	108
15	82.7	75.3	e69.7	e85.1	63.7	49.2	86.1	476	741	268	144	108
16	84.9	74.4	e71.2	e85.4	56.7	50.5	91.3	538	734	261	142	105
17	83.7	75.6	e71.5	e87.4	58.1	52.3	96.7	593	725	254	141	103
18	83.2	e70.2	e70.7	e80.2	56.7	50.9	97.9	510	693	247	139	102
19	82.9	e78.8	e70.8	e68.6	68.5	51.9	118	463	672	241	139	103
20	82.3	e76.1	e72.1	63.7	79.1	51.9	146	490	648	234	136	110
21	81.7	e74.2	e72.8	e62.2	e78.7	53.4	178	468	598	230	133	112
22	81.5	73.4	e73.1	e59.9	e68.4	54.4	193	497	546	226	133	103
23	85.4	74.5	e73.3	e67.6	e66.0	53.7	210	492	511	222	130	99.2
24	85.2	73.9	e72.8	e66.3	e65.3	53.9	248	494	482	223	129	98.0
25	82.7	e75.5	e69.8	e60.4	55.3	53.7	280	486	466	218	125	101
26	81.4	e76.6	e69.3	e59.4	57.9	52.0	320	488	459	215	120	104
27	80.3	e76.2	e71.4	57.9	54.8	55.0	311	513	460	216	118	104
28	80.0	75.2	e79.6	e63.3	53.1	56.6	301	538	455	209	118	122
29	79.3	72.6	e89.5	e54.4		58.6	266	573	447	207	119	131
30	79.0	72.6	e103	e50.1		56.6	246	574	437	202	117	112
31	77.0		e119	e58.4		53.4		599		197	113	
Total	2,688	2,286	2,307	2,749	1,971	1,664	4,197	12,640	19,150	8,610	4,623	3,306
Mean	86.7	76.2	74.4	88.7	70.4	53.7	140	408	638	278	149	110
Max	107	83.9	119	140	124	70.7	320	599	930	422	196	132
Min	77.0	69.3	68.9	50.1	53.1	49.1	57.8	194	437	197	113	98.0
Ac-ft	5,331	4,535	4,576	5,452	3,910	3,300	8,325	25,069	37,980	17,080	9,170	6,558

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2019, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	90.7	78.4	68.4	63.3	60.6	63.8	162	527	611	288	150	108
Max	156	114	88.4	88.7	87.5	159	446	1,072	1,377	779	280	169
(WY)	(1987)	(1986)	(1983)	(2019)	(2017)	(2017)	(2017)	(1997)	(1986)	(2011)	(2011)	(2011)
Min	51.0	50.7	41.5	39.7	34.7	39.5	58.6	99.1	96.2	61.4	55.1	52.1
(WY)	(1978)	(1978)	(2002)	(2008)	(2003)	(1988)	(1975)	(1977)	(1977)	(1977)	(1977)	(1977)

Figure 2019.18 (cont.)

10039500 BEAR RIVER AT BORDER, WY

LOCATION.--Lat 42°12'40", long 111°03'11" referenced to North American Datum of 1927, in NE ¼ NE ¼ NE ¼ sec.15, T.14 S., R.46 E., Bear Lake County, ID, Hydrologic Unit 16010102, on left bank 0.2 mi west of Wyoming-Idaho State line, 0.5 mi west of Border, and 2.1 mi upstream from Thomas Fork.

DRAINAGE AREA.--2,480 mi².

PERIOD OF RECORD.--October 1937 to September 1996, October 1996 to September 2000 (seasonal), October 2000 to current year.

REVISED RECORDS.--WDR UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft above NGVD of 1929, unadjusted.

REMARKS.-- Natural flow of stream affected by regulation of upstream reservoirs, diversions for irrigation, and return flow from irrigated areas. Records are good except estimated discharges which are poor and the following exceptions: March 13 to August 15, 2017 which is rated fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s, Jun 7, 1983, gage height, 9.69 ft; minimum discharge, 24 ft³/s, Apr 29, 30, 1977.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	84.6	148	213	e143	e115	e135	e215	556	1,350	1,040	232	129
2	90.1	152	194	e146	e105	e132	e251	520	1,400	1,060	223	125
3	91.8	154	197	e148	e106	e130	e288	492	1,430	982	214	114
4	96.4	154	e156	e149	e123	e128	e337	494	1,410	935	202	91.7
5	100	157	e147	e146	e132	e129	e395	564	1,460	922	190	89.1
6	107	156	e142	e138	e127	e133	e453	619	1,470	921	181	90.2
7	102	162	e139	e131	e121	e137	e503	643	1,560	916	177	86.7
8	101	170	e136	e119	e122	e137	e535	698	1,670	919	179	90.1
9	110	e151	e133	e107	e126	e137	e556	736	1,680	901	179	97.1
10	118	e141	e128	e111	e127	e138	e575	743	1,590	836	172	114
11	133	e145	e128	e116	e142	e138	e584	742	1,500	768	178	141
12	149	e143	e127	e120	e171	e138	577	758	1,450	746	185	149
13	148	e148	e126	e120	e192	e138	595	791	1,450	687	195	150
14	149	166	e125	e119	e193	e138	576	812	1,450	637	187	146
15	148	171	e125	e117	e157	e137	558	798	1,470	579	179	140
16	149	170	e126	e113	e141	e137	559	832	1,430	612	174	135
17	149	174	e127	e112	e126	e133	615	890	1,370	546	161	135
18	149	157	e129	e113	e116	e133	625	874	1,360	503	169	124
19	146	150	e136	e114	e112	e136	587	811	1,310	462	166	127
20	147	159	e142	e116	e108	e140	573	880	1,290	420	164	133
21	147	170	e141	e120	e109	e142	584	912	1,280	390	165	145
22	147	181	e137	e121	e111	e143	651	940	1,280	368	151	147
23	148	176	e135	e118	e111	e146	708	855	1,280	352	156	140
24	150	170	e139	e117	e116	e149	739	893	1,300	332	158	131
25	148	158	e138	e119	e134	e153	711	937	1,290	314	155	117
26	148	171	e129	e116	e142	e159	692	967	1,250	298	151	120
27	148	172	e121	e119	e140	e166	695	1,010	1,230	295	146	121
28	147	201	e117	e124	e138	e171	654	1,100	1,170	281	142	129
29	147	195	e120	e120		e189	626	1,170	1,070	255	138	158
30	147	192	e130	e111		e192	586	1,250	1,030	251	132	186
31	148		e138	e112		e193		1,280		246	130	
Total	4,093	4,914	4,321	3,795	3,663	4,507	16,600	25,570	41,280	18,770	5,331	3,801
Mean	132	164	139	122	131	145	553	825	1,376	606	172	127
Max	150	201	213	149	193	193	739	1280	1680	1060	232	186
Min	84.6	141	117	107	105	128	215	492	1030	246	130	86.7
Ac-ft	8,118	9,747	8,571	7,527	7,265	8,940	32,930	50,710	81,880	37,240	10,570	7,539

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2019, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	196	214	187	171	195	367	699	969	1,130	527	216	168
Max	752	693	563	381	479	1,640	2,220	3,158	3,829	2,837	752	671
(WY)	(1983)	(1983)	(1983)	(1985)	(1986)	(2017)	(2017)	(1952)	(1983)	(2011)	(1983)	(1983)
Min	43.5	74.7	97.2	77.6	75.2	105	71.2	74.4	62.2	54.2	42.3	38.5
(WY)	(2002)	(2002)	(2002)	(1993)	(1993)	(1988)	(1977)	(1977)	(1977)	(1977)	(1940)	(1940)

Figure 2019.18 (cont.)

PACIFICORP

Daily Mean by Year

Rainbow Inlet Canal WY2019

Identifier: 10046000
Location: Rainbow Inlet Canal near Dingle ID
Units: ft^3/s

Year: **WY**2019

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	50.0 UN	146 UN	155 UN	140 UN	105 UN	140 UN	210 UN	734 UN	1290 UN	934 UN	180 UN	85.0 UN
2	50.0 UN	146 UN	155 UN	140 UN	105 UN	140 UN	250 UN	696 UN	1340 UN	927 UN	180 UN	85.0 UN
3	60.0 UN	146 UN	150 UN	140 UN	105 UN	140 UN	265 UN	658 UN	1350 UN	901 UN	180 UN	70.0 UN
4	65.0 UN	140 UN	150 UN	135 UN	115 UN	135 UN	300 UN	543 UN	1330 UN	831 UN	165 UN	36.0 UN
5	90.0 UN	146 UN	140 UN	135 UN	115 UN	135 UN	387 UN	438 UN	1330 UN	786 UN	165 UN	30.0 UN
6	85.0 UN	146 UN	140 UN	135 UN	115 UN	135 UN	474 UN	487 UN	1350 UN	803 UN	150 UN	30.0 UN
7	91.0 UN	146 UN	150 UN	135 UN	115 UN	135 UN	583 UN	517 UN	1350 UN	805 UN	145 UN	25.0 UN
8	91.0 UN	146 UN	155 UN	135 UN	115 UN	135 UN	675 UN	591 UN	1400 UN	794 UN	145 UN	25.0 UN
9	102 UN	155 UN	160 UN	135 UN	115 UN	135 UN	711 UN	701 UN	1480 UN	822 UN	116 UN	25.0 UN
10	108 UN	140 UN	155 UN	135 UN	115 UN	135 UN	756 UN	712 UN	1520 UN	875 UN	116 UN	25.0 UN
11	115 UN	146 UN	155 UN	135 UN	115 UN	135 UN	802 UN	729 UN	1470 UN	861 UN	116 UN	25.0 UN
12	130 UN	135 UN	150 UN	135 UN	115 UN	135 UN	798 UN	731 UN	1380 UN	798 UN	116 UN	52.0 UN
13	145 UN	135 UN	155 UN	135 UN	115 UN	130 UN	777 UN	731 UN	1310 UN	741 UN	116 UN	75.0 UN
14	145 UN	125 UN	150 UN	135 UN	110 UN	135 UN	759 UN	747 UN	1300 UN	670 UN	116 UN	75.0 UN
15	143 UN	125 UN	150 UN	135 UN	115 UN	135 UN	742 UN	754 UN	1270 UN	572 UN	125 UN	75.0 UN
16	140 UN	135 UN	139 UN	135 UN	115 UN	130 UN	729 UN	729 UN	1230 UN	502 UN	125 UN	75.0 UN
17	140 UN	145 UN	135 UN	113 UN	115 UN	130 UN	741 UN	753 UN	1180 UN	529 UN	116 UN	73.0 UN
18	145 UN	150 UN	140 UN	119 UN	120 UN	130 UN	756 UN	793 UN	1150 UN	495 UN	116 UN	97.0 UN
19	150 UN	135 UN	140 UN	119 UN	120 UN	135 UN	748 UN	796 UN	1130 UN	463 UN	116 UN	95.0 UN
20	150 UN	140 UN	150 UN	107 UN	120 UN	135 UN	721 UN	799 UN	1080 UN	431 UN	116 UN	97.0 UN
21	150 UN	125 UN	150 UN	110 UN	120 UN	135 UN	690 UN	880 UN	1020 UN	386 UN	91.0 UN	105 UN
22	155 UN	145 UN	140 UN	110 UN	120 UN	135 UN	696 UN	977 UN	984 UN	352 UN	85.0 UN	105 UN
23	155 UN	155 UN	150 UN	110 UN	120 UN	135 UN	734 UN	1010 UN	996 UN	297 UN	85.0 UN	110 UN
24	155 UN	150 UN	140 UN	110 UN	120 UN	145 UN	775 UN	996 UN	1020 UN	258 UN	85.0 UN	110 UN
25	155 UN	150 UN	140 UN	110 UN	120 UN	145 UN	820 UN	974 UN	1030 UN	239 UN	80.0 UN	100 UN
26	150 UN	140 UN	140 UN	115 UN	120 UN	175 UN	812 UN	1010 UN	1010 UN	229 UN	80.0 UN	110 UN
27	150 UN	140 UN	140 UN	115 UN	120 UN	190 UN	791 UN	1040 UN	993 UN	190 UN	75.0 UN	110 UN
28	155 UN	150 UN	140 UN	115 UN	136 UN	200 UN	790 UN	1100 UN	1020 UN	190 UN	77.0 UN	110 UN
29	146 UN	150 UN	140 UN	115 UN		220 UN	773 UN	1170 UN	965 UN	180 UN	78.0 UN	125 UN
30	146 UN	150 UN	140 UN	110 UN		220 UN	755 UN	1220 UN	907 UN	180 UN	78.0 UN	140 UN
31	146 UN		140 UN	110 UN		190 UN		1260 UN		180 UN	77.0 UN	
Aggr	124	143	146	125	116	148	661	815	1210	555	116	76.7
Min	50.0	125	135	107	105	130	210	438	907	180	75.0	25.0
Max	155	155	160	140	136	220	820	1260	1520	934	180	140
Total	7650	8500	8990	7660	6460	9090	39300	50100	71700	34200	7160	4560

Date Processed: March 20, 2020 17:04

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PACIFICORP

Rocky Mountain Power | Pacific Power

PacifiCorp
Reservoir Level Records
Bear Lake 2018-2019
Daily Stage (Ft) Add 5900 for Elevation

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Day
1	16.47	16.40	16.41	16.59	16.75	16.95	17.23	18.18	19.26	20.28	19.76	18.31	1
2	16.46	16.42	16.41	16.60	16.76	16.96	17.25	18.21	19.30	20.28	19.73	18.28	2
3	16.45	16.42	16.42	16.60	16.77	16.97	17.26	18.24	19.35	20.28	19.70	18.25	3
4	16.44	16.42	16.43	16.60	16.79	16.98	17.27	18.27	19.40	20.28	19.67	18.22	4
5	16.44	16.42	16.43	16.60	16.79	16.98	17.28	18.29	19.45	20.28	19.64	18.19	5
6	16.44	16.42	16.44	16.60	16.80	16.99	17.30	18.32	19.50	20.28	19.61	18.16	6
7	16.44	16.42	16.45	16.61	16.80	17.00	17.31	18.34	19.55	20.27	19.56	18.13	7
8	16.44	16.41	16.45	16.61	16.80	17.01	17.34	18.36	19.60	20.27	19.51	18.10	8
9	16.44	16.41	16.46	16.62	16.81	17.02	17.36	18.38	19.65	20.27	19.47	18.07	9
10	16.44	16.41	16.47	16.62	16.81	17.02	17.38	18.40	19.70	20.26	19.43	18.05	10
11	16.43	16.40	16.48	16.63	16.81	17.03	17.40	18.42	19.75	20.25	19.39	18.03	11
12	16.43	16.40	16.48	16.63	16.83	17.04	17.44	18.45	19.80	20.24	19.34	18.03	12
13	16.43	16.40	16.49	16.64	16.84	17.05	17.48	18.48	19.85	20.23	19.29	18.02	13
14	16.43	16.40	16.49	16.64	16.84	17.06	17.51	18.51	19.90	20.22	19.29	18.02	14
15	16.42	16.40	16.50	16.65	16.85	17.07	17.55	18.54	19.95	20.28	19.21	18.01	15
16	16.41	16.40	16.50	16.65	16.86	17.08	17.60	18.57	19.98	20.20	19.16	18.01	16
17	16.40	16.40	16.51	16.65	16.87	17.09	17.65	18.60	20.04	20.18	19.11	18.00	17
18	16.40	16.40	16.51	16.66	16.88	17.10	17.70	18.63	20.09	20.16	19.06	18.00	18
19	16.40	16.40	16.52	16.66	16.89	17.11	17.75	18.66	20.13	20.14	19.01	17.99	19
20	16.40	16.40	16.52	16.67	16.89	17.12	17.80	18.70	20.16	20.12	18.96	17.98	20
21	16.40	16.40	16.53	16.69	16.90	17.13	17.82	18.74	20.19	20.10	18.90	17.97	21
22	16.40	16.40	16.54	16.70	16.90	17.14	17.84	18.80	20.21	20.07	18.84	17.96	22
23	16.40	16.40	16.55	16.71	16.91	17.15	17.88	18.86	20.23	20.05	18.78	17.94	23
24	16.40	16.40	16.56	16.72	16.91	17.16	17.93	18.91	20.25	20.03	18.72	17.93	24
25	16.40	16.40	16.56	16.73	16.92	17.17	17.98	18.94	20.26	20.00	18.66	17.92	25
26	16.40	16.40	16.57	16.74	16.92	17.18	18.02	18.98	20.27	19.96	18.60	17.91	26
27	16.40	16.40	16.57	16.74	16.93	17.19	18.05	19.02	20.28	19.92	18.54	17.90	27
28	16.41	16.40	16.58	16.74	16.94	17.20	18.08	19.06	20.28	19.89	18.49	17.90	28
29	16.41	16.40	16.58	16.75		17.21	18.12	19.11	20.28	19.85	18.45	17.90	29
30	16.41	16.40	16.58	16.75		17.22	18.15	19.11	20.28	19.82	18.40	17.90	30
31	16.42		16.59	16.75		17.23		19.21		19.79	18.36		31

BEAR LAKE STATISTICS

	Monthly												Yearly
Daily Mean	16.42	16.40	16.50	16.66	16.85	17.08	17.62	18.62	19.90	20.14	19.12	18.04	**17.78**
Daily Min	16.40	16.40	16.41	16.59	16.75	16.95	17.23	18.18	19.26	19.79	18.36	17.90	**16.40**
Daily Max	16.47	16.42	16.59	16.75	16.94	17.23	18.15	19.21	20.28	20.28	19.76	18.31	**20.28**

Notes: Based on lake elevations taken at Utah State Park Marina.

PACIFICORP

Daily Mean by Year

Bear Lake Outlet Canal WY2019

Identifier: 10059500
Location: Bear Lake Outlet Canal near Paris ID
Units: ft^3/s

Year: WY2019

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	756 G	1180 G	991 G
2	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	739 G	1170 G	907 G
3	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	666 G	1170 G	902 G
4	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	523 G	1170 G	904 G
5	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	513 G	1170 G	800 G
6	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	516 G	1160 G	762 G
7	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	520 G	1160 G	757 G
8	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	788 G	1160 G	754 G
9	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1190 G	1160 G	636 G
10	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1210 G	1160 G	439 G
11	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1230 G	1160 G	382 G
12	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1220 G	1160 G	377 G
13	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1210 G	1160 G	365 G
14	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1200 G	1160 G	327 G
15	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1190 G	1160 G	298 G
16	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1190 G	1160 G	289 G
17	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1190 G	1160 G	294 G
18	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1190 G	1160 G	281 G
19	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	1190 G	1160 G	283 G
20	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	111 G	1190 G	1160 G	286 G
21	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	341 G	1190 G	1160 G	281 G
22	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	353 G	1180 G	1160 G	279 G
23	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	539 G	1180 G	1160 G	279 G
24	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	737 G	1180 G	1150 G	279 G
25	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	750 G	1180 G	1150 G	274 G
26	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	761 G	1180 G	1150 G	269 G
27	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	771 G	1190 G	964 G	269 G
28	0 G	0 G	0 G	0 G	0 G	0 G	0 G	0 G	931 G	1180 G	844 G	271 G
29	0 G	0 G	0 G	0 G		0 G	0 G	0 G	1100 G	1180 G	921 G	273 G
30	0 G	0 G	0 G	0 G		0 G	0 G	0 G	945 G	1180 G	973 G	268 G
31	0 G		0 G	0 G		0 G		0 G		1170 G	1040 G	
Aggr	0	0	0	0	0	0	0	0	244	1050	1130	459
Min	0	0	0	0	0	0	0	0	0	513	844	268
Max	0	0	0	0	0	0	0	0	1100	1230	1180	991
Total	0	0	0	0	0	0	0	0	14500	64300	69200	27300

Date Processed: March 21, 2020 11:04

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10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE

LOCATION.--Lat 42°00'47", long 111°55'14" referenced to North American Datum of 1927, in NE ¼ NW ¼ NE ¼ sec.29, T.16 S., R.39 E., Franklin County, ID, Hydrologic Unit 16010202, on left bank 1,050 ft downstream from inlet canal to Cub River pumps, 1.1 mi downstream from Weston Creek, 1.8 mi upstream from Idaho-Utah State line, and 3.5 mi southeast of Weston.

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR UT-74-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,420 ft above NGVD of 1929, from topographic map. Prior to September 10, 1982 at datum 12.00 ft higher. September 10, 1982 to September 30, 1985 at datum 10.0 ft higher.

REMARKS.-- Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft^3/s, Jun 14, 1984, gage height, 19.20 ft, present datum; maximum gage height, 20.25 ft, Jun 21, 1971, present datum; minimum daily discharge, 24 ft^3/s, May 16, 2004.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	473	400	499	e413	488	833	649	1,110	1,700	690	915	655
2	474	406	492	e542	491	816	658	1,080	1,760	721	940	650
3	526	444	491	e595	517	714	681	1,040	1,690	635	927	595
4	551	447	488	e570	618	651	775	932	1,590	606	941	590
5	531	447	489	e597	799	626	903	961	1,470	545	938	599
6	518	451	489	655	792	642	1,070	960	1,370	490	936	611
7	502	451	470	651	653	818	1,150	918	1,370	485	979	631
8	483	451	472	562	541	891	1,270	966	1,490	508	990	674
9	485	451	469	535	508	789	1,390	949	1,590	638	954	709
10	534	455	470	507	513	713	1,790	943	1,460	738	953	737
11	556	481	482	508	514	673	1,710	920	1,390	634	960	800
12	548	485	497	503	492	660	1,630	973	1,330	686	953	792
13	523	518	493	489	483	627	1,450	941	1,170	778	952	718
14	517	524	500	431	567	550	1,210	820	1,080	771	921	554
15	520	469	478	508	780	534	1,350	798	1,000	737	884	494
16	598	449	469	534	812	533	1,750	838	914	725	895	463
17	684	457	470	578	691	522	2,210	925	899	681	914	487
18	768	450	470	590	588	537	1,890	966	885	674	901	467
19	804	463	459	587	548	574	1,570	934	790	673	917	469
20	699	450	492	538	552	585	1,760	1,020	630	664	882	488
21	792	462	488	526	539	602	1,780	1,170	630	688	869	495
22	449	481	496	535	517	622	1,770	1,270	546	653	870	493
23	453	490	439	487	508	656	1,760	1,140	522	702	876	499
24	418	507	473	488	537	778	1,520	1,060	505	721	865	505
25	409	507	491	501	548	1,040	1,540	1,210	520	701	853	530
26	406	492	491	498	607	779	1,440	1,300	537	675	860	589
27	405	492	488	497	725	702	1,380	1,410	511	727	863	560
28	404	493	480	494	842	693	1,280	1,620	584	759	842	625
29	403	494	461	491		708	1,240	1,680	695	768	704	873
30	401	502	431	470		676	1,190	1,720	740	830	679	1,090
31	401		e397	470		659		1,710		886	665	
Total	16,230	14,070	14,770	16,350	16,770	21,200	41,770	34,280	31,369	21,190	27,600	18,440
Mean	524	469	477	527	599	684	1,392	1,106	1,046	684	890	615
Max	804	524	500	655	842	1040	2210	1720	1760	886	990	1090
Min	401	400	397	413	483	522	649	798	505	485	665	463
Ac-ft	32,200	27,910	29,300	32,429	33,260	42,060	82,840	68,000	62,220	42,030	54,740	36,580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2019, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	794	849	856	839	873	1,068	1,283	1,312	1,187	942	882	810
Max	2,849	2,983	2,552	1,904	2,556	3,264	3,594	3,968	4,263	3,442	2,416	2,545
(WY)	(1984)	(1984)	(1985)	(1984)	(1986)	(1986)	(1986)	(1986)	(1986)	(1983)	(1984)	(1986)
Min	224	298	310	269	296	351	351	158	301	368	461	192
(WY)	(2004)	(1993)	(1982)	(2004)	(2002)	(1991)	(2003)	(2003)	(2004)	(2006)	(1993)	(1992)

Figure 2019.18 (cont.)

10109001 COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF LOGAN RIVER ABOVE STATE DAM AND CACHE HIGHLINE CANAL LOGAN, HYDE PARK AND SMITHFIELD CANAL NEAR LOGAN, UTAH

Water-Data Report 2019 REVISED RECORDS.--WDR UT-04-1: Discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	126	118	108	80.2	90.1	91.2	121	356	608	474	236	177
2	134	119	105	79.0	91.4	91.5	122	326	672	465	231	175
3	136	117	106	87.2	99.0	89.3	138	310	696	455	229	174
4	147	120	99.4	99.2	97.6	87.8	147	310	755	444	227	173
5	138	118	97.6	103	95.9	90.4	148	341	824	423	225	172
6	132	117	104	101	93.1	93.7	176	400	859	404	220	177
7	129	116	103	95.9	90.8	108	184	466	929	392	218	179
8	129	114	104	93.8	79.0	103	184	448	964	383	220	182
9	128	113	101	94.7	85.1	96.9	220	430	875	373	220	184
10	134	114	99.2	95.2	94.1	94.7	216	391	790	360	215	177
11	127	113	101	95.6	89.5	93.4	185	383	747	351	211	189
12	126	111	101	91.8	85.4	93.5	176	426	764	344	207	181
13	127	110	97.3	87.6	92.8	94.7	169	497	798	338	204	178
14	126	110	94.1	83.8	94.9	92.9	174	570	827	329	202	172
15	122	111	98.8	90.4	102	92.3	254	670	838	319	201	172
16	121	109	97.3	95.6	96.0	93.6	270	707	835	312	200	169
17	121	111	98.5	99.8	93.3	94.6	255	758	811	312	197	163
18	120	109	100	98.9	91.2	97.0	248	670	791	300	196	157
19	121	108	102	94.4	89.2	98.9	280	591	763	292	193	157
20	121	105	101	95.1	92.3	100	321	547	742	286	193	161
21	121	106	102	96.8	89.0	101	405	517	700	280	190	159
22	120	110	101	92.2	91.0	107	398	496	640	276	190	158
23	121	112	95.7	89.4	87.8	105	362	472	589	269	187	154
24	121	117	102	94.8	90.3	111	395	473	562	266	186	153
25	121	109	103	92.7	91.0	108	451	456	555	262	183	152
26	122	105	101	92.4	92.1	108	476	458	545	259	182	152
27	121	105	96.8	91.8	93.6	111	497	484	535	259	181	153
28	121	109	95.4	92.2	91.9	117	472	487	526	249	181	e168
29	119	110	85.0	91.0		126	430	502	514	245	180	e175
30	119	111	99.9	83.7		118	394	526	500	242	180	e162
31	117		95.8	89.6		119		559		238	178	
Total	3,888	3,357	3,096	2,869	2,569	3,128	8,268	15,029	21,550	10,200	6,263	5,054
Mean	125	112	99.9	92.5	91.8	101	276	485	718	329	202	169
Max	147	120	108	103	102	126	497	758	964	474	236	189
Min	117	105	85.0	79.0	79.0	87.8	121	310	500	238	178	152
Ac-ft	7,712	6,659	6,140	5,689	5,096	6,205	16,400	29,809	42,750	20,230	12,420	10,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2019, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	147	130	116	109	107	125	254	591	641	336	209	168
Max	262	221	187	165	230	405	629	1,186	1,465	1,118	477	312
(WY)	(2012)	(2012)	(1984)	(2012)	(2017)	(2017)	(1986)	(1936)	(1986)	(2011)	(2011)	(2011)
Min	74.2	71.9	69.0	63.1	61.6	80.3	111	163	141	103	86.4	79.9
(WY)	(1935)	(1993)	(1993)	(1993)	(1993)	(1942)	(1991)	(1977)	(1934)	(1934)	(1992)	(1934)

Figure 2018.19 (cont.)

10126000 BEAR RIVER NEAR CORINNE, UT

LOCATION.--Lat 41°34'35", long 112°06'00" referenced to North American Datum of 1927, in NE ¼ SE ¼ NE ¼ sec.30, T.10 N., R.2 W., Box Elder County, UT, Hydrologic Unit 16010204, on right bank 1.2 mi downstream from Salt Creek, 2.0 mi northeast of Corinne, and 2.8 mi downstream from Malad River.

DRAINAGE AREA.--7,029 mi².

PERIOD OF RECORD.--October 1949 to September 1957, October 1963 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,204.6 ft above NGVD of 1929, unadjusted. Auxiliary nonrecording gage 7,800 ft downstream July 27, 1950 to November 21, 1955.

REMARKS.-- Records good except for estimates, which are poor. Natural flow of stream affected by Cutler Dam many miles upstream of gage, power development, diversions for irrigation, and return flow from irrigated areas and backwater from Bear River Bird Refuge about 5 miles downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,770 ft³/s, May 19, 1984, gage height, 17.50 ft; minimum daily discharge, 23 ft³/s, Jul 30, 2004.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2018-10-01 to 2019-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	214	849	1,090	e842	950	2,140	1,940	4,040	3,320	158	355	175
2	230	807	954	e823	895	2,120	1,740	3,850	3,430	159	359	165
3	190	619	1,080	e784	938	2,070	1,870	3,540	3,420	304	338	158
4	165	592	1,070	e701	1,280	2,000	2,000	3,170	3,390	420	423	179
5	423	622	884	e755	1,610	1,710	2,100	2,940	3,350	357	374	240
6	736	734	842	e965	2,000	1,570	2,150	2,790	3,260	352	304	201
7	808	888	983	e1,050	2,030	1,700	2,360	2,590	3,220	359	360	193
8	783	930	958	e1,070	1,770	2,250	2,650	2,720	3,100	267	414	210
9	665	741	846	e1,080	1,460	2,960	2,840	2,820	3,250	194	406	242
10	590	598	861	e1,060	1,240	3,000	2,850	2,610	3,310	172	472	369
11	570	661	956	e982	1,140	2,470	2,720	2,350	3,320	172	543	775
12	850	761	933	e920	945	1,980	3,170	2,160	3,050	161	497	669
13	847	810	891	e937	975	1,840	3,260	2,160	2,840	157	542	798
14	698	851	903	e969	1,130	1,680	3,110	2,080	2,580	149	552	787
15	577	852	906	e988	1,440	1,980	3,070	2,030	2,160	138	461	626
16	744	847	809	e925	2,240	1,580	3,050	1,860	1,900	135	382	491
17	875	835	791	e749	2,460	1,410	3,680	1,970	2,000	146	333	357
18	972	849	830	e747	2,250	1,580	3,640	2,210	1,850	156	335	376
19	1,020	868	935	e1,050	2,230	1,450	3,630	2,570	1,640	157	247	377
20	1,020	814	1,000	e1,210	1,730	1,640	4,120	2,790	1,470	150	286	452
21	1,080	729	1,020	e1,260	1,250	1,690	4,150	2,790	1,340	146	549	563
22	1,100	744	1,030	e1,280	1,140	1,600	4,060	2,900	1,070	136	417	719
23	642	784	1,100	e1,230	1,110	1,670	4,220	2,880	951	143	234	621
24	234	863	1,130	e1,070	1,120	1,990	4,250	2,990	688	152	246	592
25	334	895	1,010	e1,010	1,120	2,170	4,240	3,010	511	134	296	586
26	562	1,290	943	e1,010	1,250	2,180	4,240	2,930	394	120	180	617
27	506	838	893	e995	1,710	2,380	4,220	2,870	485	149	284	672
28	582	1,050	877	e992	2,010	2,120	4,360	2,990	611	171	343	706
29	539	1,090	e866	e985		1,710	4,290	3,050	360	184	296	1,310
30	490	1,050	e854	e985		2,040	4,200	3,090	195	189	232	1,760
31	505		e850	976		2,100		3,090		209	183	
Total	19,550	24,860	29,090	30,400	41,420	60,780	98,180	85,840	62,470	5,996	11,240	15,989
Mean	631	829	939	981	1,479	1,961	3,273	2,769	2,082	193	363	533
Max	1100	1290	1130	1280	2460	3000	4360	4040	3430	420	552	1760
Min	165	592	791	701	895	1410	1740	1860	195	120	180	158
Ac-ft	38,780	49,310	57,709	60,300	82,160	120,600	194,700	170,300	123,900	11,890	22,300	31,710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2019, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,222	1,479	1,548	1,666	1,771	2,239	2,748	2,725	2,019	628	538	800
Max	4,240	4,471	4,414	3,639	5,966	6,041	7,258	9,598	9,201	4,186	3,045	3,423
(WY)	(1984)	(1985)	(1984)	(1984)	(1986)	(1986)	(1985)	(1984)	(1984)	(1983)	(1983)	(1984)
Min	95.6	621	535	620	723	897	638	71.8	77.6	40.4	46.8	62.2
(WY)	(1993)	(1995)	(1995)	(1993)	(1993)	(2015)	(1992)	(1992)	(1992)	(2003)	(2004)	(1992)

Figure 2019.18 (cont.)

2020 WATER SUPPLY AND DISTRIBUTION REPORT

2020 Water Supply and Distribution Report

OVERVIEW

The water supply in 2020 was fairly mediocre with irrigation season stream flow varying from 81% to 85% which was below the forecasted amounts. Additionally, summer rains were virtually non-existent after June. Thankfully, due to fairly good water year in 2019, reservoirs began the 2020 water year in fairly good shape. Summer precipitation was well below normal. A water emergency was declared in mid-July in the Central Division. Despite the mediocre water year, water was fairly distributed between the States pursuant to the Compact.

WATER SUPPLY

Three stream gages, one in each division of the river, have been used by the Commission as indicator gages of the relative supply available for each of the divisions of the river (see Stream Gaging Program section in the Overview chapter). The Utah-Wyoming State Line and Smith's Fork gages measure a major portion of the stream flow in the Upper and Central Divisions, respectively. The Logan River is a major tributary to the Bear River in Cache Valley, which is in the Lower Division. Specific discharges, as measured by the USGS for the three gages during 2020, compared with the long-term averages, are summarized in Figure 2020.1 and are graphically illustrated in Figures 2020.2 through 2020.4 on the subsequent pages.

Figure 2020.1 shows a summary of the volumetric discharge for each of these gages for the water year. As the water supply available during the irrigation season is most critical for filling the natural flow rights, the discharge as measured at these gages during the irrigation season is also shown in Figure 2020.1.

Figures 2020.2 through 2020.4 show hydrographs for each of these three gaging stations. On each hydrograph, the mean daily flow during the irrigation season is plotted against the average of the mean daily flows for the period 1943 through 2020. The area between the 2020 hydrographs and the mean hydrographs represents the difference in volume of water discharged during 2020 versus the long-term average. This volumetric difference is illustrated by the bar charts shown on each of the figures.

As can be seen in Figure 2020.1, the annual discharge for the Upper Division (Utah-Wyoming State Line gage) was 87 percent of the long-term average, and streamflow on Smith's Fork and the Logan River were each 85 percent. More importantly to the natural flow diversions than the streamflow during the water year is the streamflow during the irrigation season of May through September. During this period, the water supply was 85 percent (Upper Division), 81 percent (Central Division), and 81 percent (Lower Division).

2020 Water Supply Summary by Division

2020 WATER YEAR
(Discharge in Acre-feet)

GAGE	AVERAGE (1943-20)	2020	PERCENT
Upper Division (UT-WY State Line)	139,500	120,900	87%
Central Division (Smith's Fork)	137,000	116,200	85%
Lower Division (Logan River)	181,000	154,400	85%

2020 IRRIGATION SEASON
MAY - SEPTEMBER
(Discharge in Acre-feet)

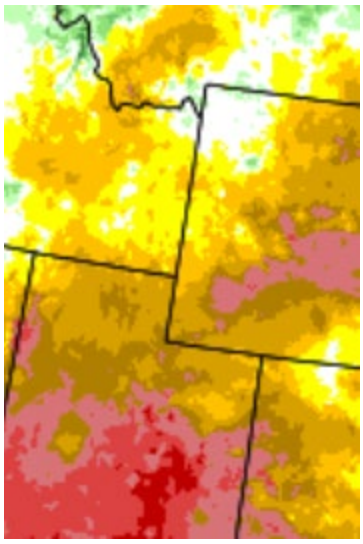
GAGE	AVERAGE (1943-20)	2020	PERCENT
Upper Division (UT-WY State Line)	114,900	98,000	85%
Central Division (Smith's Fork)	101,800	83,000	81%
Lower Division (Logan River)	120,800	98,400	81%

Figure 2020.1

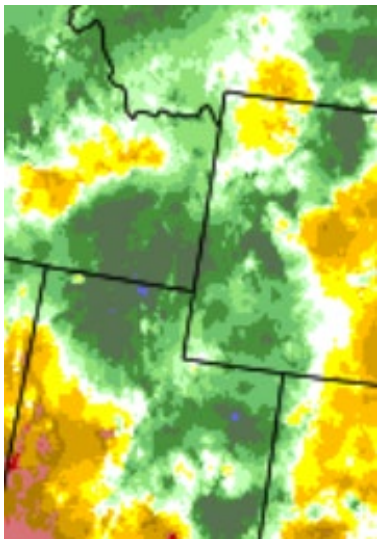
One item of interest to note is that the April 1 streamflow forecasts for the April – September period were about 10% to nearly 30% higher than the actual stream flows realized during the irrigation season. The forecasted amounts on April 1 were 96%, 111% and 100%, respectively.

A closer look at the three hydrographs (Figures 2020.2, 2020.3 and 2020.4) is also insightful when one is trying to understand the natural flow water supply in the spring and summer of 2020. In general, the three gages show a slightly early runoff peak in late May after which flow was below normal in all three Divisions through the remainder of the season.

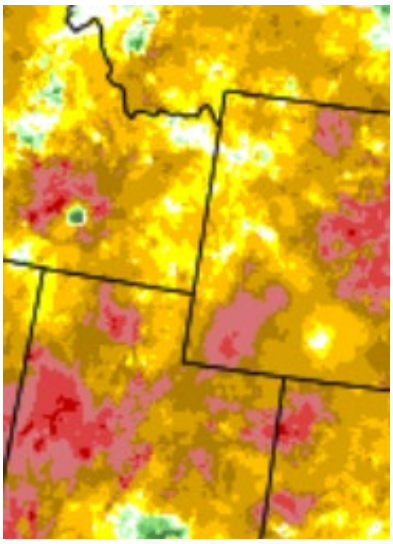
Historically the Commission has focused on the snowpack with its attendant streamflow forecasts as the main indicator of water supply. However, in recent years, the impact of summer precipitation has become more apparent as an important portion of the irrigation water supply. After well below normal precipitation in April and May, June 2020 had above normal precipitation after which the Bear River Basin turned extremely dry with no to very little precipitation the remainder of the summer and into the fall (see monthly precipitation maps below).



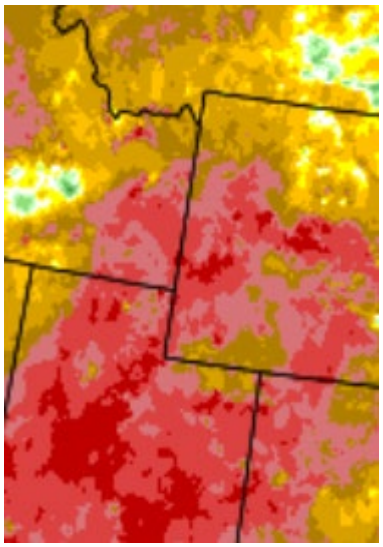
May 2020



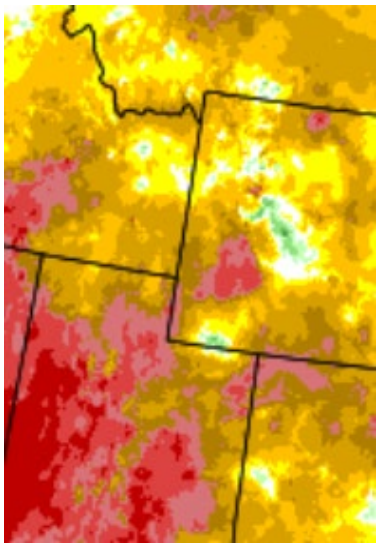
June 2020



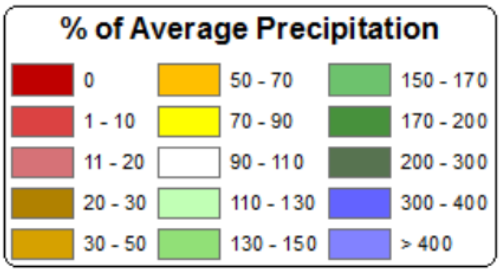
July 2020



August 2020



September 2020



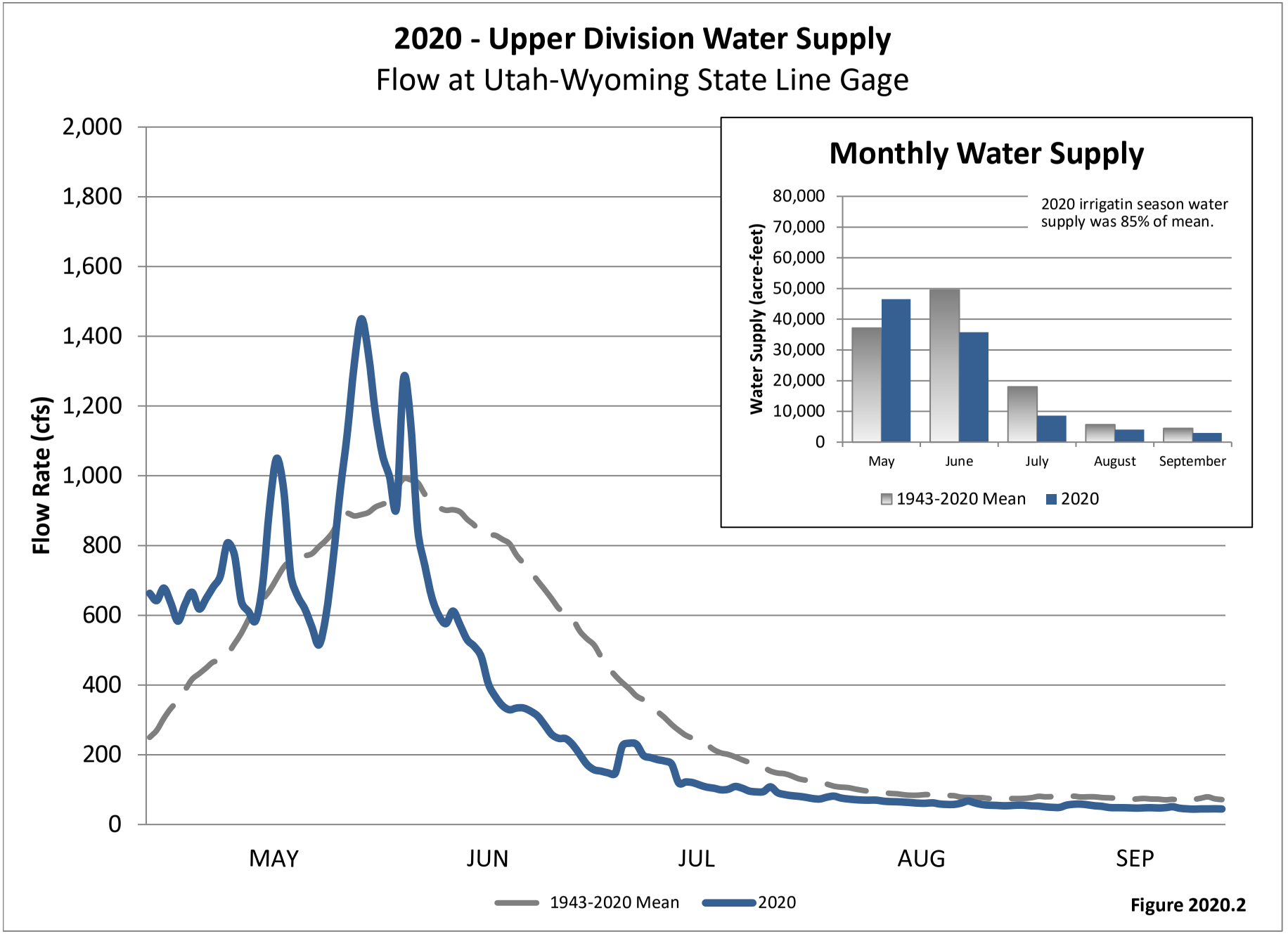


Figure 2020.2

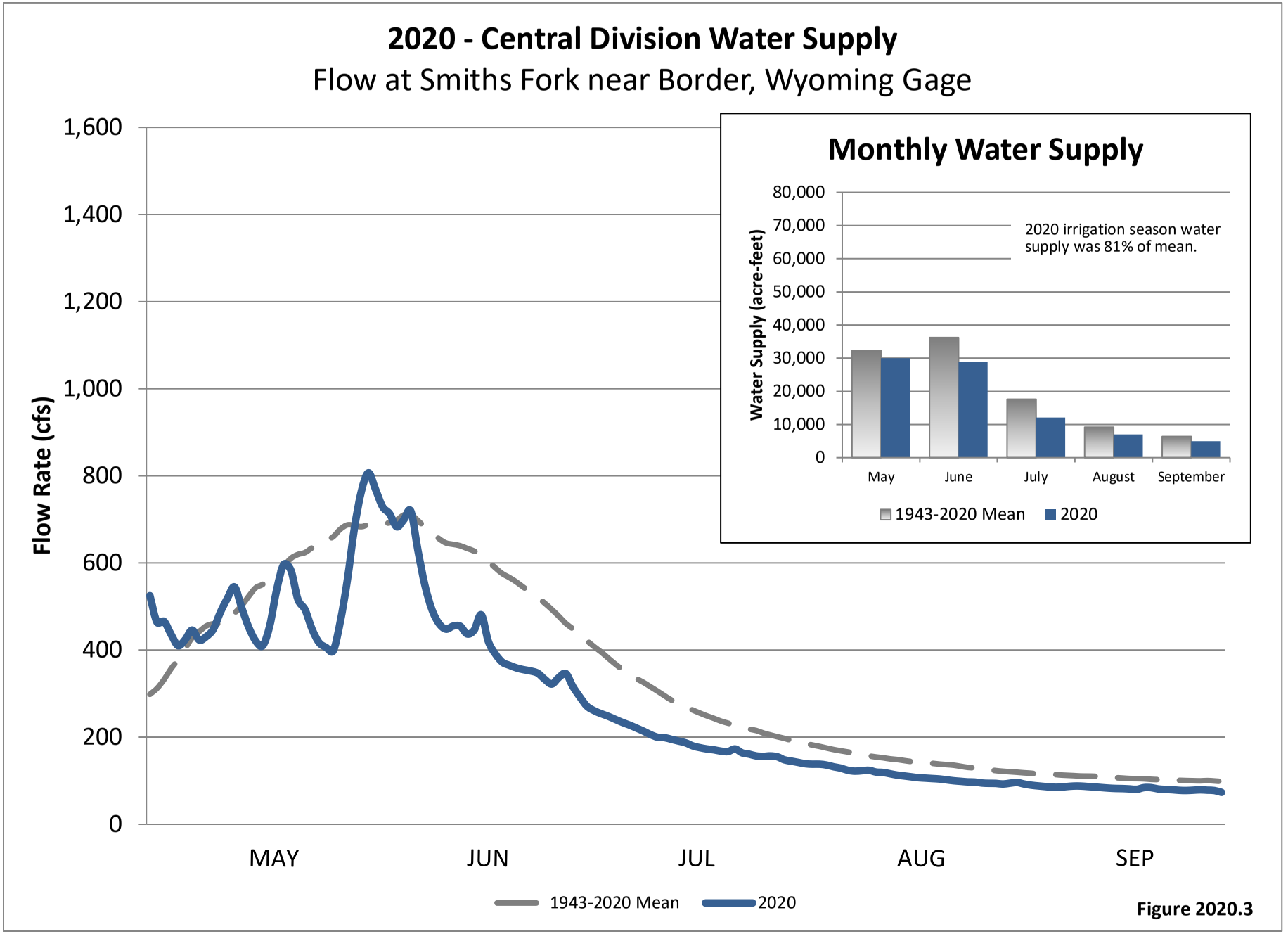


Figure 2020.3

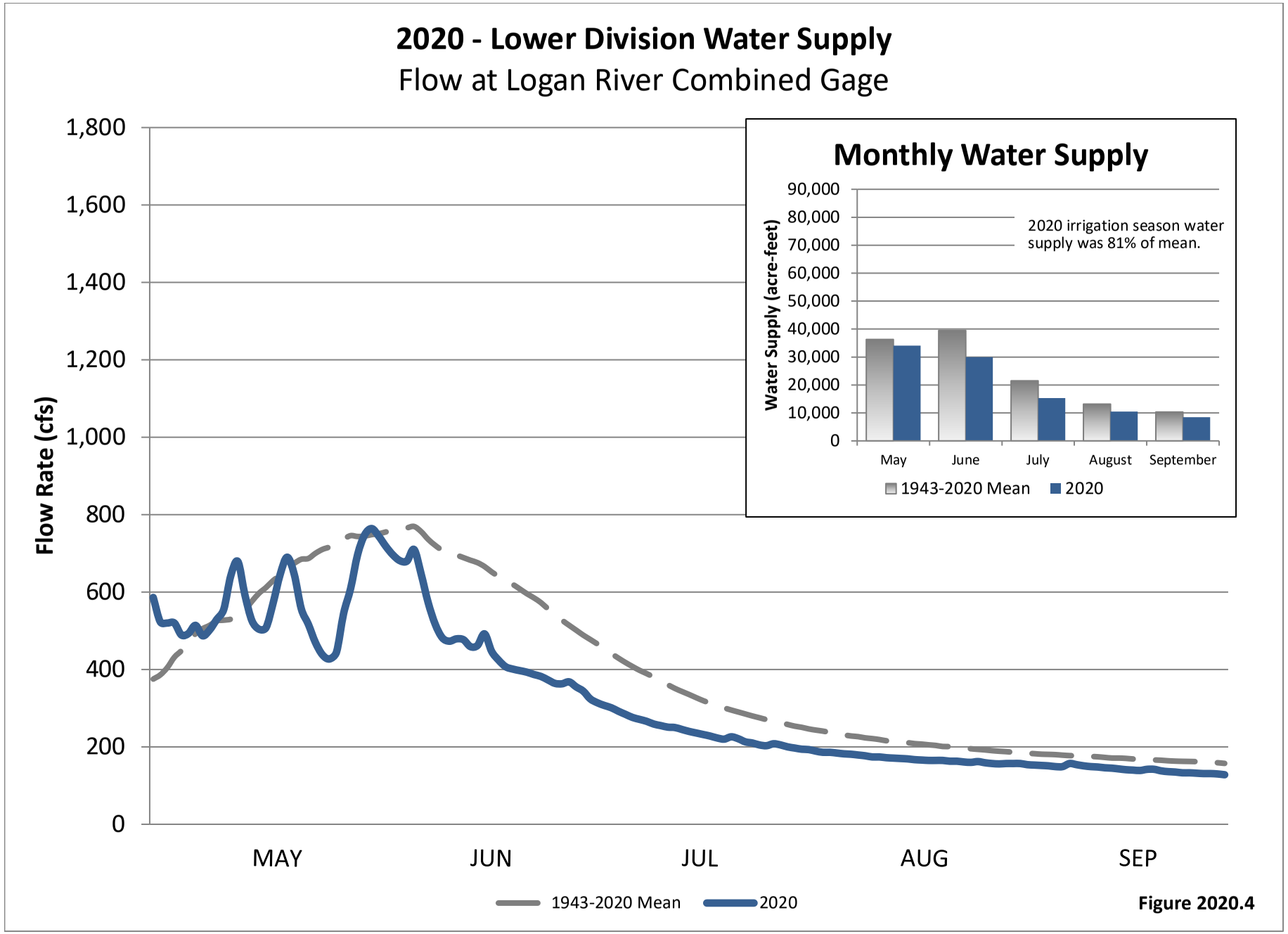


Figure 2020.4

STORAGE

Storage supplies along the Bear River have a notable impact on the water resources available for irrigation each year. Because of the fairly good water supply in 2019, the 2020 storage season began with good carryover storage. Woodruff Narrows Reservoir is the largest reservoir in the Upper Division. However, Whitney, Sulphur Creek, and Woodruff Creek Reservoirs also provide for notable amounts of winter storage.

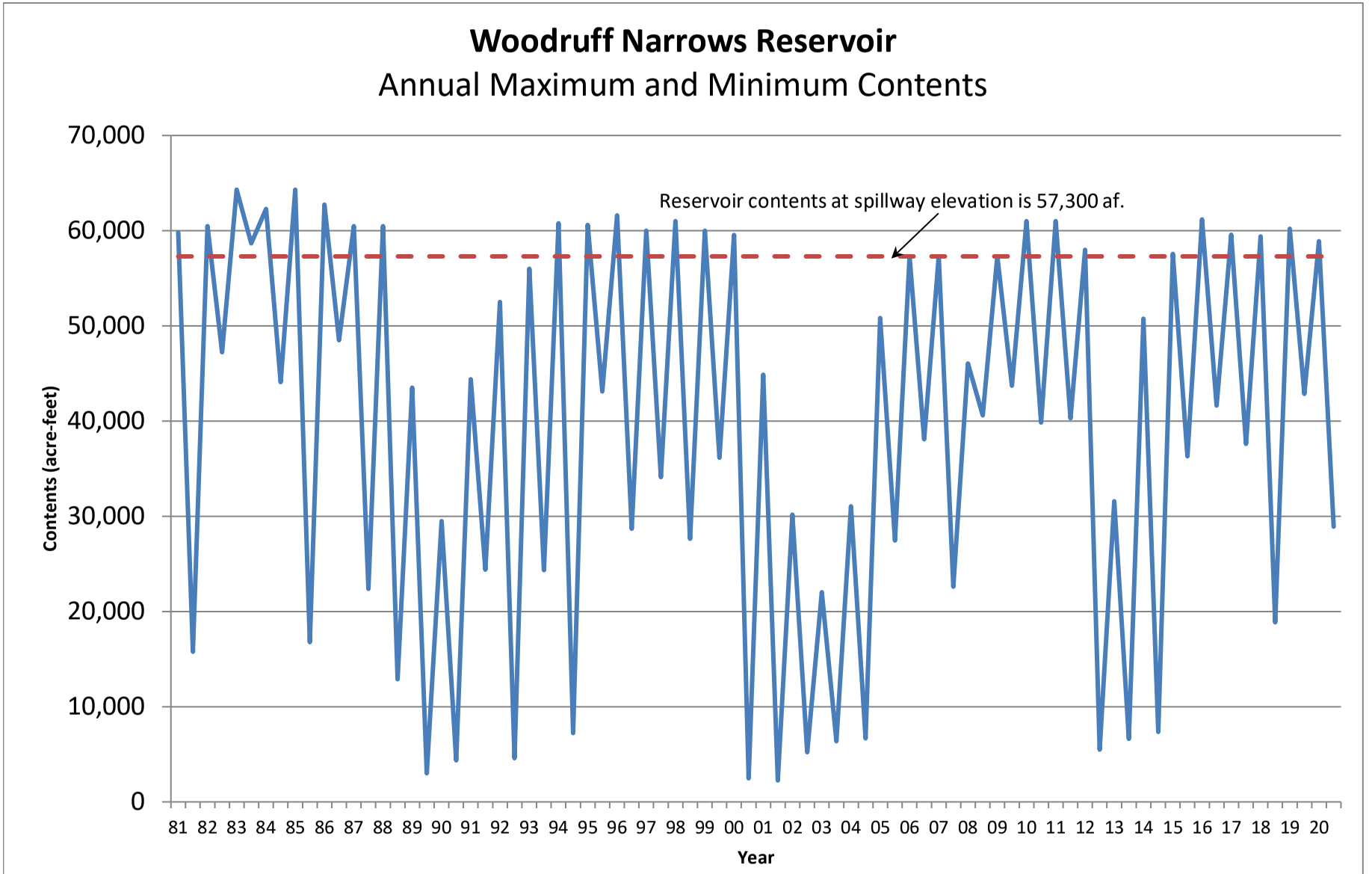
Paragraph B of Article VI of the Amended Compact, which allows for additional storage rights above Stewart Dam, also has a provision which restricts storage to occur if the water surface elevation at Bear Lake is below an elevation of 5911.0 (UP&L Datum). About half of the storage which is assigned to Woodruff Narrows Reservoir, from both the States of Utah and Wyoming, falls under this provision of the Amended Compact. Bear Lake began the storage season above 5917, and therefore, well above the 5911 foot elevation storage restriction and so this limit did not apply during the 2020 storage season.

Prior to 1997 a gage was maintained, with Commission funding, by the USGS on Woodruff Narrows Reservoir. The gage included a recorder which allowed for preservation of daily values. Since this time, periodic measurements have been kept by the Woodruff Narrows Reservoir Company in coordination with the Wyoming State Engineer's Office. In 2013 a real-time water level gage was installed at Woodruff Narrows Reservoir. Figure 2020.5 shows the maximum and minimum contents for the Woodruff Narrows Reservoir since its enlargement in 1980.

The spillway crest of Woodruff Narrows Dam is at an elevation of 6454.5 feet and when the water level is at this elevation, the content is 57,300 acre-feet. Hence, when the reservoir is spilling, the contents above this amount represent uncontrolled storage as this storage is only temporary and cannot be controlled by the reservoir company. Generally, during spill periods, the reservoir company is often releasing significant flows through its outlet works as well. Though the total contents are uncontrolled, the proportion of water discharging from the reservoir through the outlet works versus over the spillway is somewhat under the control of the reservoir company. Both discharge to the Bear River below the dam but above the stream gage, and it makes no difference to the total discharge measured into the Bear River. Because of the significant carry-over in storage from 2019 Woodruff Narrows was able to easily fill with a maximum contents of 59,100 acre-feet and then, with a little more than 30,000 acre-feet of releases during the irrigation season, it carried into the 2021 storage season about 29,000 acre-feet.

There is no significant storage in the Central Division.

The largest and most significant storage reservoir in the Lower Division, and in the entire watershed, is Bear Lake, which is at the very top of the Lower Division. Bear Lake is operated as a storage reservoir by PacifiCorp. The Compact regulates various aspects of how PacifiCorp can manage the storage of water within Bear Lake. Figure 2020.6 summarizes the 2020 Bear Lake hydrologic information and significant operational events.



Note: Through the 1996 water year a gage with a recorder was maintained by the USGS on Woodruff Narrows Reservoir. From then until 2013 measurements are based on spot observations and estimates by the Woodruff Narrows Reservoir Company and the Wyoming State Engineer's Office. Since 2013, a gage and recorder has been maintained by the Wyoming State Engineer's Office. Contents above 57,300 af represent uncontrolled storage.

Figure 2020.5

Summary of Significant
2020 Bear Lake
Hydrologic Information and Operational Events

Date	Hydrologic Information/Event	Contents (% of Full) Discharge (% of Normal)
10-01-19	Bear Lake Beginning Elevation — 5,917.89 ft	1,018,257 af (72%)
11-04-19	Bear Lake Low Elevation[1] — 5,917.84 ft[1]	1,014,802 af (71%)
	Rainbow Inlet Canal Discharge	208,000 af (79%)
	Bear River Discharge Below Stewart Dam	2,600 af
	Bear Lake Net Runoff (Computed Total Inflow less lake Evaporation)	180,000 af (56%)
07-07-20	Bear Lake High Elevation — 5,919.46 ft	1,127,305 af (79%)
	Outlet Canal Releases: 11/18 – 3/31; 6/1 – 10/4 (126 days irrigation releases)	281,000 af
07-16-20	Outlet Canal Maximum Release – 1,700 cfs	
	Bear Lake Storage Release[2] (irrigation release 115,700 acre-feet)	145,000 af
09-30-20	Bear Lake Ending Elevation — 5,916.35 ft	912,473 af (64%)
	Bear Lake Settlement Agreement "System Loss" Volume	28,900 af

[1] Low contents prior to start of storage (occurred in previous water year)

[2] Net irrigation storage release from Bear Lake, subtracting Rainbow inflow and the decreed adjustment for the natural yield of Bear Lake and Mud Lake area. Includes system loss volume.

[3] Due to uncontrolled flow from (welcome) rain events. Whenever water flows below Cutler during the irrigation season, any storage water in the system at Cutler is the first water out. Natural flow goes to irrigators.

Figure 2020.6

Bear Lake began the 2020 water year with fairly high carry over storage which led to releases for flood control operations with storage releases occurring through most of the storage season. By March 31st, with forecasted inflow well below normal runoff and Bear Lake near an elevation of 5918, flood releases ceased and PacifiCorp reinitiated storage. With a dramatically reduced runoff (56% of normal) Bear Lake reached a high elevation of 5919.46 feet on July 7th. Total storage release was 145,000 acre-feet and Bear Lake ended the water year at 5916.35 feet, or 64% full.

Figure 2020.7 is a graph which shows the annual maximum and minimum elevations of Bear Lake since 1915. As described above, the beginning storage elevation (or minimum) occurred, on November 4, 2019, and thereafter PacifiCorp endeavored to maintain Bear Lake levels near 5918. One can see from Figure 2020.7 that after flood releases the storage in the lake increased from an elevation of 5918.10 to 5919.46 and by September 30 had been drawn down just over three feet to 5916.35. Figure 2020.8 is an area plot showing the daily contents in Bear Lake over the past ten years. This hydrograph and Figure 2020.7 show the impact of two very significant water years (2011 and 2017) amid average to well below average water years over the last ten-year period.

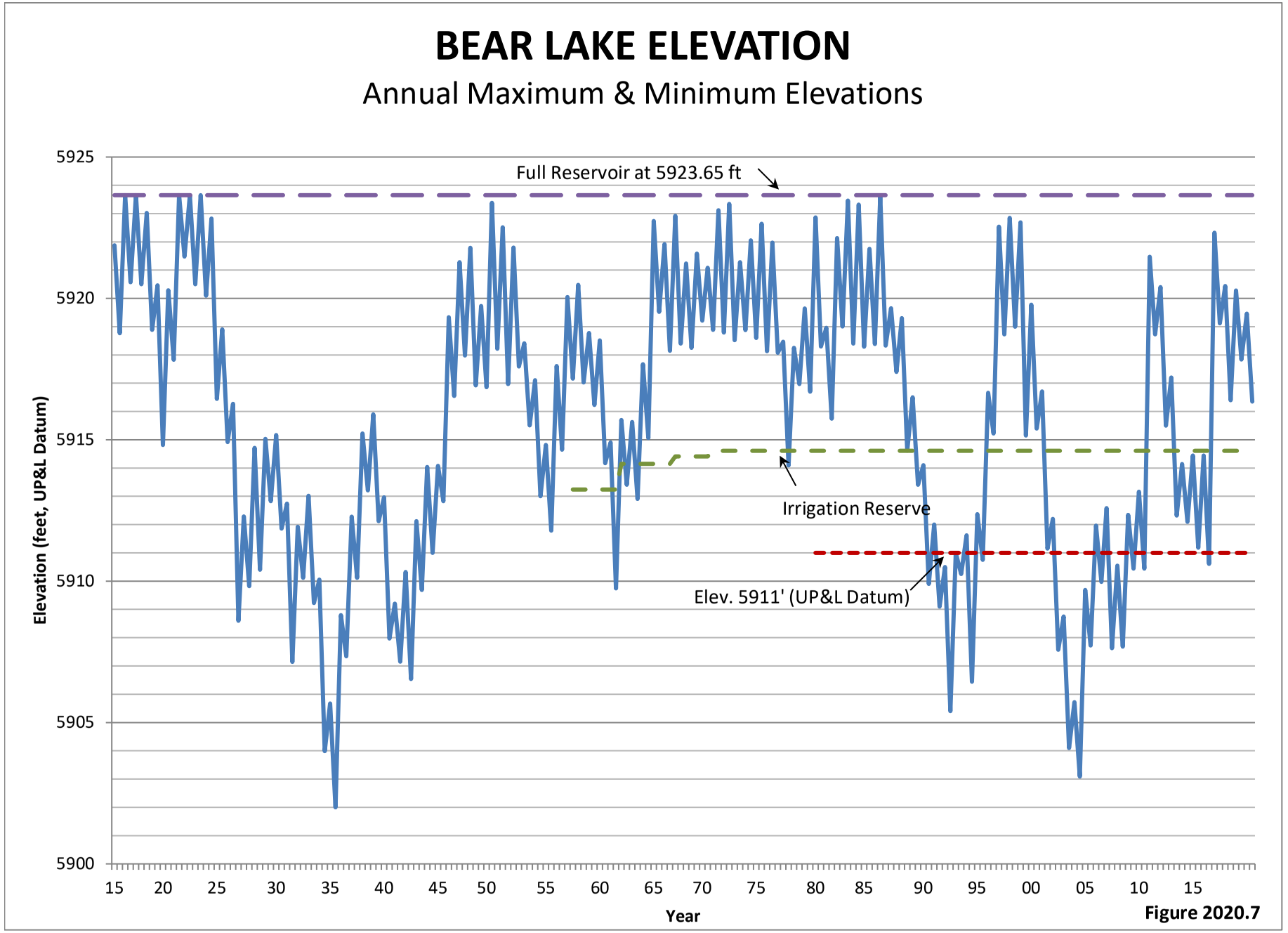


Figure 2020.7

BEAR LAKE CONTENTS

Water Years 2011 - 2020

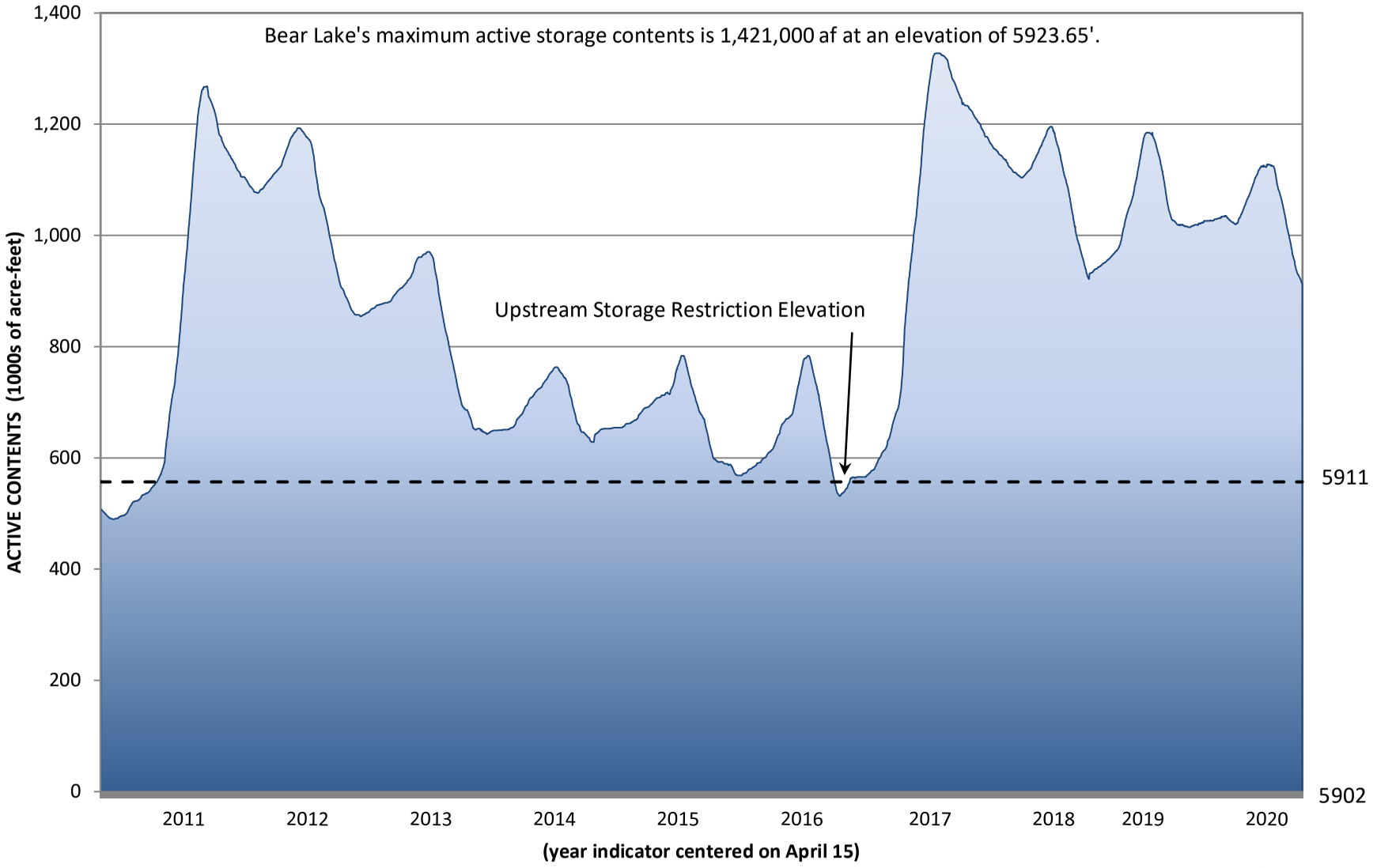


Figure 2020.8

STREAMFLOW DISTRIBUTION

General

The water administration in 2020 in the three divisions remained similar to prior years. Hilary McIntosh replaced Ethan Overton as Wyoming's hydrographer in the Cokeville area. Don Barnett continued to serve as Engineer-Manager of the Bear River Commission. Each River Commissioner/Watermaster works under the direction of his State Engineer's office, but coordinates with the Commission's Engineer-Manager with regard to total diversions in each of the various sections as defined by the Compact.

During the 2020 irrigation season, the following River Commissioners/Watermasters measured and distributed water in their sections of the river:

DIVISION	SECTION	RIVER COMMISSIONER/ WATERMASTER
Upper	Upper Utah	Travis McInnis
	Upper Wyoming	Travis McInnis
	Lower Utah	Ron Hoffman
	Lower Wyoming	Hilary McIntosh
Central	Wyoming	Hilary McIntosh
	Idaho	Josh Hanks
Lower	Idaho	Josh Hanks
	Utah	Jim Watterson

Upper Division

The Upper Division divertible flow, as defined by the Compact, consists of a summation of the diversions of all of the canals in the four sections, plus waters bypassing Pixley Dam, less that portion of water diverted by the canals which is attributable to storage releases from Whitney, Sulphur Creek, Woodruff Narrows and Grassy Lake Reservoirs. The Compact provides that when the total divertible flow is less than 1250 cfs, a water emergency exists. The total divertible flow dropped below this amount on July 4 and remained below for the rest of the irrigation season. Nevertheless, there was no request for interstate regulation. In late August a call-in and tabulation of the diversion data was made and diversions were generally in compliance with what allocations would have been had interstate delivery been occurring. Looking at the data, one can see that the Upper Wyoming Section took less than what would have been its allocation if a water emergency had been declared pretty much for the full irrigation season. The Lower Utah Section took a little under its allocation or right at its allocation during most of the year. In recent years, users in the Upper Division have at times opted for the flexibility available through unofficial general cooperation and sharing of water rather than direct Compact administration.

During years when a water emergency has been declared, the regulation of the river is based on the weekly diversions as called in by the respective River Commissioners. At the end of each year, these River Commissioners submit to their respective State Engineers a complete written report of water deliveries. It is this information which is presented in the graphs and tables on the following pages and not the weekly totals called in during times of regulation. The weekly call-in totals, which are received during the irrigation season, differ slightly from the year-end data because of timing of call-ins and call-outs, shifts on canal ratings and other factors.

Figures 2020.9 and 2020.10 show the divertible flow and natural flow diversions in the Upper Wyoming and Lower Utah Sections, respectively. Also shown on the graphs (magenta line) is what would have been the Compact allocation had a water emergency been imposed. As can be seen in Figure 2020.10, during some of the irrigation season, diversion in the Lower Utah Section was below the allocation. However, this is due to the fact that the water was getting past the Lower Utah Section to the Lower Wyoming Section and not due to over diversion in the Upper Wyoming Section as is confirmed by Figure 2020.9. Figure 2020.11 is a tabulation by month of canal diversions and shows the calculation of divertible flow (less storage release) and allocations to the respective sections, pursuant to the Compact, had a water emergency been declared. The values shown for each canal and pump in this figure represent total diversion (including both natural flow and storage), and then the storage water is subtracted out of the section totals before computing the total divertible flow.

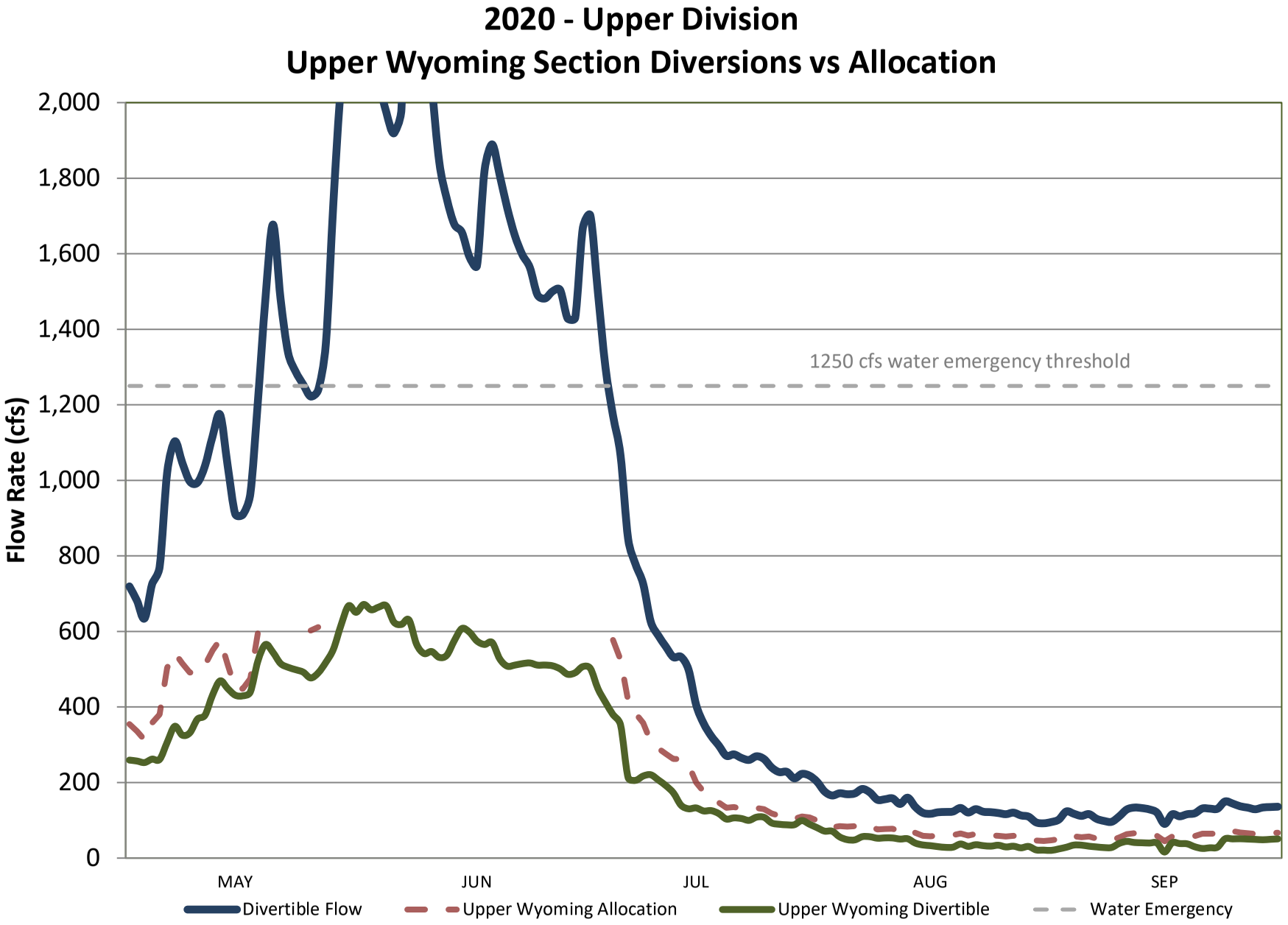


Figure 2020.9

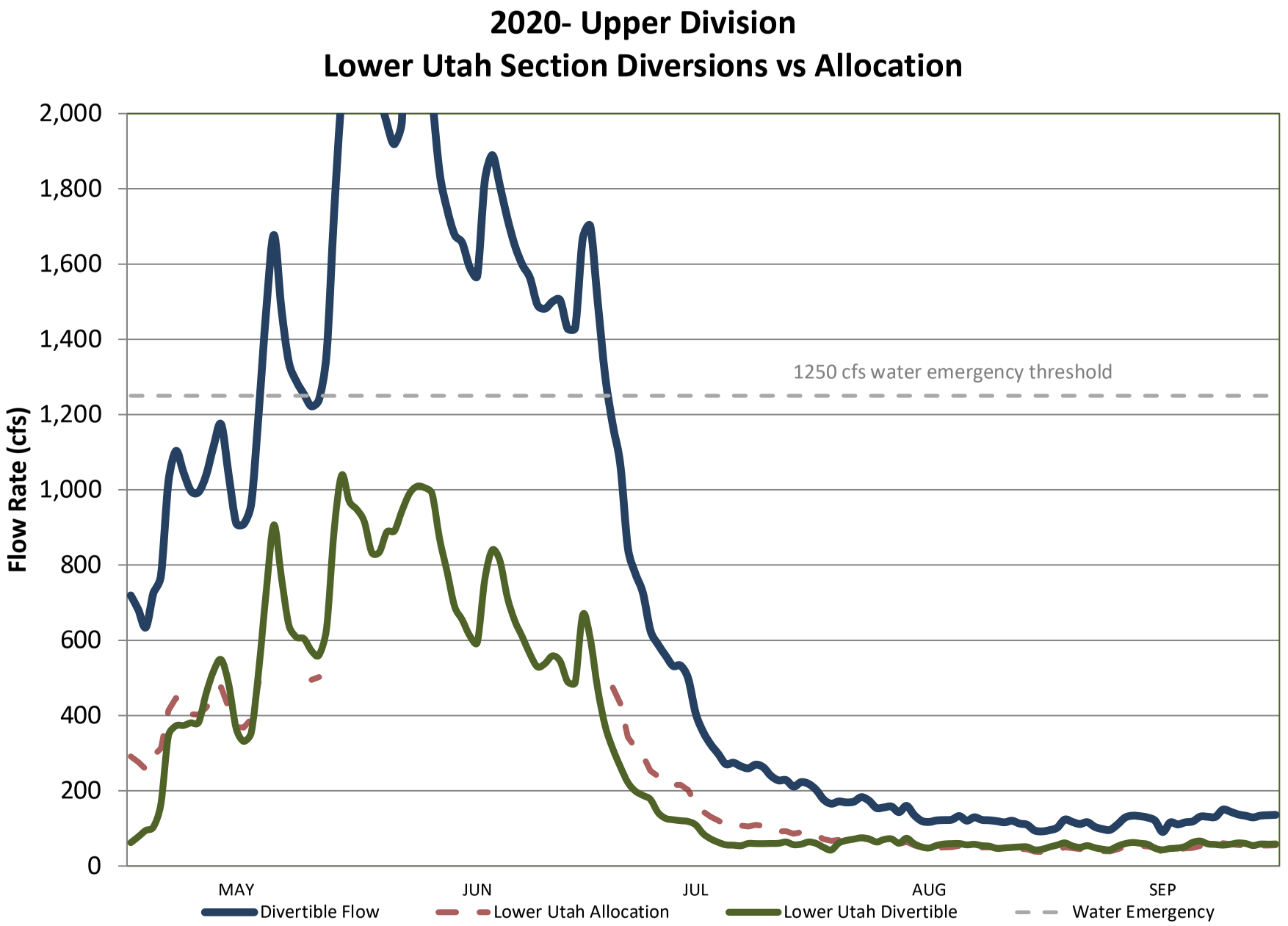


Figure 2020.10

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

May

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
UPPER UTAH SECTION																															
Hovarka (E Fk)	0	0	0	0	0	0	0	0	0	0	0	1	2	1	2	6	15	13	10	12	12	12	12	12	12	12	12	12	12	14	14
Hatch (W Fk)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UPPER WYOMING SECTION																															
Hilliard East Fork (E Fk)	0	0	0	0	0	0	0	0	0	0	0	1	4	4	4	3	2	4	7	6	8	19	18	16	15	15	16	18	19	26	30
Lannon & Lone Mtn	11	13	13	14	14	14	15	15	15	15	15	15	15	15	15	14	14	15	15	17	19	18	18	18	17	17	17	19	20	20	19
Hilliard West Side	0	0	0	0	0	0	0	0	0	0	0	12	32	24	21	18	25	33	33	33	31	30	29	26	22	27	31	33	34	34	34
Bear (Bear R)	14	19	19	19	25	34	37	42	41	40	45	57	60	58	57	57	57	55	53	73	87	88	92	90	89	82	82	79	71	71	67
Tropic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	5	5	4	4	3	3	3	3	3	4	6	6
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	2	3	7	7	6	7	8	6	3	3	5	3	6	7	5	9	4	7	11	10	11	10	10	9	8	9	9	9	9	8	9
Crown & Pine Grove	3	3	3	3	3	3	3	3	4	5	8	11	13	15	17	16	18	20	24	19	14	17	19	17	15	18	19	23	28	17	18
McGraw	0	0	0	0	7	22	23	22	22	22	22	24	24	22	19	11	11	11	10	10	9	9	9	9	8	9	9	10	10	9	8
Lewis (D4)	0	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	0
Homer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Lewis and Blanchard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Myers No. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	6	5	3	2	2	2	1	2	3	5	6	7	7
Hare	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4	4	5	5	5	5	5	5	5
Coffman	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	3	3	3	3
Knoder	0	0	0	0	0	0	0	0	0	0	0	0	2	4	4	4	3	4	3	2	2	2	2	2	1	1	1	1	2	1	1
Myers No. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10	8	8	8	7	4	5	5	5	4	4	5	7	8	9	10
Myers Irr	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	0	0	1	1	1	1	0	0	0	1	1	0
Evanston Pipeline	10	9	9	8	8	8	8	5	5	5	6	6	6	6	6	6	6	7	9	9	8	7	6	6	7	10	9	9	9	10	10
Booth	13	16	16	15	13	13	13	13	13	13	13	14	13	13	16	16	16	17	19	19	17	16	16	15	14	14	18	23	25	26	13
Anel Irr	0	0	0	0	0	0	0	0	0	0	0	3	10	10	10	10	9	9	9	10	10	10	11	11	11	12	12	12	13	13	13
Cornelison	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	4	4	4	4	4	4	4	4	4	4	4	4	4
Ev Water Supply (and Anderson)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Knight No. 2 (and No. 1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	9	10	10	9	8	8	8	8	8	7	3	4	3	3
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	0	0	0	1	12	19	20	19	19	19	19	20	20	20	20	17	18	23	22	20	19	14	13	16	14	15	16	18	17	15	16
Wilson Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4
Faulkner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
Rocky Mtn & Blyth (and Crompton)	5	5	5	5	5	5	3	3	3	2	11	26	28	26	21	16	16	18	22	21	20	20	19	19	18	19	20	21	22	22	22
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	0	0	0	0	0	0	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Sim's Creek Slough Diversion	5	5	5	5	5	4	5	5	7	8	8	8	8	7	7	7	7	7	7	7	6	6	5	9	12	13	14	13	13	14	11
John Sims	10	14	15	13	9	12	19	22	26	26	26	26	19	18	19	22	22	26	31	17	6	4	4	4	3	10	12	8	15	33	32
Michael Sims	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5
S. P.	0	0	0	0	3	17	17	16	17	17	17	17	17	16	15	15	15	15	16	14	12	12	12	11	11	13	16	15	15	16	15
Almy	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Sims, Blight & Turner	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Bowns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	2	2	2	2	2	2	2	2	2	2	8	8	8	8	8	8	8	8	8	8	10	10	10	10	10	12	12	12	12	12	12
Chapman (Headgate)	119	102	89	93	89	88	91	88	95	105	108	112	116	104	96	97	101	118	135	115	100	91	88	86	83	82	89	105	117	134	156
Chapman (Stateline, incl'd above)	113	103	85	88	84	77	79	73	75	86	88	94	100	98	88	91	90	102	126	110	100	83	78	76	71	63	62	68	78	91	109
Morris Bros Irr (Lower)	3	3	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	1	1	2	1	1
Bowns & Bruce	0	0	0	1	1	1	1	1	1	1	9	9	9	9	9	9	9	6	6	6	6	6	6	6	6	6	5	5	5	5	5
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunnel	22	17	18	20	19	18	18	18	18	18	18	19	20	19	17	17	16	17	20	23	20	18	17	16	15	14	15	18	20	34	12
Francis-Lee	11	11	12	12	12	12	15	23	22	22	22	24	25	26	25	24	24	25	25	25	25	25	24	24	24	24	24	24	24	25	24
Bear River Canal	27	30	31	37	43	42	41	42	41	43	52	57	59	53	49	49	49	50	50	50	50	50	50	51	51	51	51	48	46	47	47
TOTAL UPPER WY DIV.	264	261	257	265	288	332	352	357	367	380	426	486	527	502	478	476	487	570	616	596	566	554	547	540	526	542	569	601	625	677	659
Whitney Storage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulphur Creek Storage	5	4	4	3	3	3	3	4	4	4	6	6	5	5	5	5	6	6	8	8	7	6	6	5	6	9	8	8	9	9	9
LOWER UTAH																															
Neville	1	4	6	6	6	6	5	5	5	4	5	6	7	7	7	7	7	6	6	6	6	6	6	6	6	7	7	7	6	5	5
Booth	0	0	0	0	0	5	12	12	12	11	12	15	16	16	14	12	12	14	19	19	19	19	19	19	19	18	18	17	16	16	16
Rees Land & Livestock	15	20	30	34	36	37	36	38	39	39	37	33	27	27	28	26	25	25	25	25	23	23	21	21	21	21	22	23	23	23	23
Crawford-Thompson	6	8	8	8	8	7	7	7	7	7	78	165	155	154	139	142	142	145	146	148	148	148	150	149	149	149	149	144	145	145	150
Randolph-Woodruff	14	20	23	25	54	105	103	118	132	131	139	181	212	234	225	224	227	233	234	236	238	241	245	242	242	240	241	225	252	257	260
Dykens	0	0	0	0	0	0	0	0	0	0	15	37	44	49	54	48	49	50	50	50	50	51	52	52	51	51	51	49	39	38	39
Lazy P Ranch Pump (G.R. Peart)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	1	1	1
Randolph-Sage Creek	25	26	26	29	30	31	31	31	30	30	30	29	28	29	30	31	140	212	216	213	218	220	221	228	229	226	226	226	226	206	200
Hoffman Brothers Ranch Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	1	0	0	0	0	0	0
McMinn	0	0	0	0	1	1	0	0	0	12	26	24	27	31	35	39	33	32	39	44	46	48	52	59	61	62	64	65	64	52	48
Enberg	0	0	0	0	0	0	0	0	2	0	0	1	10	19	22	25	21	19	17	16	17	18	20	21	22	21	20	19	21	16	14
BQ Westside	1	1	1	1	40	185	172	156	150	144	153	140	145	154	157	171	152	145	157	191	201	208	217	227	231	234	237	240	237	204	190
Burdette Weston Pumps	0	0	0	0	0	0	7	6	4	4	4	0	3	2	2	0	0	0	0	0	1	6	0	0	2	7	7	6	7	3	1
Dan Peart Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	2	2	2
TOTAL LOWER UT DIV.	62	78	95	103	174	376	373	374	381	382	499	630	672	723	712	726	806	883	909	952	973	996	1010	1030	1040	1042	1047	1027	1039	970	948
Woodruff Narrows Storage Release	-189	-130	-44	-63	39	62	-15	33	37	9	100	193	212	345	469	525	594	486	264	106	300	481	536	565	615	631	551	210	-46	-187	-407
LOWER WYOMING																															
Johnson Pipelines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	6	5	3	5	6	7	7	7	7	6
Weston Ranch Pumps	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	7	6	1	0	1	3	4	3	4	6	7	7	7
McFarland	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	4	5	4	3	3	4	6	7	8	9	9	9	14	17	17	16
B.Q. Dam Slough (West)	0	0	0	0	0	0	0	0	2	15	13	12	11	15	20	23	24	21	21	21	21	25	25	26	27	28	27	29	28	29	28
B.Q. Dam East	7	7	7	7	7	7	7	7	7	7	7	36	58	69	75	78	83	77	77	78	80	91	93	95	95	94	93	116	135	142	143
Pixley Irr (East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25
Pixley Irr (West)	0	0	0	0	0	0	0	5	13	14	8	0	0	0	5	19	21	15	6	20	20	21	27	48	55	62	63	51	47	48	51
C-12 Pipeline and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Willis Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	0	0	0	0
TOTAL LOWER WY DIVERSIONS	7	7	7	7	7	7	7	12	22	36	28	49	71	87	104	127	139	125	118	132	135	153	163	188	199	206	208	248	266	275	276
Bear River below Pixley Dam	202	210	236	290	345	372	360	341	269	210	191	149	120	77	89	104	116	109	99	100	103	110	97	53	67	79	86	68	64	64	65
Total Divertible Flow	719	681	634	725	771	1021	1103	1046	997	994	1039	1116	1174	1039	911	909	964	1209	1481	1677	1481	1338	1288	1254	1222	1240	1362	1737	2043	2177	2361
Upper UT Allocation	4	4	4	4	5	6	7	6	6	6	6	7	7	6	5	5	6	7							7	7					
Upper UT Divertible	0	0	0	0	0	0	0	0	0	0	0	1	2	1	2	6	15	13	10	12	12	12	12	12	12	12	12	12	12	14	14
Upper WY Allocation	355	336	313	358	380	504	544	516	491	490	512	550	579	512	449	448	475	596							602	611					
Upper WY Divertible	259	257	253	262	261	307	349	325	332	368	378	432	469	449	431	430	440	521	565	545	515	505	499	492	477	491	518	553	616	668	651
Lower UT Allocation	291	276	257	294	312	414	447	424	404	403	421	452	475	421	369	368	390	490							495	502					
Lower UT Divertible	62	78	95	103	165	347	373	374	381	382	458	518	549	484	365	331	355	522	733	907	767	640	608	604	572	561	632	892	1039	970	948
Lower WY Allocation	69	65	61	70	74	98	106	100	96	95	100	107	113	100	87	87	93	116							117	119					
Lower WY Divertible	7	7	7	7	0	0	7	6	15	35	11	16	35	28	25	38	38	43	73	114	84	71	72	92	95	98	114	212	266	275	276

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2020.11

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

June

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
UPPER UTAH SECTION																														
Hovarka (E Fk)	14	14	14	14	14	14	14	13	13	13	12	14	16	16	15	15	15	15	15	14	14	14	14	14	14	14	14	14	14	13
Hatch (W Fk)	0	0	0	0	0	0	0	0	0	0	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
UPPER WYOMING SECTION																														
Hilliard East Fork (E Fk)	32	31	30	30	30	30	27	24	18	13	11	11	17	28	29	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29
Lannon & Lone Mtn	16	16	20	20	19	20	18	17	16	16	15	16	19	19	19	19	19	18	18	18	18	19	20	20	21	21	21	21	21	21
Hilliard West Side	34	34	34	34	33	33	32	30	30	26	21	18	21	19	16	15	13	23	37	37	37	37	37	37	37	37	37	37	36	35
Bear (Bear R)	75	75	77	79	82	82	72	69	70	70	71	77	87	90	96	98	98	97	97	97	96	97	98	98	98	97	95	93	92	90
Tropic	5	5	4	4	4	4	4	4	3	3	4	5	5	4	4	4	3	4	3	4	5	5	5	5	5	5	5	5	5	5
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	8	9	12	11	10	10	7	4	3	4	7	8	10	10	9	9	9	8	7	6	6	6	6	6	5	5	4	4	4	3
Crown & Pine Grove	20	16	21	22	20	25	16	13	12	10	12	16	20	29	27	26	25	21	18	18	20	19	19	19	18	16	14	13	14	12
McGraw	8	7	7	7	7	7	6	6	5	5	8	12	15	18	19	19	19	18	16	15	14	15	15	15	14	13	12	11	11	10
Lewis (D4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	2	7	8	1	1	5	9	9	8	8	7
Homer	3	3	3	3	3	3	3	3	3	5	5	5	5	5	5	5	3	3	3	3	3	3	3	2	2	2	2	2	2	2
Lewis and Blanchard	1	1	7	7	7	7	7	7	7	8	8	8	8	8	8	8	2	2	2	2	2	2	2	4	4	4	4	4	4	4
Myers No. 2	7	6	5	5	5	6	7	5	4	3	3	2	2	2	2	1	1	1	1	2	4	4	4	4	2	2	2	1	2	1
Hare	5	5	6	6	6	6	6	6	6	5	5	5	5	5	5	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Coffman	3	3	3	3	3	2	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
Knoder	1	1	1	5	6	7	7	4	3	1	1	1	1	3	3	3	3	3	3	3	3	2	2	3	3	3	3	3	3	4
Myers No. 1	10	5	4	5	5	4	3	3	3	5	3	2	3	3	4	4	4	2	1	1	3	3	3	3	3	4	4	5	5	7
Myers Irr	0	1	3	2	2	2	2	2	2	2	2	2	2	2	5	8	8	5	2	2	2	2	2	2	1	2	3	2	2	2
Evanston Pipeline	9	10	10	10	11	10	9	3	1	11	11	11	11	11	11	14	14	14	14	14	14	14	13	13	13	13	13	13	13	14
Booth	16	17	16	16	17	19	22	20	19	18	17	16	16	15	14	14	14	14	15	16	19	22	18	18	18	18	17	17	19	20
Anel Irr	14	14	14	14	14	13	13	13	13	13	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11	11
Cornelison	4	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	3	3	3	3	3	3	3	3	4	4	4	4	4	4
Ev Water Supply (and Anderson)	5	5	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	3	3	3	3	3	3	3	4	4	4	4	4	4
Knight No. 2 (and No. 1)	3	2	5	10	9	10	11	10	10	9	8	7	7	6	6	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	17	17	19	18	17	16	12	12	12	15	19	22	21	21	19	18	20	20	15	16	18	18	18	15	14	14	16	17	18	20
Wilson Irr	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Faulkner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Mtn & Blyth (and Crompton)	22	21	21	20	20	21	22	20	20	19	18	17	17	16	16	15	15	15	15	14	13	12	12	12	10	11	15	14	15	19
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	3	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	7	7	7	7	7	7	5	5	5	5	5	5	5
Sim's Creek Slough Diversion	11	13	14	13	12	13	14	11	9	9	8	7	9	10	9	9	9	10	9	9	8	7	6	6	6	5	4	4	6	10
John Sims	32	31	30	21	8	8	9	8	7	7	6	6	10	21	21	21	21	21	14	7	5	5	5	5	7	9	8	6	6	6
Michael Sims	5	5	5	5	5	5	5	5	12	12	12	12	12	12	12	12	12	12	0	0	0	0	0	0	0	0	0	0	0	0
S. P.	12	10	9	9	9	9	8	7	6	6	5	6	10	14	14	13	13	13	11	9	8	8	8	8	8	8	8	7	7	8
Almy	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Sims, Blight & Turner	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	10	10	10	10	10	10	10	10	8	8	8	8	8	8	5
Bowns	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	10	10	10	10	10	10	10	10	7	7	7	7	7	7	7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Chapman (Headgate)	157	146	132	133	129	140	154	122	106	104	99	97	96	89	83	78	83	90	84	79	74	72	70	68	66	64	62	59	58	64
Chapman (Stateline, incl'd above)	111	108	105	101	96	100	134	118	100	91	84	73	69	53	49	44	47	56	55	56	52	47	40	37	39	41	38	33	33	36
Morris Bros Irr (Lower)	1	1	1	2	2	1	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	3	2	0	0	1
Bowns & Bruce	5	5	5	5	5	5	5	5	10	10	10	10	10	10	10	10	10	10	0	0	0	0	0	0	0	0	0	0	0	0
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunnel	25	26	24	35	46	17	2	2	1	7	34	31	33	33	30	27	31	35	31	26	22	26	40	40	38	37	36	33	31	37
Francis-Lee	24	24	24	24	23	23	23	23	23	23	23	23	22	22	21	21	21	22	23	23	23	22	22	21	21	21	20	20	19	16
Bear River Canal	47	47	48	48	48	48	48	47	47	47	47	47	47	47	47	46	47	47	47	47	47	48	48	48	48	49	49	49	49	43
TOTAL UPPER WY DIV.	680	666	674	686	674	667	638	568	542	547	569	574	613	644	634	610	601	608	566	546	549	553	554	548	549	547	538	523	527	534
Whitney Storage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulphur Creek Storage	9	9	9	9	10	9	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOWER UTAH																														
Neville	5	5	5	6	6	6	6	6	7	7	7	6	6	6	6	6	7	6	5	5	5	5	6	6	7	7	6	7	6	6
Booth	16	16	16	16	16	16	16	16	16	16	16	16	15	15	15	14	15	14	14	14	14	14	14	14	14	14	14	14	15	14
Rees Land & Livestock	23	23	23	23	23	23	22	21	20	21	23	23	23	22	22	22	23	22	23	23	20	23	23	23	22	20	20	20	20	19
Crawford-Thompson	122	145	147	149	149	153	156	151	150	149	151	153	153	149	147	147	168	159	151	149	149	150	148	147	148	151	147	145	146	145
Randolph-Woodruff	260	262	268	272	274	282	288	278	273	271	271	273	269	283	291	291	322	292	303	311	308	304	300	294	295	307	315	309	310	309
Dykens	39	38	37	37	35	37	39	35	32	30	29	26	25	24	18	23	42	29	22	20	24	20	15	14	16	15	23	24	28	29
Lazy P Ranch Pump (G.R. Peart)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
Randolph-Sage Creek	145	32	33	95	172	174	175	183	187	177	155	153	153	153	152	151	153	180	182	163	156	153	149	147	143	142	140	136	135	137
Hoffman Brothers Ranch Pump	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0
McMinn	58	66	64	54	52	57	72	79	79	80	80	80	83	83	81	82	96	108	107	100	96	93	90	87	85	84	82	79	78	80
Enberg	18	22	21	16	14	13	15	17	17	17	17	17	17	16	15	16	22	29	27	23	21	20	18	8	3	0	0	0	0	0
BQ Westside	226	220	213	210	197	187	197	218	219	217	220	221	222	214	209	212	253	283	277	258	246	240	228	219	236	262	241	205	201	205
Burdette Weston Pumps	0	0	2	6	3	0	0	0	0	0	0	0	1	6	7	7	0	2	3	0	0	0	0	0	0	0	0	0	0	0
Dan Peart Pump	2	2	2	2	4	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4
TOTAL LOWER UT DIV.	916	833	834	888	947	955	990	1009	1006	990	974	971	969	973	964	974	1103	1127	1119	1069	1045	1028	998	965	975	1007	993	944	941	949
Woodruff Narrows Storage Release	-493	-399	-149	11	116	61	-611	-733	-309	-47	170	273	380	428	467	501	454	390	416	474	520	551	568	570	571	585	586	591	590	372
LOWER WYOMING																														
Johnson Pipelines	6	6	6	6	6	6	6	5	3	4	6	7	6	6	6	7	4	2	2	3	6	6	5	6	5	2	2	0	0	0
Weston Ranch Pumps	6	6	5	2	3	5	3	0	2	5	5	7	5	4	3	3	0	0	0	3	7	5	7	3	0	0	0	0	0	0
McFarland	16	17	17	17	17	17	16	17	18	18	18	18	19	19	19	18	19	20	19	18	18	17	17	17	16	17	18	17	17	17
B.Q. Dam Slough (West)	26	26	26	24	24	25	24	22	21	21	20	19	19	19	19	19	17	16	7	5	7	8	10	10	10	12	19	19	19	18
B.Q. Dam East	152	157	158	156	155	156	153	156	160	161	163	164	166	165	165	165	169	171	168	163	159	156	154	152	151	155	158	157	158	160
Pixley Irr (East)	25	34	34	34	34	34	34	34	32	32	32	32	32	32	32	32	39	39	39	39	39	39	39	36	36	36	36	36	35	35
Pixley Irr (West)	60	63	64	67	67	67	65	67	66	67	69	71	72	70	69	67	74	75	80	82	79	78	75	72	69	71	70	69	70	70
C-12 Pipeline and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	1	0
Willis Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL LOWER WY DIVERSIONS	291	308	311	305	305	310	301	300	302	307	313	317	319	316	314	312	323	322	315	314	313	308	306	297	288	295	305	300	300	300
Bear River below Pixley Dam	81	88	94	101	104	106	123	147	158	151	137	134	134	127	122	149	224	199	201	243	240	237	251	229	219	215	231	230	231	234
Total Divertible Flow	2466	2300	2067	1975	1919	1982	2669	2769	2329	2054	1844	1746	1678	1657	1592	1569	1820	1890	1809	1721	1649	1598	1563	1491	1482	1500	1504	1428	1430	1667
Upper UT Allocation																														
Upper UT Divertible	14	14	14	14	14	14	14	13	13	13	21	22	24	24	24	24	24	23	23	23	23	22	22	22	22	22	22	22	22	22
Upper WY Allocation																														
Upper WY Divertible	672	657	665	668	625	619	631	566	542	547	531	537	576	608	598	575	566	571	528	508	511	515	517	511	511	509	501	487	491	507
Lower UT Allocation																														
Lower UT Divertible	916	833	834	888	891	944	990	1009	1006	990	870	782	690	655	613	594	761	840	812	714	651	609	563	529	538	559	544	490	487	667
Lower WY Allocation																														
Lower WY Divertible	291	308	311	303	285	300	301	300	302	307	285	271	254	243	235	227	246	256	244	234	224	215	210	200	191	195	206	200	199	237

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2020.11 (cont.)

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

July

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
UPPER UTAH SECTION																															
Hovarka (E Fk)	13	13	13	13	13	9	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3
Hatch (W Fk)	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
UPPER WYOMING SECTION																															
Hilliard East Fork (E Fk)	28	27	27	27	27	26	25	25	25	24	24	24	24	24	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lannon & Lone Mtn	20	19	19	21	21	18	13	14	14	16	18	18	18	18	12	10	10	10	10	8	5	4	4	5	5	5	5	5	5	5	4
Hilliard West Side	33	26	23	21	20	23	31	36	33	33	33	33	26	20	8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Bear (Bear R)	87	82	79	77	75	71	74	67	68	67	66	66	63	61	24	8	13	18	17	18	18	12	8	8	8	8	8	7	8	8	8
Tropic	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	3	3	3	3	3	3	3	2	2	2	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crown & Pine Grove	11	10	15	18	17	16	25	24	25	23	22	22	23	24	17	18	18	18	18	18	18	19	20	22	22	22	22	23	22	21	16
McGraw	9	8	8	10	10	9	8	9	7	4	4	4	4	3	3	4	4	4	3	3	4	4	3	4	4	4	4	4	4	4	4
Lewis (D4)	5	1	1	2	0	0	1	1	0	8	12	8	5	5	3	5	5	3	3	3	3	4	5	5	5	5	4	5	1	0	0
Homer	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lewis and Blanchard	4	4	4	4	4	4	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myers No. 2	1	0	0	0	0	0	1	3	1	1	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hare	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coffman	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Knoder	4	4	2	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Myers No. 1	10	2	2	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myers Irr	2	1	1	2	1	1	1	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Evanston Pipeline	14	14	14	14	14	9	11	12	11	11	11	12	10	12	12	12	12	12	12	12	13	12	12	12	12	12	11	11	12	12	13
Booth	20	18	14	10	7	4	4	11	14	17	12	11	11	12	11	12	8	6	8	7	6	7	8	8	8	8	8	8	8	8	8
Anel Irr	11	11	11	11	11	8	1	7	13	11	7	8	8	8	8	9	8	8	8	5	2	1	1	1	1	1	1	1	1	1	1
Cornelison	4	2	2	2	2	2	2	6	6	6	6	6	6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ev Water Supply (and Anderson)	4	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Knight No. 2 (and No. 1)	5	4	3	2	1	1	1	4	5	6	5	4	3	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	20	18	18	15	12	9	15	12	9	9	10	9	9	7	7	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	9
Wilson Irr	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
Faulkner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Mtn & Blyth (and Crompton)	22	20	16	13	11	10	9	9	10	10	9	9	9	5	4	4	3	2	2	3	2	1	1	1	1	1	1	1	1	1	1
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	5	5	5	5	5	5	5	5	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sim's Creek Slough Diversion	12	9	5	2	1	0	2	5	7	7	6	5	5	5	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
John Sims	7	7	4	3	3	7	5	5	6	6	6	5	5	5	5	5	6	6	7	7	7	6	5	4	4	4	4	5	6	6	6
Michael Sims	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S. P.	8	8	9	8	7	6	7	7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	2	3	3	3
Almy	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sims, Blight & Turner	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bowns	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chapman (Headgate)	69	73	67	51	42	34	37	53	73	74	65	55	51	51	56	65	82	75	60	53	52	52	61	61	46	41	40	42	44	41	37
Chapman (Stateline, incl'd above)	44	47	49	36	28	22	18	29	47	57	58	48	41	37	42	47	63	64	52	46	44	44	46	51	40	32	30	28	31	28	26
Morris Bros Irr (Lower)	3	4	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Bowns & Bruce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunnel	43	40	31	28	26	23	3	1	1	0	0	0	0	0	0	1	1	1	0	5	10	8	8	7	8	9	10	8	13	11	6
Francis-Lee	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear River Canal	12	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL UPPER WY DIV.	502	449	413	380	353	319	314	335	351	354	340	321	301	294	219	189	200	193	177	171	168	157	163	163	148	144	142	147	152	144	131
Whitney Storage	0	0	0	0	0	81	81	81	81	81	81	81	89	89	12	12	12	12	12	12	12	17	17	18	18	18	18	18	12	12	17
Sulphur Creek Storage	0	0	0	0	0	25	27	37	49	67	67	67	72	74	74	52	63	63	62	52	52	40	37	37	37	37	36	41	41	43	32
LOWER UTAH																															
Neville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Booth	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rees Land & Livestock	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Crawford-Thompson	56	30	22	18	17	13	11	10	11	11	11	11	13	13	12	12	11	10	10	11	12	13	11	11	11	11	11	11	11	11	11
Randolph-Woodruff	83	69	62	56	47	37	35	36	36	29	30	31	34	36	37	37	37	36	35	34	33	33	34	34	32	32	31	30	30	30	29
Dykens	17	6	2	1	1	1	1	1	1	1	1	2	3	2	2	1	3	1	1	1	1	2	1	1	1	1	2	1	1	1	2
Lazy P Ranch Pump (G.R. Peart)	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Randolph-Sage Creek	138	126	100	90	82	78	76	77	76	73	72	73	70	67	65	49	31	30	28	28	28	28	28	29	29	29	29	29	29	29	29
Hoffman Brothers Ranch Pump	0	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	1	0	0	0
McMinn	80	63	48	40	35	30	27	25	23	21	21	19	16	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enberg	0	0	0	0	1	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BQ Westside	207	170	136	115	96	82	72	63	54	27	13	8	8	10	11	10	10	9	9	8	7	10	10	10	10	10	10	10	10	10	10
Burdette Weston Pumps	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	4	4	1	0	0	0	4	3	3	4	4	4	0	0	0	0
Dan Peart Pump	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4
TOTAL LOWER UT DIV.	605	470	376	328	285	248	226	216	205	167	151	147	148	149	140	116	99	90	87	86	87	95	93	93	94	93	94	87	87	91	91
Woodruff Narrows Storage Release	-40	-37	5	20	26	31	33	34	33	30	29	29	33	37	37	37	32	33	37	37	40	42	41	40	41	40	36	37	34	33	38
LOWER WYOMING																															
Johnson Pipelines	0	0	1	1	1	0	1	1	0	0	3	6	7	7	6	7	7	7	7	7	7	7	6	6	7	7	6	6	5	6	7
Weston Ranch Pumps	0	0	0	0	0	0	0	0	0	1	4	5	6	7	5	6	6	3	1	5	3	4	7	7	6	4	5	3	5	7	5
McFarland	17	16	14	13	11	10	8	7	10	11	10	10	9	8	7	6	5	5	5	5	4	2	2	2	1	1	0	0	0	0	0
B.Q. Dam Slough (West)	18	16	17	16	16	15	14	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B.Q. Dam East	158	154	146	138	129	120	113	87	2	1	2	2	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pixley Irr (East)	35	35	35	35	35	35	25	25	25	25	25	25	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pixley Irr (West)	70	69	66	62	58	54	49	44	45	46	44	43	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-12 Pipeline and Pivot	0	2	2	1	0	2	1	2	1	0	2	1	2	1	0	1	0	2	0	2	1	0	0	0	1	0	2	2	1	1	2
Willis Pipeline	0	0	0	0	0	0	4	4	4	4	4	4	4	4	0	0	0	0	0	0	4	4	4	4	4	4	4	0	0	0	0
TOTAL LOWER WY DIVERSIONS	298	293	282	265	250	235	215	179	87	90	95	97	87	54	21	20	19	17	14	19	20	18	20	20	19	16	18	12	11	14	14
Bear River below Pixley Dam	234	228	214	197	182	164	149	134	133	142	138	131	178	189	137	120	100	94	92	88	82	77	77	70	62	56	52	49	49	46	43
Total Divertible Flow	1701	1498	1300	1172	1066	846	777	725	626	589	560	532	533	499	406	356	323	298	271	275	265	260	270	262	240	228	228	211	223	218	202
Upper UT Allocation				7	6	5	5	4	4	4	3	3	3	3	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
Upper UT Divertible	22	22	22	21	21	17	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11
Upper WY Allocation				578	525	417	383	358	308	290	276	262	263	246	200	176	159	147	134	135	131	128	133	129	118	112	113	104	110	108	100
Upper WY Divertible	502	449	413	380	353	213	206	217	221	207	192	173	140	130	133	125	126	118	103	106	105	100	108	108	93	90	88	88	99	90	81
Lower UT Allocation				475	432	342	315	294	253	239	227	215	216	202	164	144	131	121	110	111	107	105	109	106	97	92	93	86	90	88	82
Lower UT Divertible	605	470	371	312	264	222	199	188	177	142	127	123	121	118	110	86	72	63	56	55	54	60	60	60	60	60	64	57	58	64	60
Lower WY Allocation				112	102	81	75	70	60	57	54	51	51	48	39	34	31	29	26	26	25	25	26	25	23	22	22	20	21	21	19
Lower WY Divertible	298	293	281	262	246	229	210	173	82	85	90	92	81	48	14	13	13	12	8	13	13	11	13	13	12	9	12	5	6	8	8

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2020.11 (cont.)

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

August

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
UPPER UTAH SECTION																															
Hovarka (E Fk)	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1
Hatch (W Fk)	8	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	2	2	2	2	2	2	2	2	2	2	2	2
UPPER WYOMING SECTION																															
Hilliard East Fork (E Fk)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lannon & Lone Mtn	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hilliard West Side	2	3	3	3	3	3	3	2	2	3	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear (Bear R)	8	8	8	8	8	8	8	8	8	8	8	8	9	11	11	11	13	17	17	17	17	17	17	17	17	17	17	14	11	11	11
Tropic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crown & Pine Grove	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	8	5	5	4	3	3	3	3	3	3	3	3	3	3
McGraw	3	3	3	3	3	3	4	4	3	3	3	3	3	3	3	3	3	4	4	3	2	1	1	1	1	1	0	0	0	0	0
Lewis (D4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	6	5	5	5	5	4	5	4	3	3	3	1
Homer	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lewis and Blanchard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myers No. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coffman	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Knoder	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Myers No. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myers Irr	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2
Evanston Pipeline	13	12	12	12	12	12	12	12	12	12	12	12	15	11	12	12	12	13	13	12	12	11	11	11	11	11	10	11	11	10	10
Booth	8	8	8	7	8	8	8	8	7	8	8	8	8	8	7	7	6	5	4	4	4	4	4	3	1	1	1	1	1	1	1
Anel Irr	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	6	6	6	6	6	6	6	5	4	4	4
Cornelison	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ev Water Supply (and Anderson)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Knight No. 2 (and No. 1)	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	11	11	11	11	12	15	15	15	15	14	14	13	14	13	12	12	11	12	14	13	13	13	13	13	11	4	1	1	1	1	1
Wilson Irr	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Faulkner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Mtn & Blyth (and Crompton)	1	1	1	2	2	2	2	2	1	1	1	1	2	2	2	2	3	2	2	2	2	2	2	2	3	2	4	7	5	5	6
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sim's Creek Slough Diversion	1	1	1	1	2	4	4	4	4	4	4	4	4	3	3	4	3	3	2	0	0	0	0	0	1	1	1	0	0	0	0
John Sims	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5	5	5	5	5	5	4	3	3	3	5	7	6	6	5	4	5
Michael Sims	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S. P.	4	4	5	5	4	3	3	3	3	3	3	3	3	3	3	3	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2
Almy	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sims, Blight & Turner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bowns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chapman (Headgate)	32	33	17	6	5	5	5	5	5	5	5	7	8	6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Chapman (Stateline, incl'd above)	23	22	16	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Morris Bros Irr (Lower)	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Bowns & Bruce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunnel	4	5	6	10	2	2	2	2	3	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Lee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear River Canal	1	1	1	1	10	20	20	20	20	20	20	20	20	20	23	20	21	22	24	23	23	23	23	23	23	23	23	23	22	22	21
TOTAL UPPER WY DIV.	121	120	106	98	102	115	114	110	111	111	108	109	113	105	104	101	102	103	104	105	105	101	100	101	100	93	88	86	77	75	75
Whitney Storage	17	17	17	17	16	20	20	20	20	20	20	20	24	24	24	24	24	20	20	20	19	19	19	19	19	17	17	19	19	19	19
Sulphur Creek Storage	32	31	32	32	38	38	38	37	37	37	37	38	50	46	47	47	50	54	47	54	51	49	50	48	52	45	43	37	36	35	36
LOWER UTAH																															
Neville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Booth	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Rees Land & Livestock	5	5	5	5	5	6	5	0	5	5	5	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crawford-Thompson	11	11	11	11	11	11	7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Randolph-Woodruff	33	34	33	33	33	36	37	38	38	38	38	38	17	11	12	12	13	13	13	12	11	11	11	11	11	12	12	12	12	12	12
Dykens	1	1	1	2	2	3	2	3	3	3	3	7	7	5	3	4	3	3	3	3	3	3	2	0	0	0	0	1	1	1	1
Lazy P Ranch Pump (G.R. Peart)	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Randolph-Sage Creek	17	9	25	30	30	31	30	29	29	30	19	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	12
Hoffman Brothers Ranch Pump	0	0	0	0	0	0	0	0	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
McMinn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enberg	0	0	0	0	0	0	0	0	0	0	0	0	4	9	12	17	18	18	18	18	18	18	15	12	11	11	11	10	10	10	9
BQ Westside	10	10	10	10	10	9	10	10	11	9	10	10	9	6	5	8	10	10	10	11	12	12	11	11	11	11	11	10	8	10	11
Burdette Weston Pumps	0	0	4	4	4	5	5	5	5	5	5	5	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dan Peart Pump	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	4
TOTAL LOWER UT DIV.	82	76	94	100	101	106	101	94	100	99	90	87	64	56	52	59	63	64	62	61	61	61	56	51	50	50	51	51	48	50	54
Woodruff Narrows Storage Release	40	40	40	39	36	37	34	36	35	32	35	16	6	6	5	6	5	5	3	5	4	9	4	5	2	-2	-8	0	6	7	4
LOWER WYOMING																															
Johnson Pipelines	7	7	7	7	6	6	6	5	2	2	2	2	1	0	0	0	0	0	1	3	6	6	6	6	6	6	6	6	5	5	2
Weston Ranch Pumps	2	1	3	3	4	7	5	3	3	5	5	3	3	3	3	2	0	0	0	0	0	0	1	1	4	7	0	2	5	3	3
McFarland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B.Q. Dam Slough (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B.Q. Dam East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pixley Irr (East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pixley Irr (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-12 Pipeline and Pivot	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Willis Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL LOWER WY DIVERSIONS	11	9	12	11	11	13	12	8	5	7	7	5	5	4	3	2	0	0	1	3	6	7	8	7	10	12	6	8	11	8	5
Bear River below Pixley Dam	41	39	38	37	35	34	32	28	25	24	24	25	26	25	27	29	29	29	29	28	28	28	28	30	26	22	19	18	18	17	17
Total Divertible Flow	176	166	172	169	171	183	174	154	156	158	143	160	136	120	117	121	122	123	133	121	130	123	122	119	116	120	113	110	95	92	95
Upper UT Allocation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Upper UT Divertible	11	11	11	11	11	11	7	7	7	7	7	7	7	7	7	7	7	7	6	3	3	3	3	3	3	3	3	3	3	3	3
Upper WY Allocation	87	82	85	83	84	90	86	76	77	78	71	79	67	59	58	60	60	61	65	59	64	61	60	59	57	59	56	54	47	45	47
Upper WY Divertible	71	71	56	49	48	57	57	53	54	53	50	51	40	35	33	30	28	29	37	31	35	33	32	34	30	31	27	31	22	21	20
Lower UT Allocation	71	67	70	68	69	74	70	63	63	64	58	65	55	49	47	49	49	50	54	49	52	50	49	48	47	49	46	44	38	37	39
Lower UT Divertible	49	43	61	68	72	75	72	64	71	72	61	74	59	51	48	55	59	60	60	56	58	54	53	47	48	50	51	51	43	45	51
Lower WY Allocation	17	16	16	16	16	18	17	15	15	15	14	15	13	12	11	12	12	12	13	12	12	12	12	11	11	12	11	11	9	9	9
Lower WY Divertible	4	2	6	4	5	6	6	2	0	1	1	2	4	3	2	1	0	0	1	2	6	5	7	6	9	12	6	8	10	7	4

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2020.11 (cont.)

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE UPPER DIVISION

September

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
UPPER UTAH SECTION																															
Hovarka (E Fk)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	880
Hatch (W Fk)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	609
UPPER WYOMING SECTION																															
Hilliard East Fork (E Fk)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1400
Lannon & Lone Mtn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1406
Hilliard West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1926
Bear (Bear R)	11	10	10	10	10	11	10	10	10	10	10	11	11	11	11	11	11	10	10	9	9	9	11	10	10	9	9	8	8	8	6222
Tropic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	266
Kreider Domestic Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Danielson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	469
Crown & Pine Grove	3	3	3	3	3	3	3	3	3	3	3	4	6	4	3	3	3	3	3	3	3	3	3	4	4	4	4	4	5	5	1928
McGraw	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	970
Lewis (D4)	1	3	5	3	4	3	1	1	2	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	322
Homer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	159
Lewis and Blanchard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	182
Myers No. 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167
Hare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	197
Coffman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119
Knoder	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	366
Myers No. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	266
Myers Irr	2	2	2	2	2	2	2	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	292
Evanston Pipeline	10	10	10	10	11	11	10	9	8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	1526
Booth	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	2	2	2	1503
Anel Irr	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	871
Cornelison	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	287
Ev Water Supply (and Anderson)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	260
Knight No. 2 (and No. 1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	399
"State Hospital Ditch"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evanston Water	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1645
Wilson Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
Faulkner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
Rocky Mtn & Blyth (and Crompton)	6	6	5	5	3	3	3	3	4	4	3	2	2	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	1304
B.E.A.R. Project PL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
Fife Irr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johnston & Narramore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	313
Sim's Creek Slough Diversion	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	695
John Sims	5	6	7	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1320
Michael Sims	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	230
S. P.	2	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	0	0	5	6	2	3	2	2	2	2	2	2	2	917
Almy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	219
Sims, Blight & Turner	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	657
Bowns	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	187
Nixon West Side	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turner	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	411
Chapman (Headgate)	3	4	6	5	4	4	4	4	5	5	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8021
Chapman (Stateline, incl'd above)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6153
Morris Bros Irr (Lower)	0	0	0	0	0	0	0	0	0	1	2	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
Bowns & Bruce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	282
Olson No. 1 Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Tunnel	0	1	3	2	2	2	2	2	3	3	2	2	2	2	2	3	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1792
Francis-Lee	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	2	2	2	1	1	1	1	1	1	1343
Bear River Canal	22	21	21	21	22	22	22	22	21	22	22	22	22	23	1	23	23	23	16	6	7	9	10	10	11	10	10	10	10	10	3950
TOTAL UPPER WY DIV.	74	76	82	75	74	71	69	68	70	71	68	67	66	67	43	65	62	61	53	49	50	50	51	51	51	50	50	49	50	51	45250
Whitney Storage	19	19	19	19	19	19	19	19	14	14	14	14	14	14	14	14	14	14	14	14	14	14	0	0	0	0	0	0	0	0	1944
Sulphur Creek Storage	31	28	29	22	24	23	22	21	17	13	13	13	13	13	13	10	9	9	9	9	9	7	0	0	0	0	0	0	0	0	3192
LOWER UTAH																															
Neville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	356
Booth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	871
Rees Land & Livestock	0	0	0	0	4	4	3	0	2	1	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1614
Crawford-Thompson	3	6	5	8	7	6	8	10	4	6	10	10	9	4	5	8	5	6	7	6	2	4	5	8	11	7	3	6	4	4	8358
Randolph-Woodruff	13	14	15	12	12	13	13	14	15	16	16	16	16	15	14	14	13	14	14	15	11	9	8	8	8	12	12	13	13	13	16477
Dykens	2	2	3	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1944
Lazy P Ranch Pump (G.R. Peart)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Randolph-Sage Creek	12	12	12	12	12	12	12	12	13	13	13	13	12	13	12	12	12	12	13	13	13	13	13	13	13	13	13	12	12	11	10710
Hoffman Brothers Ranch Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
McMinn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	3853
Enberg	10	10	10	10	9	8	8	6	9	9	9	8	7	7	7	8	10	11	11	12	12	11	9	10	10	9	9	9	9	10	1330
BQ Westside	12	12	12	12	13	13	13	12	13	14	14	15	15	14	14	15	17	18	19	20	21	21	20	20	20	20	18	18	18	18	13613
Burdette Weston Pumps	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	198
Dan Peart Pump	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	385
TOTAL LOWER UT DIV.	57	62	61	60	64	60	58	56	57	59	63	62	61	53	53	59	58	61	65	66	59	57	56	58	62	60	56	60	59	59	59804
Woodruff Narrows Storage Release	1	-3	9	12	12	14	16	15	6	-1	-3	2	4	8	12	15	13	11	2	-12	-18	-18	-17	-7	0	1	1	1	1	0	14649
LOWER WYOMING																															
Johnson Pipelines	2	2	4	5	5	4	4	3	0	2	5	5	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	526
Weston Ranch Pumps	2	5	3	0	3	0	0	0	0	0	0	2	2	4	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	373
McFarland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	875
B.Q. Dam Slough (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1147
B.Q. Dam East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7726
Pixley Irr (East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1549
Pixley Irr (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3404
C-12 Pipeline and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
Willis Pipeline	0	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
TOTAL LOWER WY DIVERSIONS	3	11	11	10	13	9	8	7	0	2	5	7	7	7	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15777
Bear River below Pixley Dam	16	17	17	18	18	17	18	18	17	19	20	22	23	25	25	23	24	25	23	24	24	24	24	26	22	21	23	24	25	24	15,185
Total Divertible Flow	102	124	117	112	116	104	98	96	110	129	134	132	129	120	90	116	111	116	119	131	131	131	150	144	137	134	129	134	135	136	117,722
Upper UT Allocation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	239
Upper UT Divertible	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1,490
Upper WY Allocation	50	61	58	55	57	51	48	47	54	63	66	65	64	59	45	57	55	57	58	65	65	64	74	71	68	66	64	66	67	67	19,648
Upper WY Divertible	24	29	35	34	31	30	28	28	39	44	41	41	40	40	16	41	39	38	30	26	27	29	51	51	51	50	50	49	50	51	38,400
Lower UT Allocation	41	50	47	45	47	42	40	39	45	52	54	54	52	49	37	47	45	47	48	53	53	53	61	59	56	54	52	54	55	55	16,141
Lower UT Divertible	56	62	54	50	54	49	45	43	53	59	63	61	58	47	43	47	48	52	63	66	59	57	56	58	61	60	54	59	58	59	46,050
Lower WY Allocation	10	12	11	11	11	10	9	9	11	12	13	13	12	12	9	11	11	11	11	13	13	13	14	14	13	13	12	13	13	13	3,826
Lower WY Divertible	3	11	9	8	11	6	5	4	0	2	5	6	6	6	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,621

NOTE: "Chapman (Stateline)" is a second measurement of flows in the Chapman Canal. As such, the values are not re-added into the Upper Wyoming total. Whitney and Sulphur Creek Reservoirs supply storage to irrigators in the Upper Wyoming Section. Woodruff Narrows storage is credited 83% to the Lower Utah Section, Bear River and Francis Lee Canal irrigators, and 17% to Wyoming irrigators.

Figure 2020.11 (cont.)

Central Division

The Compact provides that a water emergency shall be deemed to exist when the divertible flow in the Central Division drops below 870 cfs. A water emergency shall also be deemed to exist in the Central Division if the flow rate at the Border Gage drops below 350 cfs. The Compact provides that once a water emergency is deemed to exist, diversions in the State of Wyoming are to be limited to 43 percent of the total divertible flow. The remaining 57 percent is available for use within Idaho.

During the irrigation, the Engineer-Manager, in coordination with the state river commissioners/Watermasters, watches the flows in the Central Division to determine when a water emergency is being approached. A weekly call-in/call-out schedule of flow and diversion data commenced on June 5. On the July 10 tabulation of data, it was determined that the total divertible flow as defined by the Compact had dopped below the water emergency trigger of 870 cfs (the flow at the Border Gage did not drop below the 350 cfs water emergency threshold for about another ten days). Figure 2020.12 shows the weekly call-in/call-out information for the Central Division. Shown with the black triangles is the total divertible flow as defined by the Compact. The green dots show Wyoming diversion data with the solid dots showing actual diversions and the hollow dots showing Wyoming's allocation (43%). Similarly, the brown squares show the Idaho data with the hollow squares showing Idaho's allocation (57%) and the solid squares showing total water available to Idaho. These values include not only diversions to Idaho canals and pumps but also water bypassing Stewart Dam as well as water flowing into the Rainbow Inlet Canal. The grey diamonds show the calculated gains/losses in the Idaho Section of the River which is determined by subtracting the flows at the Border Gage from the sum of the Idaho diversions plus discharge into the Rainbow Inlet Canal and flows bypassing Stewart Dam. The red triangles represent the forecasted divertible flow each week. The solid dark blue line is the flow at the Border Gage. It is important to note that, though efforts are made to ensure the quality of data, these values represent the preliminary, real-time flow and diversion data that are available each week as the irrigation season progresses. In order to adjust for lag-time in flows from Wyoming to Idaho, the typical weekly process is for Wyoming to measure/regulate its diversions on Monday and Tuesday, Idaho to do its diversions on Thursday and then for the call-out/regulation for the next week to occur on Friday. In 2020 the weekly call-in/call-out practice commenced on June 5. On July 10 a water emergency was declared, and interstate regulation commenced. This continued until September 28 when the water emergency was lifted.

After the close of the irrigation season final diversion and flow data are tabulated. Figures 2020.13 and 2020.14 graphically illustrate the Central Division's divertible flow and the respective allocations and diversions by the Wyoming and Idaho Sections under a water emergency. The flow passing the Border Gage is not illustrated on these figures as it confuses the diversion and allocation data. In viewing Figure 2020.13, one will note that Wyoming took a little less than its allocation for about the first month of the water emergency. It is important to note that on Figure 2020.14 the line labeled as "Available to Idaho" represents the summation of diversions within the State of Idaho, as well as flow passing Stewart Dam and diversion to the Rainbow Inlet Canal. As the Compact provides that 57 percent of the Central Division's divertible flow shall be available for use within Idaho, this line is used to show

whether such provision of the Compact was met. However, the Compact also provides that if Idaho elects to not divert into its canals its full entitlement, a portion of its allocation can pass into the Lower Division via the Rainbow Inlet Canal or Stewart Dam. Data for these hydrographs are based on the River Commissioners'/Watermasters' annual reports to their respective state water agencies.

Figure 2018.15 shows a compilation of daily canal diversions as provided by the respective River Commissioners/Watermasters. The Wyoming and Idaho Sections' diversions and allocations are tabulated and summarized at the bottom of each page. The pages are divided such that there is one month's data per page. As the flow of the Bear River at the Border Gage could also be critical to the declaration of a water emergency, as defined by the Compact, this gage's data are also shown in these tables. Despite the dryness of the year, there was very good cooperation between the Wyoming and Idaho River Commissioners/watermasters in administering water distribution throughout this irrigation season.

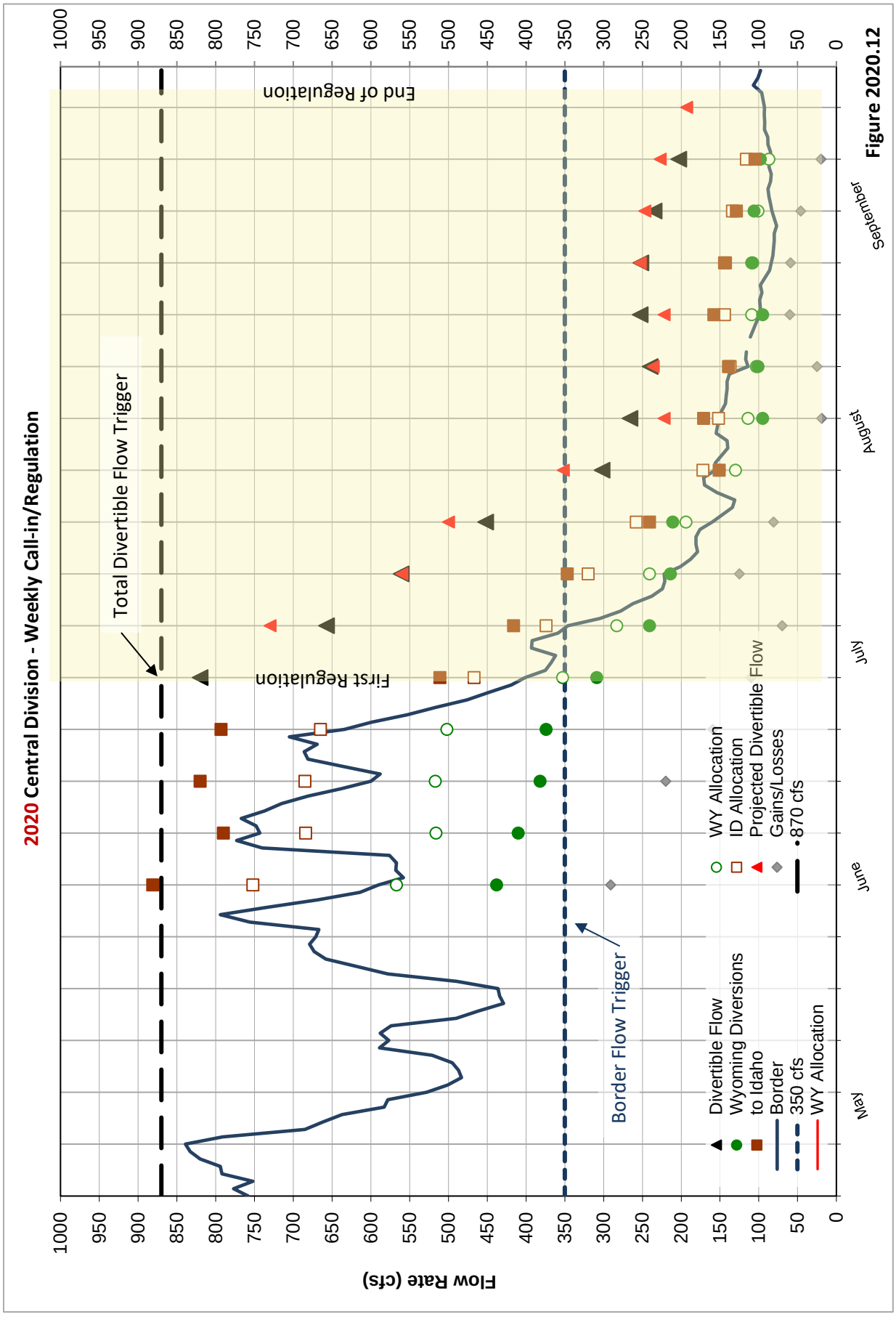


Figure 2020.12

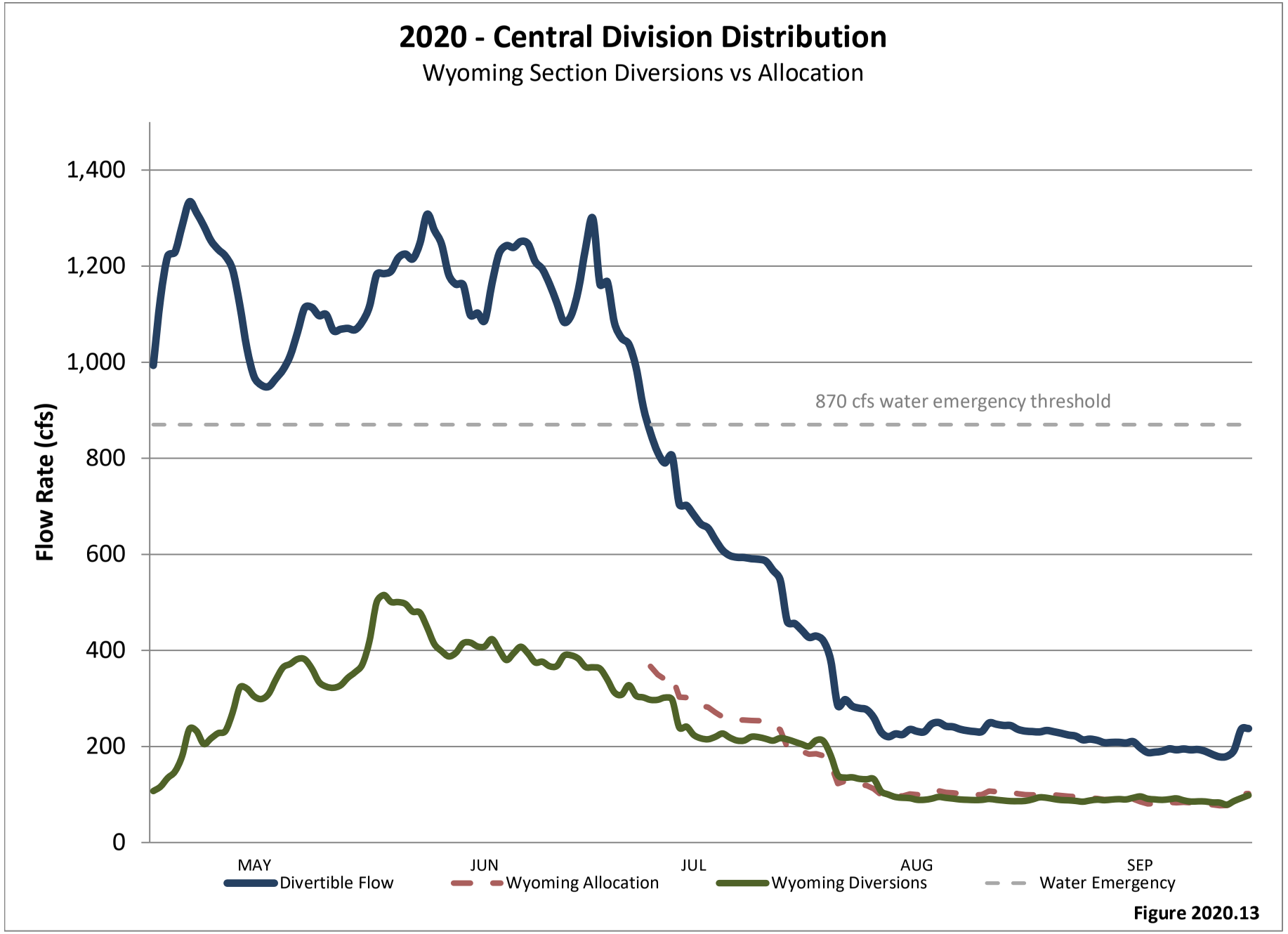


Figure 2020.13

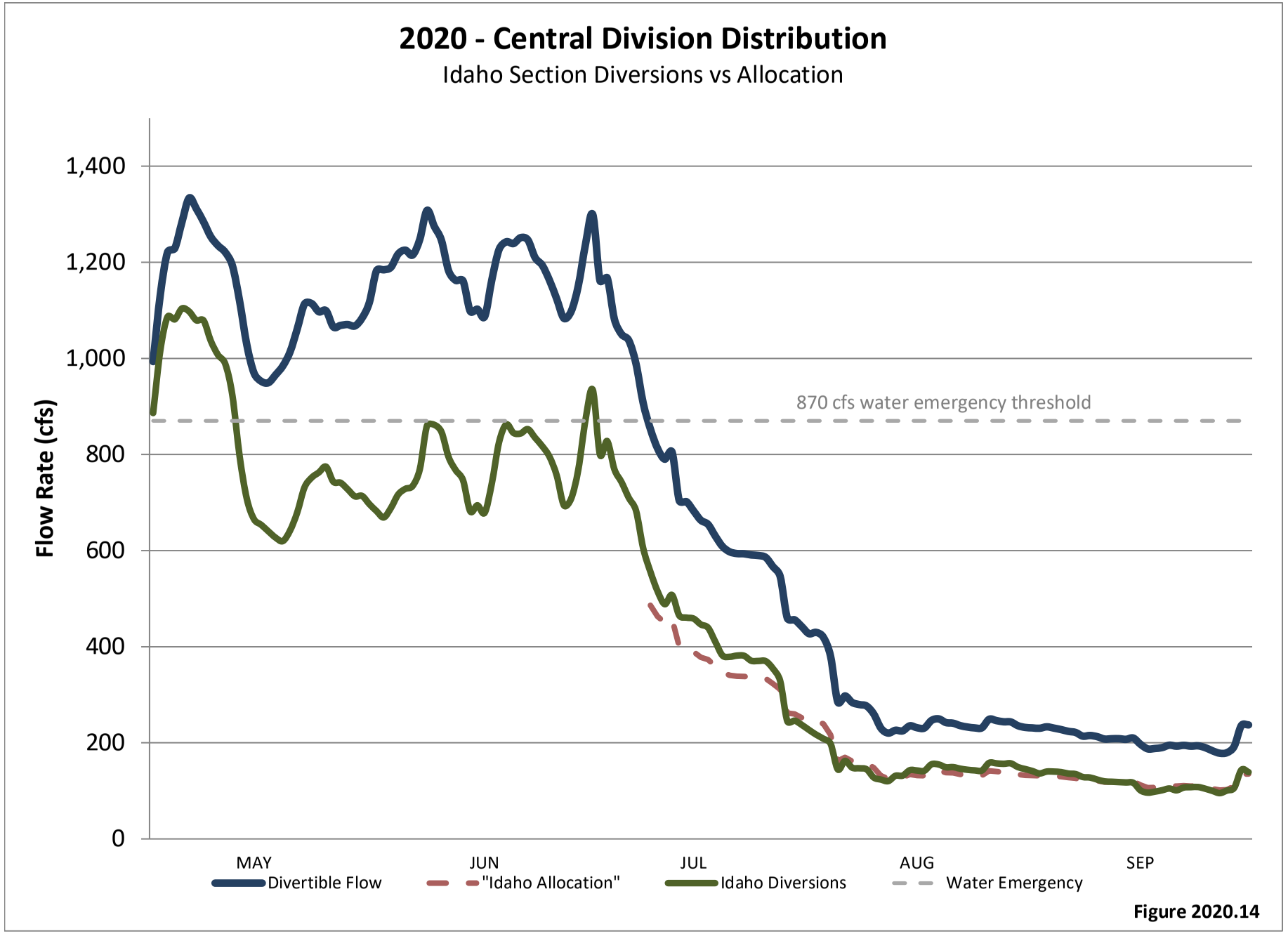


Figure 2020.14

2020

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

May

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
WYOMING DIVERSIONS																															
BEAR RIVER CANALS																															
Thornock Pump and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	3	3	3	3	3	2	0	0	0	0	0	0
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	9	9	9	9	9	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7
Wyman No. 1 (East)	19	19	19	20	20	21	20	14	14	13	13	13	12	12	11	12	15	15	16	17	18	18	18	17	16	15	15	15	16	18	20
Wyman No. 2 (West)	0	6	21	22	35	44	36	5	6	6	6	20	66	64	62	61	62	60	51	39	41	41	23	4	4	4	4	3	3	3	20
Oscar E. Snyder	18	17	16	16	16	17	17	19	18	16	16	16	16	15	14	14	15	15	15	15	16	16	16	15	18	19	19	18	19	20	22
Rocky Point (D2)	0	0	0	0	0	40	40	40	40	40	20	20	20	20	20	20	20	18	18	18	18	18	18	18	18	17	17	17	17	17	17
Cook Bros	8	8	8	8	8	8	13	21	29	39	41	44	46	46	43	43	42	43	44	46	49	47	47	44	40	38	36	38	40	45	50
John R. Richards Terr	7	7	7	7	7	7	8	9	9	8	8	7	7	8	7	8	9	9	9	10	11	12	11	12	10	9	8	7	6	8	12
TRIBUTARY DIVERSIONS																															
Abraham Stoner (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade (Grade Canyon Cr)	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
D.C.P. (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Curtis Pump (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goodell (Pine Cr)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	6	6	6	6	7	8	8	8	8	8	8	8	7	6
V.H. (Pine Cr)	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	9	9	9	9	9	9	9	10
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMITH'S FORK DIVERSIONS																															
Quinn-Bourne	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	10	10	10	10	10	10	11	11	11
Bar-O-Bar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	7	8	7	6	6	6	6	6	5	6	8	10	11
C.B.D. N0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7	7	7	7	7	6	6	6	6	6	6
C.B.D. No 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	1	1	1	1	1	1
Button Flat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Progress	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	6	6	6	6	6	6	6	6	4	4	4	4	4	4
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	3	3	3	2	2	2	2	2	3	3	12	19	19	18	16	15	14	14	15	16	18	18	18	17	16	15	14	15	16	17	22
Seven C Ranch North Pivot Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooper	9	14	14	16	20	19	17	18	17	17	18	19	20	19	17	16	15	16	18	21	20	17	16	14	14	15	14	16	19	23	29
Wheelock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7	7	7	7	7	6	6	6	6	6	6
Covey (Headgate)	3	3	3	13	30	35	35	33	38	42	43	42	42	45	43	42	44	46	56	63	65	63	60	59	57	66	74	76	76	71	72
Covey (Bruner Cr)	5	5	6	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	4	4	5	5	5
Covey (Spring Cr)	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	6	6	6	5	4	4	4	5	5	5	5
Whites Water	3	3	4	4	4	4	5	5	6	5	6	6	6	5	5	7	7	9	10	9	10	10	10	11	11	14	12	18	18	17	18
South Branch Irr (N Branch)	0	0	0	0	0	0	0	0	0	0	6	12	12	11	9	8	8	8	8	10	10	10	10	9	9	8	8	8	9	14	19
Reed Ditch (N Branch)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1
Stoner & Nichols (M Branch)	0	0	0	0	0	0	0	0	0	0	0	2	5	4	4	2	2	2	4	5	4	5	5	4	4	5	5	5	5	6	6
Minnie Roberts (M Branch)	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
Gastenanga South (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0
Gastenanga North (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
N Cokeville / Morgan (M Branch)	1	1	1	1	1	1	1	1	1	1	1	6	6	6	6	6	6	6	11	11	11	11	11	11	11	11	9	9	9	9	9
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith's Fork Ditch (M Branch)	0	0	0	0	0	1	1	1	1	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Petersen Pump (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	10	10	10	10	10	10	10	10	11	11	11	11	11
Forgeon Irr (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	8	8	8
Thornock E Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL WYOMING DIVERSIONS	107	116	134	148	180	236	232	205	217	228	232	270	323	320	304	299	309	339	364	372	382	382	362	334	325	322	327	343	355	370	419
IDAHO DIVERSIONS																															
Miller Ditch	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13
Rigby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1
Nuffer Canal	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	12	12
Sorensen Ditch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Williamson (Jensen) Ditch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4
J Smith (Loyd) Ditch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Dingle Irrigation Ditch	0	30	30	30	30	30	30	30	30	30	30	30	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	55	54
Ream Crockett Canal	33	34	34	35	36	37	38	38	39	40	41	42	43	44	45	45	46	47	48	49	50	51	52	53	53	54	55	53	52	50	48
Black Otter Canal	39	39	39	38	38	38	38	38	37	37	37	37	37	36	36	36	36	35	35	35	35	35	34	34	34	34	34	33	33	33	34
Preston Montpelier Canal	0	0	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	19	21	24	26	29	31	34	36	39	41	44	46	49	49
Keetch (LaRocco Kent) Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2
F Keetch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0
West Fork Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J Keetch (Pugmire) Ditch	20	20	20	20	20	20	20	20	20	20	20	20	20	25	29	34	38	43	48	52	57	62	66	71	75	80	85	89	94	98	103
TOTAL IDAHO DIVERSIONS	127	158	175	175	176	176	177	178	178	179	180	181	189	195	200	207	212	220	228	236	245	252	261	269	277	285	293	299	303	323	326
Total Divertible Flow	993	1133	1221	1229	1284	1334	1311	1284	1253	1235	1221	1193	1119	1028	969	952	949	966	984	1014	1062	1113	1114	1097	1099	1066	1069	1070	1067	1084	1116
Wyoming Diversions	107	116	134	148	180	236	232	205	217	228	232	270	323	320	304	299	309	339	364	372	382	382	362	334	325	322	327	343	355	370	419
Wyoming Allocation (43%)																															
Idaho Diversions	127	158	175	175	176	176	177	178	178	179	180	181	189	195	200	207	212	220	228	236	245	252	261	269	277	285	293	299	303	323	326
Rainbow Inlet Canal-Bear Lake	756	856	909	903	925	918	899	898	855	825	806	739	604	510	457	439	420	402	387	401	430	474	486	489	493	455	445	426	407	388	368
Bear River below Stewart Dam	3	3	3	3	3	3	3	3	3	3	3	3	3	3	8	8	8	5	5	5	5	5	5	5	5	3	3	3	3	3	3
Sub Total	886	1017	1087	1081	1104	1097	1079	1079	1036	1007	989	923	796	708	665	654	640	627	620	642	680	731	752	763	775	743	741	728	713	714	697
Idaho Allocation (57%)																															
Bear River @ Border WY	758	777	752	792	794	820	833	839	791	685	662	637	583	578	528	501	483	487	495	521	589	577	588	574	490	461	429	434	436	489	578

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2020.15

2020

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

June

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
WYOMING DIVERSIONS																														
BEAR RIVER CANALS																														
Thornock Pump and Pivot	1	3	3	3	3	3	3	2	0	0	0	0	0	0	0	1	3	3	3	3	3	3	3	3	3	3	3	2	1	0
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	7	5	3	3	3	3	3	3	3	3	3	3	3	3	3	5	7	7	7	7	7	4	0	0	0	0	0	0	0	0
Wyman No. 1 (East)	21	22	22	22	21	22	23	23	22	21	20	20	19	20	20	20	23	23	23	23	24	22	13	12	12	12	12	12	12	13
Wyman No. 2 (West)	59	51	44	44	44	27	14	13	14	14	14	14	14	15	15	13	5	5	5	5	5	5	4	4	4	9	31	27	24	20
Oscar E. Snyder	24	24	25	25	24	24	25	25	24	21	20	20	20	21	20	21	26	26	25	26	26	26	27	27	25	26	25	25	25	25
Rocky Point (D2)	25	25	25	25	25	25	25	22	22	22	22	22	22	23	23	23	23	23	23	23	26	26	26	26	26	26	26	26	33	33
Cook Bros	53	55	56	56	56	56	60	61	57	54	52	51	50	51	51	51	60	60	60	61	63	62	62	60	58	56	56	59	61	59
John R. Richards Terr	12	10	9	9	8	9	11	14	12	10	8	7	6	6	6	6	10	11	10	10	16	16	8	8	7	6	5	6	5	6
TRIBUTARY DIVERSIONS																														
Abraham Stoner (Sublette Cr)	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade (Grade Canyon Cr)	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0
D.C.P. (Bruner Cr)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	3	1	1
Curtis Pump (Bruner Cr)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Goodell (Pine Cr)	6	6	8	9	9	8	8	6	6	7	7	7	8	9	9	8	7	7	8	9	9	9	8	8	8	6	6	5	5	5
V.H. (Pine Cr)	10	10	8	8	7	9	9	10	10	10	10	10	9	8	7	8	10	10	9	6	6	6	6	9	8	8	10	11	11	11
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMITH'S FORK DIVERSIONS																														
Quinn-Bourne	10	10	10	10	10	12	12	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	10	10	10	9	9	9	9
Bar-O-Bar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	11	10	9	8	8	7	7	5	5	4	4	4	5	5	6	6	6	6	5	5	5	5	5	6	6	6	5	6	6	5
C.B.D. N0 3	8	8	8	8	8	8	8	1	1	1	1	1	1	1	4	4	4	4	4	4	4	1	1	1	1	1	1	1	2	2
C.B.D. No 7	4	4	4	4	4	4	4	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Button Flat	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	2
Progress	7	7	7	7	7	7	7	13	13	13	13	13	13	13	13	11	11	11	11	11	11	8	8	8	8	8	8	8	5	5
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	25	25	25	25	24	25	26	25	22	21	20	20	20	20	20	20	22	20	18	18	17	18	18	18	17	17	16	16	17	16
Seven C Ranch North Pivot Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
Cooper	33	32	30	30	28	28	30	17	9	8	7	13	17	17	16	15	16	13	11	9	8	7	11	14	13	12	12	12	6	1
Wheelock	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Covey (Headgate)	74	75	72	75	76	74	72	71	71	72	71	72	71	71	70	68	64	55	43	59	58	61	65	68	68	70	71	73	70	64
Covey (Bruner Cr)	5	5	4	5	5	5	5	5	5	5	5	5	4	5	5	4	6	5	4	4	4	4	4	3	4	4	4	4	5	5
Covey (Spring Cr)	5	4	4	4	4	4	5	6	6	6	5	5	5	5	5	6	7	6	5	5	5	5	5	4	4	5	5	5	5	5
Whites Water	18	18	17	16	16	14	12	11	10	8	7	12	32	29	26	25	18	12	11	13	17	18	17	16	14	12	12	12	13	13
South Branch Irr (N Branch)	21	21	21	20	19	18	19	18	16	14	13	12	12	12	12	12	15	14	13	12	12	11	11	10	10	10	10	10	11	11
Reed Ditch (N Branch)	1	5	5	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3	3	3	4	4	4	4	4	4	4	3	3
Stoner & Nichols (M Branch)	4	4	5	5	5	6	7	7	6	6	6	5	5	5	5	5	5	5	5	5	5	4	3	2	2	2	2	3	1	0
Minnie Roberts (M Branch)	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gastenanga South (M Branch)	0	11	11	11	11	11	11	11	7	7	7	7	7	7	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	6
Gastenanga North (M Branch)	1	6	6	6	6	6	6	6	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
N Cokeville / Morgan (M Branch)	9	9	9	9	9	9	9	9	3	3	3	3	3	3	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	3
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	0	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	5
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith's Fork Ditch (M Branch)	5	6	6	6	6	6	6	6	10	10	10	10	10	10	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7
Petersen Pump (S Branch)	1	1	1	1	1	1	1	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	11	9	9	9	9	9	9	9	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	11	11
Forgeon Irr (S Branch)	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	7	7	7	7	7	7	4	4
Thornock E Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0
TOTAL WYOMING DIVERSIONS	500	515	501	501	497	481	479	448	413	399	388	395	415	416	408	408	423	401	380	394	408	394	375	376	367	368	389	390	383	365
IDAHO DIVERSIONS																														
Miller Ditch	13	13	13	13	13	13	13	13	11	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Rigby	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0
Nuffer Canal	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Sorensen Ditch	3	3	3	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Williamson (Jensen) Ditch	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
J Smith (Loyd) Ditch	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Dingle Irrigation Ditch	53	52	51	50	49	48	47	46	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0	0	30	30	30	30
Ream Crockett Canal	47	45	43	42	40	38	37	35	25	25	26	26	26	26	27	27	27	27	28	28	28	28	29	29	29	30	30	30	30	31
Black Otter Canal	37	39	42	45	47	50	52	55	35	34	34	33	33	32	32	31	31	30	25	25	25	25	25	25	25	25	25	25	24	24
Preston Montpelier Canal	50	51	52	54	55	56	57	58	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	30	40	40	40
Keetch (LaRocco Kent) Canal	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	2	2	2	2
F Keetch	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	2	2	2	2	2	2
West Fork Canal	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	2
J Keetch (Pugmire) Ditch	108	112	117	122	126	131	135	140	145	145	145	144	144	144	144	143	143	143	143	143	142	142	142	142	141	141	141	141	140	140
TOTAL IDAHO DIVERSIONS	330	336	342	348	354	359	365	371	307	306	306	305	304	304	303	303	300	300	295	292	292	292	290	288	290	270	262	302	302	304
Total Divertible Flow	1183	1184	1190	1217	1225	1215	1248	1308	1275	1246	1182	1162	1161	1098	1102	1087	1164	1227	1243	1239	1251	1246	1210	1194	1162	1124	1083	1098	1151	1238
Wyoming Diversions	500	515	501	501	497	481	479	448	413	399	388	395	415	416	408	408	423	401	380	394	408	394	375	376	367	368	389	390	383	365
Wyoming Allocation (43%)																														
Idaho Diversions	330	336	342	348	354	359	365	371	307	306	306	305	304	304	303	303	300	300	295	292	292	292	290	288	290	270	262	302	302	304
Rainbow Inlet Canal-Bear Lake	349	330	344	366	372	372	401	484	550	536	484	457	437	373	386	371	435	521	563	548	547	556	540	524	500	481	427	401	462	564
Bear River below Stewart Dam	3	3	3	3	3	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sub Total	682	669	689	717	729	734	769	860	862	847	795	767	746	682	694	679	740	826	863	845	844	853	835	817	795	756	694	708	769	873
Idaho Allocation (57%)																														
Bear River @ Border WY	618	658	673	679	671	667	756	794	733	668	614	590	558	568	567	576	740	773	743	748	767	737	715	681	638	600	588	635	681	686

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2020.15 (cont.)

2020

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

July

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
WYOMING DIVERSIONS																															
BEAR RIVER CANALS																															
Thornock Pump and Pivot	0	0	1	3	2	2	3	2	0	0	0	0	0	0	0	0	0	0	0	1	3	2	3	3	3	3	3	3	3	2	3
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wyman No. 1 (East)	17	19	17	13	13	12	12	12	12	12	16	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Wyman No. 2 (West)	19	17	15	14	13	13	13	12	12	12	7	4	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Oscar E. Snyder	24	25	24	23	24	23	22	22	21	21	21	20	18	20	8	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	3
Rocky Point (D2)	33	33	33	33	33	54	54	54	54	54	54	54	10	10	10	10	10	10	10	1	1	1	1	1	1	1	1	1	1	1	1
Cook Bros	58	58	42	19	18	17	16	16	15	15	15	15	14	17	18	18	17	17	17	16	16	15	15	19	24	24	23	21	20	19	21
John R. Richards Terr	7	8	7	6	5	9	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	3	4	3	3	3	3	0	0	0	0
TRIBUTARY DIVERSIONS																															
Abraham Stoner (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade (Grade Canyon Cr)	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0
D.C.P. (Bruner Cr)	1	1	1	1	1	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
Curtis Pump (Bruner Cr)	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
Goodell (Pine Cr)	5	5	5	5	5	5	5	6	8	8	8	9	9	9	9	9	9	9	9	8	8	8	8	8	8	7	8	8	8	8	8
V.H. (Pine Cr)	11	11	11	11	11	11	11	9	7	6	6	5	4	4	4	5	5	5	5	6	6	6	7	8	6	6	7	6	6	6	6
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMITH'S FORK DIVERSIONS																															
Quinn-Bourne	9	10	11	11	11	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11
Bar-O-Bar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	5	5	5	5	5	5	5	5	5	5	7	6	6	6	6	7	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5
C.B.D. N0 3	2	2	2	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C.B.D. No 7	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Button Flat	2	2	2	2	2	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4
Progress	5	5	5	5	5	6	6	6	6	6	6	6	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2	2	2	2
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	16	16	16	16	16	15	15	15	14	14	14	14	14	14	13	12	11	11	10	10	10	10	11	10	9	9	9	9	9	8	8
Seven C Ranch North Pivot Pump	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooper	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheelock	9	9	9	9	9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1
Covey (Headgate)	64	62	62	62	61	61	61	60	60	60	60	60	63	63	64	64	64	66	71	74	76	75	76	73	71	71	73	73	69	69	68
Covey (Bruner Cr)	5	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	4	3	3	3	3	4	4	3	3
Covey (Spring Cr)	5	5	4	4	4	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	4
Whites Water	12	9	10	12	11	11	12	13	13	14	13	14	17	17	15	14	16	22	24	22	20	20	21	21	20	21	21	22	22	20	19
South Branch Irr (N Branch)	10	9	9	8	8	8	7	7	7	6	8	8	7	6	6	6	5	6	5	4	2	2	2	2	2	1	1	1	1	1	1
Reed Ditch (N Branch)	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Stoner & Nichols (M Branch)	0	0	0	0	0	0	0	0	0	0	5	11	10	8	5	6	4	4	5	5	3	4	5	4	4	4	4	5	4	4	4
Minnie Roberts (M Branch)	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastenanga South (M Branch)	6	6	6	6	6	6	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastenanga North (M Branch)	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N Cokeville / Morgan (M Branch)	3	3	3	3	3	3	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	6
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	5	5	5	5	5	5	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	2	2	2	2	2	2	1	1	1	1
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith's Fork Ditch (M Branch)	7	7	7	7	7	7	7	7	7	7	7	7	7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Petersen Pump (S Branch)	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	11	11	11	11	11	11	4	4	4	4	4	4	5	5	5	5	5	5	5	5	7	7	7	7	7	7	7	7	7	7	2
Forgeon Irr (S Branch)	4	4	4	4	4	4	0	0	0	0	0	0	0	6	6	6	6	6	6	6	3	3	3	3	3	3	3	4	4	4	4
Thornock E Pump	0	0	0	0	0	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	1	1	1	1	1	1	1
TOTAL WYOMING DIVERSIONS	365	362	340	312	308	328	306	302	297	297	302	298	239	241	224	217	215	220	227	218	212	212	220	219	216	212	217	215	210	205	200
IDAHO DIVERSIONS																															
Miller Ditch	9	9	9	9	9	9	9	9	9	8	8	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6
Rigby	0	0	0	0	2	2	2	2	2	2	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	2	1
Nuffer Canal	12	12	12	12	12	12	12	12	12	12	12	12	12	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sorensen Ditch	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Williamson (Jensen) Ditch	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0
J Smith (Loyd) Ditch	2	2	2	2	2	2	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dingle Irrigation Ditch	30	30	30	40	40	41	41	41	41	42	42	48	51	55	53	50	48	45	43	40	37	37	37	37	37	37	37	37	37	37	37
Ream Crockett Canal	31	31	31	32	32	32	32	33	33	33	33	34	34	36	36	35	35	35	34	34	26	26	26	26	26	26	26	26	26	26	26
Black Otter Canal	24	24	24	24	24	24	24	24	20	11	10	10	9	9	9	8	8	8	7	7	12	12	11	11	11	10	10	10	9	9	8
Preston Montpelier Canal	20	20	20	20	51	51	51	51	51	51	51	51	51	46	47	48	49	34	35	35	48	48	48	48	48	48	48	48	48	48	48
Keetch (LaRocco Kent) Canal	2	2	2	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F Keetch	2	2	2	2	2	2	2	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
West Fork Canal	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J Keetch (Pugmire) Ditch	140	20	20	20	20	20	11	11	11	11	11	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL IDAHO DIVERSIONS	282	162	162	170	203	204	195	194	192	183	179	187	189	185	182	170	164	134	131	128	131	130	130	129	129	129	128	128	129	130	130
Total Divertible Flow	1299	1162	1168	1082	1050	1037	989	907	853	812	790	805	704	702	682	663	655	630	609	597	594	593	591	590	586	567	546	459	456	442	427
Wyoming Diversions	365	362	340	312	308	328	306	302	297	297	302	298	239	241	224	217	215	220	227	218	212	212	220	219	216	212	217	215	210	205	200
Wyoming Allocation (43%)									367	349	340	346	303	302	293	285	281	271	262	257	255	255	254	254	252	244	235	198	196	190	184
Idaho Diversions	282	162	162	170	203	204	195	194	192	183	179	187	189	185	182	170	164	134	131	128	131	130	130	129	129	129	128	128	129	130	130
Rainbow Inlet Canal-Bear Lake	648	633	661	594	534	501	483	406	363	331	308	320	275	275	275	275	275	275	250	250	250	250	240	240	240	225	200	116	116	106	96
Bear River below Stewart Dam	5	5	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sub Total	935	800	828	769	742	710	683	605	556	515	488	508	465	461	458	446	440	410	382	379	382	381	371	370	370	355	329	245	246	237	227
Idaho Allocation (57%)									486	463	450	459	401	400	389	378	373	359	347	341	338	338	337	336	334	323	311	262	260	252	243
Bear River @ Border WY	669	705	634	599	553	516	476	448	419	401	375	368	362	393	392	358	323	284	257	242	218	204	201	201	181	169	160	161	160	156	140

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2020.15 (cont.)

2020

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

August

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
WYOMING DIVERSIONS																															
BEAR RIVER CANALS																															
Thornock Pump and Pivot	3	3	2	2	2	3	2	0	1	2	1	1	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alonzo F. Sights (Main Stem)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wyman No. 1 (East)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wyman No. 2 (West)	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oscar E. Snyder	11	14	12	3	5	6	3	3	2	2	4	4	2	2	2	2	3	5	2	2	2	2	2	4	5	5	4	4	4	4	4
Rocky Point (D2)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cook Bros	24	22	21	23	25	26	26	26	27	32	40	41	41	41	40	40	40	40	40	39	39	40	40	40	39	38	37	36	36	36	38
John R. Richards Terr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRIBUTARY DIVERSIONS																															
Abraham Stoner (Sublette Cr)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2
Grade (Grade Canyon Cr)	0	0	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D.C.P. (Bruner Cr)	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Curtis Pump (Bruner Cr)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goodell (Pine Cr)	8	7	6	6	6	6	6	6	6	6	6	6	6	6	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
V.H. (Pine Cr)	9	9	9	9	9	9	9	8	8	8	8	8	8	8	6	6	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMITH'S FORK DIVERSIONS																															
Quinn-Bourne	11	11	8	5	4	4	4	6	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bar-O-Bar	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C.B.D. N0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C.B.D. No 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Button Flat	4	4	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Progress	2	2	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	7	7	7	7	7	6	6	6	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seven C Ranch North Pivot Pump	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheelock	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covey (Headgate)	70	72	48	26	25	27	27	27	27	15	4	4	4	4	4	4	4	4	4	6	8	8	8	8	8	8	8	8	8	8	8
Covey (Bruner Cr)	3	3	4	4	4	4	4	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covey (Spring Cr)	4	4	4	4	4	4	4	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Whites Water	18	17	18	19	17	16	14	14	13	16	17	14	14	14	14	14	14	14	16	16	12	10	10	10	11	11	11	11	12	12	12
South Branch Irr (N Branch)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Reed Ditch (N Branch)	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Stoner & Nichols (M Branch)	4	4	5	2	2	2	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minnie Roberts (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastenanga South (M Branch)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
Gastenanga North (M Branch)	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1
N Cokeville / Morgan (M Branch)	6	6	6	4	4	1	1	1	1	1	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cokeville Water (M Branch)	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith's Fork Ditch (M Branch)	3	3	3	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Petersen Pump (S Branch)	2	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bourne (S Branch)	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Forgeon Irr (S Branch)	4	4	4	4	4	4	4	4	4	0	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0
Thornock E Pump	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL WYOMING DIVERSIONS	213	211	182	140	135	136	133	132	132	107	100	95	93	92	89	89	91	95	93	91	90	89	88	89	91	89	87	86	86	87	90
IDAHO DIVERSIONS																															
Miller Ditch	6	6	6	6	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Rigby	1	1	1	1	1	1	1	0	0	0	0	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Nuffer Canal	0	0	0	8	10	11	11	12	12	13	13	13	13	13	12	12	12	12	11	11	11	11	10	10	11	11	11	10	10	10	10
Sorensen Ditch	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Williamson (Jensen) Ditch	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J Smith (Loyd) Ditch	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
Dingle Irrigation Ditch	37	37	37	10	20	20	20	20	20	20	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	21
Ream Crockett Canal	26	26	26	26	20	20	20	20	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7
Black Otter Canal	8	8	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	14	14	14	14	14	14	14
Preston Montpelier Canal	48	48	48	15	40	38	37	35	33	32	30	36	36	36	35	35	35	35	35	35	35	35	35	35	40	39	39	38	37	36	36
Keetch (LaRocco Kent) Canal	2	2	2	2	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	0	0	0
F Keetch	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0
West Fork Canal	0	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0
J Keetch (Pugmire) Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7
TOTAL IDAHO DIVERSIONS	130	132	131	79	108	107	106	104	90	88	87	98	99	98	97	97	96	96	94	94	94	94	94	93	109	108	107	108	104	103	102
Total Divertible Flow	430	420	380	285	298	284	280	277	260	230	220	226	225	235	231	231	247	250	242	241	236	233	231	231	249	246	244	243	236	232	231
Wyoming Diversions	213	211	182	140	135	136	133	132	132	107	100	95	93	92	89	89	91	95	93	91	90	89	88	89	91	89	87	86	86	87	90
Wyoming Allocation (43%)	185	180	163	123	128	122	120	119	112	99	95	97	97	101	99	99	106	107	104	104	101	100	99	99	107	106	105	105	101	100	99
Idaho Diversions	130	132	131	79	108	107	106	104	90	88	87	98	99	98	97	97	96	96	94	94	94	94	94	93	109	108	107	108	104	103	102
Rainbow Inlet Canal-Bear Lake	86	76	66	56	46	36	36	36	33	30	28	28	28	40	40	40	54	54	50	50	47	45	44	44	44	44	44	44	40	37	34
Bear River below Stewart Dam	1	1	1	10	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sub Total	217	209	198	145	162	148	147	145	128	123	120	131	132	143	142	142	155	155	149	149	146	144	143	142	158	157	156	157	149	145	141
Idaho Allocation (57%)	245	239	217	162	170	162	159	158	148	131	126	129	128	134	132	131	141	142	138	137	134	133	132	132	142	140	139	139	134	132	132
Bear River @ Border WY	127	115	112	133	148	148	134	134	126	118	118	131	129	128	124	119	118	117	116	113	113	116	115	113	111	107	103	98	98.4	99.1	96.3

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2020.15 (cont.)

2020 DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATIONS IN THE CENTRAL DIVISION

September

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
WYOMING DIVERSIONS																															
BEAR RIVER CANALS																															
Thornock Pump and Pivot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142
Bridge Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Alonzo F. Sights (Main Stem)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	325
Wyman No. 1 (East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1249
Wyman No. 2 (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	4	4	3	3	3	3	3	3	3	2	2	2	2	4	5	1636
Oscar E. Snyder	6	5	5	4	3	3	3	4	5	5	4	4	3	5	4	3	2	2	2	2	2	3	5	5	4	2	2	2	4	4	1800
Rocky Point (D2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1948
Cook Bros	42	39	37	37	37	36	35	37	36	37	38	40	40	40	39	38	39	38	37	39	39	41	40	41	41	43	39	35	34	34	5648
John R. Richards Terr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	613
TRIBUTARY DIVERSIONS																															
Abraham Stoner (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	150
Teichert Bro's Ditch (Sublette Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teichert Bro's Spreader Dk (Sublette Cr)	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	89
Grade (Grade Canyon Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
D.C.P. (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	117
Curtis Pump (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Goodell (Pine Cr)	8	8	8	8	8	8	8	8	8	8	8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	3	3	3	997
V.H. (Pine Cr)	4	4	4	4	4	4	4	4	4	4	4	7	7	6	6	6	6	6	7	7	7	7	7	7	6	6	7	10	10	10	1182
Dimond No. 2 (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenyon (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMITH'S FORK DIVERSIONS																															
Quinn-Bourne	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	803
Bar-O-Bar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
TJC Pump (Brown Pump)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Francis-Larson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	459
C.B.D. N0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211
C.B.D. No 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
Button Flat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	226
Progress	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	463
Larson Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emelle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1418
Seven C Ranch North Pivot Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Seven C Ranch South Pump & Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Cooper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1013
Wheelock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	493
Covey (Headgate)	10	12	11	11	11	11	11	12	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	12	12	12	12	16	19	19	6396
Covey (Bruner Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	466
Covey (Spring Cr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	4	504
Whites Water	11	10	11	10	10	10	9	10	11	9	8	7	7	6	9	11	9	10	11	11	7	2	2	1	1	1	1	1	2	3	1893
South Branch Irr (N Branch)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	855
Reed Ditch (N Branch)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	1	1	1	334
Stoner & Nichols (M Branch)	1	1	1	1	1	1	1	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	370
Minnie Roberts (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
Gastenanga South (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	207
Gastenanga North (M Branch)	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	148
N Cokeville / Morgan (M Branch)	1	1	1	1	1	1	1	0	3	3	5	5	5	5	5	5	0	0	0	0	1	1	1	1	1	1	1	2	2	2	723
Tanner (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Star (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Star Two Pump (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Cokeville Water (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	224
Igo No. 3 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Igo No. 2 (M Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Smith's Fork Ditch (M Branch)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	567
Petersen Pump (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
Petersen Yard P.L.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Bourne (S Branch)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	738
Forgeon Irr (S Branch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	441
Thornock E Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97
TOTAL WYOMING DIVERSIONS	94	93	90	88	88	87	85	88	89	88	89	90	90	93	96	91	90	89	90	92	88	85	86	85	83	83	79	86	92	98	35477
IDAHO DIVERSIONS																															
Miller Ditch	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	1224
Rigby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
Nuffer Canal	10	9	9	9	9	8	8	8	9	9	9	9	9	9	8	7	6	5	3	2	1	5	5	5	5	5	5	5	5	5	1518
Sorensen Ditch	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	353
Williamson (Jensen) Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	308
J Smith (Loyd) Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	248
Dingle Irrigation Ditch	21	21	21	21	20	20	20	20	20	20	20	20	20	20	20	10	10	10	14	12	11	10	8	8	8	8	8	8	8	8	4311
Ream Crockett Canal	7	15	15	15	15	15	15	15	15	14	13	12	11	10	9	8	8	7	7	6	5	5	4	4	4	4	4	4	4	4	3881
Black Otter Canal	14	14	15	15	15	15	15	15	15	15	16	16	16	17	17	17	18	18	18	19	21	22	20	18	17	15	13	11	10	8	3254
Preston Montpelier Canal	35	34	34	33	32	31	31	30	30	30	30	30	30	30	15	15	18	20	22	25	28	30	30	27	24	21	19	16	13	10	5290
Keetch (LaRocco Kent) Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	0	0	0	0	0	0	0	0	133
F Keetch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116
West Fork Canal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119
J Keetch (Pugmire) Ditch	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	6197
TOTAL IDAHO DIVERSIONS	101	108	108	107	106	105	104	103	104	103	102	101	101	100	84	76	78	81	85	86	87	88	84	79	75	70	66	61	57	52	27029
Total Divertible Flow	230	233	231	227	224	222	214	215	213	208	208	209	207	210	197	187	188	190	195	193	195	193	194	190	183	178	180	193	236	237	107673
Wyoming Diversions	94	93	90	88	88	87	85	88	89	88	89	90	90	93	96	91	90	89	90	92	88	85	86	85	83	83	79	86	92	98	35477
Wyoming Allocation (43%)	99	100	99	98	96	95	92	93	91	89	90	90	89	90	85	81	81	82	84	83	84	83	83	82	79	77	77	83	102	102	12314
Idaho Diversions	101	108	108	107	106	105	104	103	104	103	102	101	101	100	84	76	78	81	85	86	87	88	84	79	75	70	66	61	57	52	27029
Rainbow Inlet Canal-Bear Lake	30	27	27	27	25	25	20	20	15	12	12	12	12	12	12	15	15	15	15	12	15	15	19	20	20	20	30	40	79	79	44539
Bear River below Stewart Dam	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	8	8	628
Sub Total	136	140	140	139	136	135	129	128	124	120	119	118	118	117	101	96	98	101	105	101	107	108	108	104	100	95	101	106	144	139	72196
Idaho Allocation (57%)	131	133	131	130	128	126	122	123	121	118	119	119	118	120	112	107	107	108	111	110	111	110	110	108	104	102	102	110	135	135	16323
Bear River @ Border WY	97.8	91.8	86	83.5	81.9	81.1	79.7	80.3	77.3	79.6	82.5	85.4	88.6	88	85	83.8	86.5	84.9	84.8	88.2	88.4	92.5	92.2	92.8	92.5	94.5	96.1	107	101	97.7	56137

NOTE: Wyoming is limited to 43% of the total divertible flow. The remainder of the divertible flow is available for use within Idaho.

Figure 2020.15 (cont.)

Lower Division

The Compact provides that a Utah Lower Division water user can petition the Commission for interstate regulation if he believes that he is being deprived of water to which he is justly entitled due to diversions in Idaho. If, upon review, the Commission finds such to be the case, then the Compact provides for the declaration of a water emergency and that it shall put into effect water delivery schedules based on priority of rights without regard to the state line. The Commission has never received such a petition. However, with growing concern for such a possibility, the Commission, over a several-year period, determined how it would receive and review such a petition and implement water delivery should a water emergency be declared. At its November meeting in 1997, the Commission adopted *Interim Procedures for Lower Division Water Delivery*. Appendix B to the procedures, which was revised with the procedures in April 2004, provides for the accounting and distribution method to be used in a water emergency.

Also appended to the procedures is *Water Delivery Schedule No. 1* which was revised by the Commission in 2015 and which includes the mainstem Lower Division water rights in both Idaho and Utah. After adoption of the water delivery schedule, both states began using this common schedule of water rights in their water right accounting programs. Hence, though not regulated by the Commission, the distribution in the Lower Division is cooperatively managed by the states of Idaho and Utah through their respective Watermasters and River Commissioners. Such distribution was facilitated in 2020 with bi-weekly conference calls with the state agencies, large water users and PacifiCorp. Figure 2020.16 shows the delivery of water in the Lower Division as reported by the two state agencies.

2020 Lower Division Irrigation Water Deliveries

Canal/Group	Natural Flow (af)	Storage Use (af)	Total Diversion (af)
Idaho			
Gentile Valley	10,924	959	11,883
West Cache	40,700	6,589	47,289
Cub River Pumps	5,722	13,289	19,011
Last Chance and Bench B	76,068	10,752	86,820
Idaho Small Irrigators	16,229	2,078	18,307
Utah			
Bear River Canal Company	222,172	71,497	293,669
Utah Small Irrigators	3,966	4,853	8,819

Figure 2020.16

Allocation and deliveries of Bear Lake storage water are significant in most years to the total water diverted in the Lower Division. In 1995, PacifiCorp, the irrigators and Bear Lake interests entered into a settlement agreement as to the allocation of storage water from Bear

Lake. In 2004 the parties entered into an *Amended and Restated Bear Lake Settlement Agreement.* PacifiCorp tracks deliveries pursuant to the settlement agreement. Figure 2020.17 shows such deliveries in 2020. Note that during the early portion of 2020 PacifiCorp was in flood release operations at Bear Lake. The below values represent the portion of the release that was purposeful to irrigation demands.

2020 Bear Lake Storage Deliveries

Irrigation Storage Allocation	245,000 af
Bear Lake Storage Release	145,000 af
Lake Recovery Volume	100,000 af
Decreed Transit Losses[1]	5,200 af
System Losses[2]	28,900 af
Delivered Bear Lake Storage	110,900

[1]Approximate, 3.6% of total storage release per Dietrich Decree, based on average rate for all irrigators

[2]Water that passes below Cutler Dam that is accounted for as storage water release

Figure 2020.17

STATE WATER ACTIVITIES

Article XI of the Amended Compact provides that applications for appropriation or change in water use within each state shall be in accordance with individual state law, except no such application shall be approved if the effect will deprive water users within another state or increase the depletion beyond that which is provided for under the Compact. This article further requires that state officials report, in a format and at intervals established by the Commission, the status of their respective allocations and uses. The Commission has determined the best format for reporting such changes in use is the Biennial Report. Figure O.3 in the Overview section of this report provides the most recent depletion information. This portion of the Biennial Report provides a summary of major water and water right related activities in each of the states during the 2020 water year.

Idaho

Water Activities

In January 2020, the Idaho Department of Water Resources (IDWR) approved Transfer 83369, which added a point of diversion to water right 13-974 held by West Cache Irrigation Company (WCIC). WCIC diverts water from the Bear River in Idaho at its main canal for irrigation use by shareholders in Idaho and Utah. In 1996, IDWR approved a transfer adding a second point of diversion to water right 13-974 for a pump station on the Bear River near Cornish, Utah. Transfer 83369 authorizes WCIC to divert water right 13-974 at another pump station to be constructed at the north end of Cutler Reservoir in Utah.

During the 2020 legislative session, the State of Idaho adopted Idaho Code § 42-1406C which authorizes the Director of IDWR to petition the adjudication court to commence an adjudication of the Bear River Basin. The proposed Bear River Basin Adjudication includes all surface water sources and ground water flowing into or toward the Bear River or flowing toward the Great Salt Lake. This includes surface water sources and ground water in Administrative Basins 11 (Bear Lake area to Alexander Reservoir), 13 (Alexander Reservoir to Preston area), 15 (Malad Valley) and 17 (Curlew Valley).

Water Rights

Water right permits were issued in Basins 11, 13 and 15 as shown in the table below. Permit 13-8043 includes a condition requiring the permit holder to mitigate for depletions.

Right No.	Priority Date	Rate (cfs)	Source	Water Use
11-7858	10/24/2019	0.02	JENSEN SPRING	STOCKWATER
13-8038	3/29/2019	0.04	SPRING	DOMESTIC
13-8042	9/3/2019	3.00	WESTON CREEK	IRRIGATION STORAGE
13-8043	12/12/2019	0.20	MINK CREEK	RECREATION STORAGE
13-8044	1/7/2020	0.40	UNNAMED STREAM	RECHARGE, STOCKWATER
13-8047	2/13/2020	0.04	SPRING	DOMESTIC
13-8052	3/12/2020	0.05	SPRING	DOMESTIC
13-8062	7/2/2020	0.02	SPRING	DOMESTIC

Utah

Water Activities

Utah Division of Water Resources continues pipeline corridor preservation through Box Elder County along I-15 near the Willard Bay area for the Bear River Development project. The Division is also making plans to identify potential alternative pipeline corridors in Box Elder County between West Haven and the Willard Bay area and from West Haven to I-84 north of Howell. The Division continues to work with local Water Districts regarding the timing and the need for the Bear River Development project.

The Utah Board of Water Resources funded multiple projects in the Bear River. The Bear River Canal Company replaced 2,000 feet of open ditch with pipe, lined a portion of its canal, added new flow measurements with telemetry, automated some canal controls and did emergency repairs following a canal wall failure. For this work the canal company received a loan of $884,000 from the Board. West Cache Irrigation Company received a loan for $2,745,000 to replace 5.3 miles of ditch with pipe, pipe another section 6,300 feet long and construct pump stations.

During the winter of 2019-2020 a cloud seeding program targeted select storms over mountain ranges in Eastern Box Elder County and Cache County. Bear River Water Conservancy District and Cache County cost shared (50/50) with the Utah Board of Water Resources. Estimated average annual increase in snow-water equivalent in the target area due to seeding activity is 6%.

Utah Division of Water Resources, Idaho Department of Water Resources and PacifiCorp completed the Joint Bear River Planning Model, which uses RiverWare to simulate operations of the Lower Division. The model was used to answer questions about how changing flood control operations would affect storage in Bear Lake and flow downstream. A report on the study's findings was published December 2020.

The Utah Division of Forestry, Fire & State Lands (FFSL) is developing the 2021 Bear Lake Comprehensive Management Plan to replace the existing 2009 CMP and to update management goals and objectives for Bear Lake sovereign lands in Rich County, Utah. The purpose of the CMP is to ensure that navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality (known as Public Trust resources) are given due consideration and balanced against the economic necessity, justification for, or benefit to be derived from any proposed use, pursuant to Utah Administrative Code R652-2-200. FFSL's primary goal for the Bear Lake CMP is to provide clear and consistent guidance for coordination and management, straightforward permitting requirements, and helpful best management practices for implementing projects that affect Bear Lake sovereign lands.

Great Salt Lake Advisory Council and Weber Basin Water Conservancy District published the Conservation Impacts Study report to inform future water resource planning decisions that may affect Great Salt Lake. The study examines the potential impacts of water conservation on water resource planning and develops an action plan of additional studies needed to assist policy makers in more completely understanding the role of conservation. If additional water conservation efforts can significantly decrease water use, there is the potential to further delay, reduce the magnitude, or perhaps even eliminate the need for future large water development projects, such as the Bear River Development project.

Great Salt Lake Advisory Council also published Water Strategies for Great Salt Lake which compiles potential strategies to address declining lake levels of Great Salt Lake. Although not all have agreed on the reports results, the report intended to evaluate and prioritizes strategies thought to have a potential to improve water management and increase water deliveries to Great Salt Lake. A committee of stakeholders including Bear River Association of Governments and Bear Lake Watch contracted with Conservation Economics Institute to study the regional economic contributions of Bear Lake. They are expecting to start February 2021.

The Natural Resources Conservation Service, with project sponsors Franklin County and Cub River Irrigation Company is proposing to partially fund through the Watershed Protection and Flood Prevention Act the Cub River Watershed Plan. Flood prevention would be addressed by installing a storm drain system in Lewiston City and surrounding agricultural lands by reducing water in the soil profile and improving and increasing the capacity of the local drainage districts' existing infrastructure. The project would also address Agricultural Water Management by eliminating seepage along the main canal by installing a pressurized pipeline to conserve water, reduce water in the soil profile, reduce maintenance issues, and increase pumping efficiencies. Utah State Bill 26 – the Water Banking Act, was passed with the goal to provide water users with a framework to create a water bank to organize and facilitate the leasing and use of local water rights. The State of Utah has funded a demonstration project in Cache Valley. The Water Banking Project team has begun discussions with a number of canal companies in the southern part of Cache County. Discussions are evolving but there has been interest in creating a bank that optimizes efficiencies and use of water between companies, takes advantage of storage opportunities, and protects company water rights from forfeiture through water banking protections and beneficial use.

Water Rights

There were 66 applications to appropriate that were approved in Utah during 2020 for ground water for "ordinary domestic and stock watering" purposes and associated irrigation use for 56 homes. Change applications were also approved to change the points of diversion, nature and/or place of use of historic water rights.

Wyoming

Water Activities

With the appointment of the new State Engineer Greg Lanning in November of 2019, the April Commission meeting was his first appearance as the new Wyoming Commissioner.

The Upper Division received an instate call for regulation on July 6, from a canal below Woodruff Narrows Reservoir. This call came after all Upper Division reservoirs had filled to capacity, and the call remained in effect for the remainder of the 2020 irrigation season.

The Central Division began reporting weekly diversion totals to the Engineer Manager on June 9, although Wyoming continued to stay under its allocation until August 7, when we had to start restricting water users to stay in compliance with Compact allocations. Regulation did not seem to have a significant impact on Wyoming water users because most users were turned down for haying operations. Hilary McIntosh did an excellent job managing the Central Division; unfortunately, we lost her to a short battle with cancer.

Water Rights

New water right permits subject to Compact depletions issued from Wyoming's allocation are as follows:

Permit No.	Appropriator	Priority Date
P#35682.D	Bar O Bar Smiths Fork Ranch LLC	10/13/2016
P#14566.R	Bar O Bar Smiths Fork Ranch LLC	10/13/2016
P#206782.W	Kirk and Janet Widmer	2/13/2017
P#7884.E	Willis Land Wyoming LLC`	4/25/2018
P#15124-15126R	Jed and Jennilyn Wayment	8/27/2018
P#210446.W	Greg Nate	2/14/2019
P#15069.R	Landon Peterson	5/3/2019
P#7979.E	Spur Land and Cattle Co.	4/24/2020
P#7980.E	Neil Hymas	5/27/2020
P#36434.D	Chyleen Nielsen	8/21/2020
P#36435.D	Chyleen Nielsen	8/21/2020

STREAM GAGING

As was indicated in the Overview chapter of this report, under the subsection concerning the Stream Gaging Program, the Bear River Commission participates in a cooperative contract with the USGS for the maintenance of stream gages on the Bear River and significant tributaries. Also, the states, PacifiCorp and, at times, others participate in stream gaging on the Bear River and its tributaries. The Commission believes the collection of data concerning stream flows in the Bear River system is very important and allocates a significant portion of its annual budget in support of the cooperative stream gaging program with the U.S. Geological Survey. However, costs continue to increase and so the Commission is constantly reviewing the stream gaging program to determine if all of the stations supported are necessary for the Commission to fulfill the responsibilities assigned to it by the Compact.

During 2020, a total of 33 gages were maintained on the Bear River system. Of these 33 gages, 5 were part of a cooperative effort between the Bear River Commission and the USGS, and the USGS funded 7 gages under its Ground and Surface Water Information Program (GSWIP). PacifiCorp maintained 15 gages on the Bear River system during 2019. Three additional gages were maintained under the USGS Cooperative Program with the State of Utah (2 gages) and the State of Idaho (1 gage). Additionally, the State of Wyoming maintained 1 gage on the Bear River and the USFWS funded 1 USGS gage. The Bear Lake water quality platforms were funded as described in the footnote with the table below. Figure 2020.18 shows a tabulation of these gages and the entities which participated in the operation and funding of each gage. The approximate locations of the stream gages are shown on Figure O.5 in the Overview section of this report.

Publication of the streamflow records for 13 of the gages in this report were considered to be of significant value to the Commission and are included on pages 18-37 through 18-48a (the Bear River near Randolph, UT gage, which is maintained by the State of Wyoming, was added to this report as it is published nowhere else).

BEAR RIVER SYSTEM STREAM GAGING STATIONS

STREAM GAGES MAINTAINED DURING THE 2020 WATER YEAR

STATION #	STATION NAME	OPERATED BY	FUNDED BY
10011500✪	Bear River near UT-WY state line	USGS	USGS
10016900✪	Bear River at Evanston WY	USGS-WY	USGS
10020100✪	Bear River above reservoir near Woodruff UT	USGS	USGS
10020300	Bear River below reservoir near Woodruff UT	USGS	BRC/USGS
10023000	Big Creek near Randolph UT	USGS	UTDNR/USGS
10026500	Bear River near Randolph UT	WSE	State of WY
10028500[1]	Bear River below Pixley Dam near Cokeville WY	USGS	BRC/USGS
10032000	Smiths Fork near Border WY	USGS	BRC/USGS
10038000✪	Bear River below Smiths Fork near Cokeville WY	USGS	USGS
10039500	Bear River at Border WY	USGS	BRC/USGS
10044300[2]	Dingle Inlet Canal near Dingle ID	PacifiCorp	PacifiCorp
10046000	Rainbow Inlet Canal near Dingle ID	PacifiCorp	PacifiCorp
10046500[2,3]	Bear River below Stewart Dam near Montpelier ID	PacifiCorp	PacifiCorp
	Bear Lake Water Quality Platforms	USGS	(see below)[4]
10055500	Bear Lake at State Park Marina near Garden City UT	USGS	BRC/USGS
10059500	Bear Lake Outlet Canal near Paris ID	PacifiCorp	PacifiCorp
10068500	Bear River at Pescadero ID	USGS	IDDNR/USGS
10075000	Bear River at Soda Springs ID	PacifiCorp	PacifiCorp
10079000	Soda Point Reservoir at Alexander ID	PacifiCorp	PacifiCorp
10079500	Bear River at Alexander ID	PacifiCorp	PacifiCorp
10080000	Bear River below Grace Dam near Grace ID	PacifiCorp	PacifiCorp
10086000	Oneida Narrows Reservoir at Oneida ID	PacifiCorp	PacifiCorp
10086500	Bear River below PacifiCorp Tailrace at Oneida ID	PacifiCorp	PacifiCorp
10092700	Bear River at ID-UT state line	USGS	BRC/USGS
10105900	Little Bear River at Paradise UT	USGS	UTDNR/USGS
10108400✪	Logan, Hyde Park, Smithfield Canal near Logan UT	USGS	USGS
10109000✪[5]	Logan River above State Dam near Logan UT	USGS	USGS
10113500✪	Blacksmith Fork abv Upper & Lower Dam Near Hyrum UT	USGS	USGS
10116500	Cutler Reservoir near Collinston UT	PacifiCorp	PacifiCorp
10117000	Hammond (East Side) Canal near Collinston UT	PacifiCorp	PacifiCorp
10117500	West Side Canal near Collinston UT	PacifiCorp	PacifiCorp
10118000	Bear River near Collinston UT	PacifiCorp	PacifiCorp
10126000	Bear River near Corinne UT	USGS	USFWS

Notes:

✪ GSWIP site – Ground and Surface Water Information Program

Underlined station numbers indicate those gages for which stream flow data are published in this report.

[1] This gage is operated seasonally from April 1 until September 30 each year.

[2] Data for these gages are generated by PacifiCorp but not formally published

[3] Discharge measurements below Stewart Dam are required for interstate regulation pursuant to the Compact. However, flow is general only a few cfs. PacifiCorp maintains this gage and reports discharge to the Idaho watermaster. The data are included with the Central Division's canal diversion data herein.

[4] These two water quality platforms are jointly funded by Bear Lake Watch, Idaho Department of Environmental Quality, Utah Division of Water Quality, PacifiCorp and USGS.

[5] Gage 10109001 represents a summation of the Logan River discharge (10109000) and canal diversions (10108400) upstream of the gage. This is not a physical river gage. Gages 10109000 and 10108400 are part of the GSWIP.

Figure 2020.18

10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°57'55'', long 110°51'10'' referenced to North American Datum of 1927, in SE ¼ NW ¼ SE ¼ sec.30, T.3 N., R.10 E., Summit County,UT, Hydrologic Unit 16010101, on left bank 400 ft downstream from West Fork and 2.8 mi upstream from Utah-Wyoming State line.
DRAINAGE AREA.--172 mi².
PERIOD OF RECORD.--July 1942 to current year.
REVISED RECORDS.--WDR UT-74-1: Drainage area.
GAGE.--Water-stage recorder. Elevation of gage is 7,965 ft above NGVD of 1929, from river-profile map. Prior to October 1, 1986 at datum 3.0 ft higher.
REMARKS.-- Records good except for estimated daily discharges which are poor and other periods as noted. Records fair May 20, 2014 through Jun. 17, 2014 due to variable control conditions from snow-melt runoff. Flow regulated slightly by Whitney Reservoir, total capacity, 4,700 acre-ft since 1966. Three diversions above station for irrigation of about 265 acres above and 2,600 acres below station.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,390 ft³/s, Jun 30, 2011, gage height, 7.82 ft; minimum, 6.8 ft³/s, Apr 12, 1984, result of upstream ice jam.

DISCHARGE, CUBIC FEET PER SECOND
YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	73.4	58.4	e39.7	e41.9	e41.7	e50.8	49.2	663	1,350	200	80.8	55.5
2	71.3	52.8	e40.7	e42.4	e41.5	e49.0	49.8	642	1,180	172	78.0	55.2
3	68.7	52.3	e38.5	e42.7	e41.1	e51.0	40.2	678	1,060	157	74.4	53.4
4	66.5	49.8	36.2	e42.2	e40.5	e50.8	41.2	635	997	153	73.2	52.8
5	64.6	47.1	32.9	e41.6	e40.1	e48.4	48.0	583	909	148	78.4	50.5
6	66.0	50.2	33.4	e40.9	e40.7	e51.6	50.1	631	1,280	147	81.3	49.2
7	65.8	50.9	37.0	e40.7	e41.0	e53.7	51.4	666	1,150	225	75.9	49.1
8	65.7	50.4	35.2	e40.7	e41.8	e49.4	59.2	618	845	233	73.2	55.6
9	63.8	50.6	35.0	e40.4	e40.2	e52.1	72.7	648	743	230	71.3	58.1
10	61.7	50.1	e31.7	e40.1	e33.4	e51.8	85.7	681	651	198	70.1	58.5
11	55.5	49.2	e30.0	e40.1	e27.1	e52.8	89.8	712	599	192	69.8	56.4
12	62.9	45.3	e31.5	e40.5	e38.4	e51.6	81.6	807	576	186	69.9	53.6
13	61.7	49.5	e32.9	e41.2	e42.5	42.1	65.9	774	612	182	66.9	52.2
14	62.2	46.4	34.3	e41.1	e40.6	48.8	60.8	639	572	173	65.7	48.7
15	59.3	47.3	e33.5	e40.7	e38.2	47.7	63.6	611	530	119	65.2	48.2
16	61.4	47.1	e34.9	e40.7	e47.0	47.3	62.7	584	511	122	64.1	48.1
17	60.6	45.5	e36.6	e40.7	e45.6	47.6	57.1	688	481	120	62.7	47.6
18	63.2	48.1	e38.6	e41.0	e40.0	47.8	62.2	910	404	113	61.2	47.0
19	60.3	46.8	e40.8	e41.7	e35.0	46.0	63.0	1,050	367	107	60.9	47.8
20	60.8	48.2	e42.6	e42.2	e35.8	43.4	64.2	958	341	104	62.1	48.1
21	66.0	47.1	e42.8	e42.4	e43.6	38.7	77.6	715	329	99.4	58.8	47.4
22	68.6	40.8	e42.8	e42.4	e47.7	48.0	91.2	654	334	101	57.6	48.4
23	66.3	40.0	e42.8	e42.4	e51.2	44.3	102	618	334	109	57.6	50.9
24	57.4	44.4	e42.8	e42.4	e48.4	46.8	103	566	325	104	61.2	46.7
25	64.1	40.7	e43.4	e42.5	e46.9	46.1	123	515	311	95.9	67.3	45.0
26	65.8	e34.8	e43.5	e42.2	e45.9	44.5	166	601	285	93.6	61.8	44.1
27	63.3	e37.3	e42.2	e42.0	e48.4	43.7	208	761	258	94.3	57.3	44.7
28	46.7	e43.0	e39.9	e42.1	e49.0	43.2	256	956	247	108	55.4	44.7
29	54.2	e43.1	e38.7	e42.6	e49.7	42.6	339	1,120	246	91.4	54.8	45.0
30	58.0	e41.9	e39.4	e42.6		45.2	517	1,320	228	85.9	53.7	44.5
31	64.0		e41.0	e41.9		44.4		1,450		82.7	54.2	
Total	1,950	1,399	1,175	1,288	1,223	1,471	3,201	23,450	18,050	4,346	2,044	1,497
Mean	62.9	46.6	37.9	41.6	42.2	47.5	107	757	602	140	66.0	49.9
Max	73.4	58.4	43.5	42.7	51.2	53.7	517	1450	1350	233	81.3	58.5
Min	46.7	34.8	30.0	40.1	27.1	38.7	40.2	515	228	82.7	53.7	44.1
Ac-ft	3,867	2,775	2,331	2,557	2,426	2,918	6,349	46,520	35,810	8,621	4,056	2,969

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943-2020, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	66.4	55.0	45.5	41.5	39.7	44.6	116	604	833	293	92.9	75.6
Max	208	106	94.9	72.4	64.3	99.5	316	1,044	1,990	1,371	244	229
(WY)	(1983)	(1984)	(1984)	(1984)	(1984)	(2017)	(1946)	(1984)	(1986)	(2011)	(1965)	(1983)
Min	30.8	32.5	27.7	28.9	21.1	26.0	37.2	162	204	67.4	31.0	23.9
(WY)	(1959)	(1955)	(1960)	(2007)	(2003)	(1964)	(1944)	(1977)	(1992)	(1961)	(2002)	(1956)

Figure 2020.18 (cont.)

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°26'04", long 111°01'01" referenced to North American Datum of 1927, in NE ¼ NW ¼ NW ¼ sec.29, T.17 N., R.120 W., Uinta County, WY, Hydrologic Unit 16010101, on right bank 4.8 mi upstream from Woodruff Narrows Dam and 9.6 mi southeast of Woodruff.
DRAINAGE AREA.--755 mi².
PERIOD OF RECORD.--October 1961 to current year.
REVISED RECORDS.--WDR UT-74-1: Drainage area.
GAGE.--Water-stage recorder. Elevation of gage is 6,455 ft above NGVD of 1929, from river-profile map.
REMARKS.-- Diversion for irrigation of about 43,500 acres above station. Records are good except for discharges below 15 cfs which are fair and estimated discharges which are poor.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,150 ft³/s, Jun 2, 1983, gage height, 6.17 ft; minimum, no flow several days during Aug, Sep 1988, and Sep 2002.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	81.5	50.9	e57.4	e56.4	e54.1	e66.7	e231	536	1,250	94.6	4.98	30.9
2	68.7	70.3	e61.5	e57.8	e51.8	e61.8	e227	625	1,160	90.0	4.80	33.9
3	65.6	71.2	e65.4	e58.4	e48.6	e60.4	183	603	913	46.9	4.80	23.3
4	62.1	74.6	e67.4	e58.1	e43.9	e57.6	157	662	750	31.9	4.60	20.6
5	59.9	70.6	e61.1	e57.1	e42.7	e62.1	156	577	642	25.0	21.6	21.3
6	58.3	65.5	e58.8	e55.6	e48.0	e63.9	184	516	697	20.4	27.3	19.2
7	57.4	64.3	e54.5	e54.3	e53.6	e68.1	217	560	1,340	17.7	30.5	17.1
8	52.5	63.1	e55.0	e52.8	e54.2	e72.8	273	526	1,440	15.7	29.2	17.3
9	15.6	56.3	e54.8	e51.5	e50.3	e72.9	210	490	1,020	16.0	29.2	26.3
10	12.0	54.2	e53.6	e50.6	e46.0	e82.9	235	511	761	19.5	31.8	33.2
11	9.15	55.2	e50.6	e49.9	e46.6	e102	234	546	544	20.1	28.3	34.8
12	8.42	52.2	e50.8	e49.4	e53.1	e127	230	591	441	18.3	25.9	29.9
13	7.95	46.7	e53.4	e48.7	e60.6	e136	198	665	334	14.1	23.4	27.5
14	7.42	50.6	e52.5	e47.5	e64.1	e144	152	563	280	11.7	23.6	24.3
15	7.60	52.3	e50.7	e46.3	e63.1	e171	131	451	237	11.0	23.7	20.1
16	7.63	53.0	e50.2	e45.8	e60.8	e201	136	394	202	11.2	23.0	17.2
17	7.86	50.9	e53.9	e45.6	e58.2	e223	137	347	232	15.4	24.0	19.5
18	8.56	47.6	e52.2	e45.7	e51.5	e218	129	463	287	14.3	23.9	21.4
19	9.03	54.9	e52.5	e48.1	e49.9	e192	133	687	261	10.2	25.8	22.1
20	10.3	55.0	e54.0	e50.2	e52.2	e164	125	846	200	9.18	23.0	25.1
21	11.7	e46.3	e55.2	e52.5	e62.6	e154	120	653	152	e6.06	24.1	30.6
22	11.0	e38.6	e55.1	e54.7	e67.8	e161	122	470	116	e4.26	19.9	29.7
23	10.4	e48.2	e54.9	e56.0	e64.7	e160	126	413	94.6	5.45	24.6	28.5
24	12.9	e46.5	e54.1	e56.8	e59.8	e160	145	383	90.0	e5.35	24.2	21.1
25	11.1	e53.4	e52.4	e57.2	e52.5	e167	148	327	84.2	e4.59	27.2	17.4
26	34.2	e47.7	e51.5	e57.9	e52.6	e162	170	306	64.9	e4.96	31.7	16.6
27	53.0	e36.4	e51.4	e58.9	e57.1	e151	204	381	58.2	6.17	37.8	16.2
28	48.3	e40.8	e51.6	e59.8	e62.4	e154	226	603	44.7	e4.96	30.2	16.5
29	40.3	e45.8	e52.2	e60.1	e66.6	e153	274	793	39.2	6.46	25.2	17.1
30	34.7	e48.9	e53.1	e59.6		e153	331	938	56.1	7.56	24.7	17.7
31	46.4		e54.5	e57.7		e164		1,160		5.06	28.2	
Total	932	1,612	1,696	1,661	1,598	4,086	5,544	17,590	13,790	574	731	696
Mean	30.0	53.7	54.7	53.6	55.2	132	185	567	460	18.5	23.6	23.2
Max	81.5	74.6	67.4	60.1	67.8	223	331	1160	1440	94.6	37.8	34.8
Min	7.42	36.4	50.2	45.6	42.7	57.6	120	306	39.2	4.26	4.60	16.2
Ac-ft	1,848	3,197	3,365	3,295	3,172	8,105	11,000	34,880	27,350	1,139	1,450	1,381

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 -2020, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	64.0	63.3	62.7	61.3	72.6	154	310	762	790	179	45.1	45.1
Max	437	198	181	147	312	627	671	1,957	2,564	1,355	340	288
(WY)	(1983)	(1974)	(1984)	(1984)	(1986)	(1986)	(1969)	(1984)	(1986)	(2011)	(1983)	(1983)
Min	3.03	6.06	7.21	6.76	10.4	26.8	77.7	104	47.3	4.41	.68	.49
(WY)	(1965)	(1989)	(1989)	(1989)	(2003)	(1977)	(1977)	(1977)	(2012)	(2000)	(2000)	(1988)

Figure 2020.18 (cont.)

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'20", long 111°00'50" referenced to North American Datum of 1927, in NE ¼ NE ¼ NW ¼ sec.32, T.18 N., R.120 W., Uinta County, WY, Hydrologic Unit 16010101, on right bank 1,100 ft downstream from Woodruff Narrows Dam, 1.6 mi upstream from Salt Creek, 5.4 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi^2.

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR UT-74-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,398.96 ft above NGVD of 1929. Prior to September 26, 1962, at site 175 ft upstream at same datum.

REMARKS.-- Flow regulated by Woodruff Narrows Reservoir (station 10020200) beginning January 1962. Diversions for irrigation of about 43,500 acres above station. Records are good, except estimated daily discharges which are poor, and other exceptions as noted. Aug 4 to Sep 30, 2014 records are fair (due to variable control conditions from rain storm event).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft^3/s, Jun 2, 1983, gage height, 8.26 ft; no flow Jul 4, 5, 1962, Aug 30, 31, Sep 1, 2, 6, 7, 1979, Oct 30, 1980.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	20.3	18.6	19.4	19.9	19.4	20.5	144	347	757	54.6	44.7	32.2
2	20.0	18.4	19.4	19.6	19.6	20.1	171	495	761	52.9	44.6	31.2
3	20.3	18.1	19.5	20.0	19.8	20.5	186	559	764	52.3	44.3	31.9
4	20.3	18.1	19.5	19.8	19.7	20.5	174	599	761	51.5	43.7	32.9
5	20.0	18.3	19.5	19.6	19.7	20.4	165	616	758	51.0	57.6	33.1
6	20.3	18.2	19.7	19.7	19.7	20.4	166	578	758	51.8	64.1	33.5
7	20.6	17.9	20.0	20.1	19.5	20.3	178	545	729	50.3	64.9	33.4
8	20.5	17.6	20.1	20.3	19.8	20.3	212	559	707	49.3	64.9	32.6
9	20.7	17.4	20.1	20.6	19.8	20.4	231	527	711	49.2	64.2	32.0
10	20.3	17.8	20.2	21.0	20.0	20.4	231	520	714	49.3	63.9	31.9
11	20.1	17.8	20.1	20.8	19.8	20.5	241	646	714	49.4	63.7	31.8
12	20.5	17.8	20.1	20.9	19.9	20.5	236	784	714	47.5	41.6	31.7
13	20.5	17.8	20.1	21.1	20.0	20.7	228	877	714	47.5	29.5	31.7
14	20.6	17.8	20.1	21.0	20.4	19.7	207	908	708	48.2	29.4	31.8
15	20.5	18.2	20.4	21.3	20.3	17.5	179	920	704	47.6	29.1	31.9
16	20.5	18.3	18.7	21.3	20.2	17.6	154	919	703	47.9	28.6	31.9
17	20.3	18.3	18.4	21.6	20.3	17.5	146	941	686	47.5	29.0	32.0
18	20.4	18.4	18.7	21.9	20.6	18.0	138	949	677	47.2	29.0	32.2
19	20.2	18.5	18.8	22.0	20.6	18.5	133	951	677	46.7	28.6	23.9
20	19.8	18.9	18.9	22.0	20.4	28.5	129	952	674	46.5	28.4	12.7
21	19.8	18.5	18.9	22.1	20.0	49.5	123	953	672	46.3	28.3	12.2
22	19.9	18.8	18.9	22.1	20.3	67.5	120	951	667	46.6	28.4	11.9
23	19.6	18.6	18.9	22.1	20.5	80.6	123	949	663	46.0	28.8	12.0
24	19.6	18.8	19.3	19.6	20.7	99.5	129	948	660	45.7	28.7	14.0
25	19.6	18.8	19.5	18.7	20.9	127	134	942	655	45.2	29.3	17.6
26	19.5	18.6	19.5	18.8	20.9	151	138	937	650	44.6	29.6	17.2
27	19.6	18.9	19.6	18.8	20.8	154	155	932	644	42.3	30.0	17.5
28	19.4	18.9	20.1	19.1	20.8	148	170	813	636	41.8	30.3	17.8
29	19.1	19.0	20.0	19.4	20.8	141	206	747	629	40.9	31.0	17.7
30	18.8	18.9	19.6	19.4		140	255	751	428	40.2	31.5	17.8
31	18.5		19.6	19.4		140		753		42.7	32.1	
Total	620	550	606	634	585	1,701	5,202	23,870	20,690	1,471	1,222	772
Mean	20.0	18.3	19.5	20.5	20.2	54.9	173	770	690	47.4	39.4	25.7
Max	20.7	19.0	20.4	22.1	20.9	154	255	953	764	54.6	64.9	33.5
Min	18.5	17.4	18.4	18.7	19.4	17.5	120	347	428	40.2	28.3	11.9
Ac-ft	1,230	1,091	1,201	1,258	1,161	3,374	10,320	47,340	41,050	2,917	2,423	1,531

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2020, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	49.6	45.2	39.8	37.5	39.2	88.9	243	742	946	253	68.7	54.4
Max	425	421	184	153	171	648	891	1,828	2,437	1,339	331	278
(WY)	(1983)	(1983)	(1983)	(1985)	(1971)	(2017)	(1985)	(1984)	(1983)	(2011)	(1983)	(1983)
Min	3.89	.12	4.28	4.37	4.71	4.70	.34	27.8	357	10.4	3.91	3.65
(WY)	(1990)	(1981)	(1978)	(1978)	(1978)	(1978)	(1977)	(1977)	(2002)	(2002)	(1979)	(1979)

Figure 2020.18 (cont.)

Water Year 2020
Daily Mean Flow Report

Flow Records for: Bear River near Randolph, UT
Station No: 10026500 District 02 Division 4
Units: CFS

Year:	2019			2020								
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1								172.31	243.96	254.99	22.77	11.97
2								196.19	313.02	230.77	25.89	11.68
3								244.21	297.83	194.51	28.91	11.24
4								315.36	245.77	168.16	24.01	11.05
5								361.21	234.12	147.60	19.85	10.80
6								340.25	228.32	129.78	18.23	10.67
7								328.16	212.09	109.78	17.00	10.22
8							225.82	297.35	236.67	91.12	16.63	10.17
9							221.75	278.68	245.28	76.73	17.63	10.08
10							229.36	254.70	256.26	72.46	18.24	10.36
11							234.01	168.28	271.71	90.15	22.25	13.12
12							233.35	157.18	281.83	82.49	28.96	13.56
13							233.50	142.89	275.00	66.72	35.27	13.16
14							230.21	164.47	255.77	60.99	30.35	12.64
15							225.54	181.68	240.36	49.32	27.70	11.23
16							218.99	205.18	232.32	42.29	21.93	11.17
17							204.19	199.42	307.55	44.29	19.86	9.86
18							189.31	167.47	358.24	45.38	19.17	8.13
19							189.19	170.66	386.38	50.96	18.80	9.57
20							182.11	154.22	360.44	48.54	18.33	9.35
21							171.50	160.64	329.32	43.44	18.47	9.21
22							169.26	174.62	313.57	39.68	17.88	9.68
23							165.21	185.25	294.30	36.72	17.93	9.75
24							164.69	197.82	283.93	33.69	16.89	9.78
25							163.67	217.10	276.67	30.74	15.37	10.46
26							164.29	233.61	324.36	26.91	15.09	10.96
27							166.95	237.79	309.06	25.64	13.99	10.22
28							169.24	268.65	266.60	27.57	12.99	10.39
29							167.80	290.67	269.12	29.64	12.66	10.80
30							160.96	298.69	265.66	28.58	13.08	11.38
31								253.58		25.10	12.69	
Min							161	143	212	25.1	12.7	8.13
Max							234	361	386	255	35.3	13.6
Mean							195	226	281	77.6	20.0	10.8
Total(AF)							8890	13900	16700	4770	1230	640

Water Year Total: **Mean:** 115.83 **Min:** 7.82 **Max:** 397.08 **Total (Acre-ft):** 46122.50

Comments: -

Date Processed: December 24, 2020 08:51

10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY

LOCATION.--Lat 41°56'20", long 110°59'05" referenced to North American Datum of 1927, in SW ¼ SE ¼ SE ¼ sec.25, T.23 N., R.120 W., Lincoln County, WY, Hydrologic Unit 16010102, 800 ft downstream from Pixley Dam, 11 mi south of Cokeville, and 17.5 mi downstream from Twin Creek.

DRAINAGE AREA.--2,032 mi².

PERIOD OF RECORD.--October 1941 to November 1943 (published as Bear River near Cokeville), October 1952 to September 1956, May 1958 to current year (seasonal only). Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,185 ft above NGVD of 1929, from river-profile map. October 31, 1941 to November 30, 1943, at site 200 ft downstream at different datum. September 24, 1952 to August 31, 1994 at site 50 ft downstream at same datum. May 7, 2015 to August 14, 2015 at site 850 ft upstream at same datum.

REMARKS.-- Natural flow of stream affected by diversions for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs. Records are fair except for estimated daily discharges which are poor and other periods as noted. 6/20/14 - 7/12/14; records are poor due to variable control conditions from backwater. 5/6/15 - 9/30/16, 3/18/16 – 5/16/16, 6/8/16 – 10/4/16, 3/21/17 – 10/2/17, 3/14/18 – 4/24/18; records are good.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,300 ft³/s, Mar 25, 1956; minimum daily discharge, 0.09 ft³/s, Sep 8, 2002.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	67.2	---	---	---	---	---	355	202		234	40.5	16.2
2	68.4	---	---	---	---	---	349	210	81.1	228	38.7	16.7
3	66.0	---	---	---	---	---	325	236	88.1	214	38.0	17.2
4	64.2	---	---	---	---	---	306	290	e94.3	197	36.9	17.5
5	64.5	---	---	---	---	---	302	345	e101	182	35.4	17.7
6	64.4	---	---	---	---	---	300	372	e104	164	34.0	17.2
7	64.4	---	---	---	---	---	308	360	e106	149	31.7	17.7
8	62.3	---	---	---	---	---	318	341	e123	134	28.1	17.7
9	---	---	---	---	---	---	319	269	e147	133	24.9	17.2
10	---	---	---	---	---	---	319	210	e158	142	23.9	19.2
11	---	---	---	---	---	---	320	191	e151	138	23.9	19.5
12	---	---	---	---	---	---	320	149	e137	131	25.0	22.3
13	---	---	---	---	---	---	309	120	e134	178	25.7	22.6
14	---	---	---	---	---	---	295	76.9	e134	189	24.9	24.5
15	---	---	---	---	---	---	286	88.6	e127	137	27.3	24.5
16	---	---	---	---	---	---	281	104	e122	120	28.6	22.8
17	---	---	---	---	---	---	271	116	e149	100	29.1	23.7
18	---	---	---	---	---	e256	258	109	e224	93.6	28.9	25.4
19	---	---	---	---	---	e262	245	98.9	e199	91.5	28.5	23.2
20	---	---	---	---	---	e262	241	99.9	e201	87.5	28.3	24.3
21	---	---	---	---	---	e263	233	103	243	81.6	28.1	23.7
22	---	---	---	---	---	e272	227	110	240	76.8	28.0	24.0
23	---	---	---	---	---	e279	225	96.8	237	76.9	27.7	24.2
24	---	---	---	---	---	290	221	53.4	251	70.3	29.9	25.9
25	---	---	---	---	---	300	219	66.6	229	62.2	26.4	21.8
26	---	---	---	---	---	319	212	78.8	219	56.3	22.4	20.7
27	---	---	---	---	---	333	209	86.0	215	52.0	18.7	22.8
28	---	---	---	---	---	341	211	67.7	231	48.8	17.7	24.4
29	---	---	---	---		345	211	64.3	230	48.5	17.6	24.7
30	---	---	---	---		341	207	63.8	231	45.5	17.1	23.7
31	---		---	---		335		64.8		43.3	17.3	
Total							8,202	4,844	5,141	3,705	853	643
Mean							273	156	171	120	27.5	21.4
Max							355	372	251	234	40.5	25.9
Min							207	53.4	81.1	43.3	17.1	16.2
Ac-ft							16,270	9,607	10,200	7,348	1,692	1,275

Figure 2020.18 (cont.)

10032000 SMITHS FORK NEAR BORDER, WY

LOCATION.--Lat 42°17'36", long 110°52'18" referenced to North American Datum of 1927, in NE ¼ SW ¼ SW ¼ sec.28, T.27 N., R.118 W., Lincoln County, WY, Hydrologic Unit 16010102, on left bank 4.9 mi upstream from Howland Creek, 5.6 mi downstream from Hobble Creek, and 12.4 mi northeast of Border.

DRAINAGE AREA.--165 mi^2.

PERIOD OF RECORD.--May 1942 to current year.

REVISED RECORDS.--WSP 1734: 1952(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,720 ft above NGVD of 1929, from topographic map. Prior to October 16, 1945, at site 1.2 mi downstream at different datum. October 16, 1945 to November 1986 at site 0.4 mi downstream at different datum.

REMARKS.-- Records good except for estimated daily discharges which are poor. One diversion for irrigation of about 200 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft^3/s, Jun 4, 1986, gage height, 5.66 ft; minimum, 19 ft^3/s, Feb 28, 2007.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	105	e87.0	e66.8	e63.4	61.1	e52.1	69.0	525	807	292	142	96.0
2	102	e86.0	e78.5	e70.4	e61.5	e55.5	65.9	464	769	271	139	92.5
3	100	e85.1	75.9	e72.0	e63.3	e56.9	59.7	466	729	261	138	89.8
4	99.1	84.3	73.6	e72.2	e60.4	e58.2	62.1	436	713	254	138	88.1
5	99.1	83.4	73.8	e69.5	e60.5	56.5	67.1	410	683	248	136	86.6
6	97.1	82.5	73.4	e66.7	e64.3	57.0	68.4	424	699	241	132	85.2
7	95.4	81.4	e71.3	e68.2	e65.5	57.7	74.4	446	719	234	129	85.1
8	94.5	80.9	e74.7	e69.3	e58.2	59.7	85.2	423	630	228	124	86.6
9	94.7	80.9	72.9	e66.9	e48.6	59.9	98.6	431	549	221	122	87.8
10	92.4	81.2	e70.7	e71.4	e44.2	58.6	113	448	493	214	123	87.8
11	88.2	81.5	e69.4	e74.4	e41.6	e57.1	128	487	461	206	124	86.7
12	91.3	76.9	e72.6	e73.3	e44.8	57.2	121	519	448	200	120	85.6
13	90.7	81.8	e73.5	e70.5	e46.5	56.8	109	545	455	199	119	84.3
14	89.6	78.4	72.8	e67.4	e41.7	57.7	101	498	455	195	116	83.1
15	88.7	78.4	e70.2	e66.5	e39.4	60.3	102	453	437	191	113	82.3
16	88.6	78.1	e56.8	e69.2	e45.8	59.7	97.6	421	446	187	111	82.0
17	89.1	77.0	e47.4	e70.9	e44.0	62.5	89.4	410	481	180	109	81.2
18	91.3	78.0	e51.8	e69.5	e40.8	65.3	94.1	456	420	176	107	80.4
19	93.4	78.0	e70.0	e65.0	e38.3	63.5	99.6	540	391	173	106	84.2
20	92.4	77.9	e73.6	e63.1	e36.0	61.9	107	597	372	171	105	84.2
21	92.2	77.1	e76.4	e65.7	e36.1	62.5	127	583	365	168	104	81.2
22	93.3	76.1	e78.5	e65.0	e41.6	63.4	157	516	359	167	102	80.1
23	93.5	72.4	e77.1	e67.0	e44.1	61.8	178	493	355	173	100	79.3
24	88.5	72.8	e74.9	65.7	e45.4	68.9	188	448	352	164	98.7	78.0
25	89.5	e77.6	e72.4	63.7	e44.9	66.8	194	417	347	161	97.4	77.6
26	92.8	e69.8	e66.4	63.1	e45.7	62.8	228	406	333	157	97.0	78.3
27	89.5	e82.5	e58.9	64.0	e48.2	56.9	259	398	322	156	94.8	79.1
28	84.2	e80.6	e49.2	62.5	e48.2	62.6	286	465	337	157	94.1	78.3
29	e87.6	78.3	e46.2	62.2	e49.1	60.6	344	560	346	155	93.9	77.5
30	e87.1	e74.9	e46.5	e61.5		62.3	450	679	316	148	92.5	73.3
31	e87.8		e53.2	e61.9		64.8		765		145	94.4	
Total	2,869	2,381	2,089	2,082	1,409	1,868	4,223	15,129	14,590	6,092	3,522	2,502
Mean	92.5	79.4	67.4	67.2	48.6	60.2	141	488	486	197	114	83.4
Max	105	87.0	78.5	74.4	65.5	68.9	450	765	807	292	142	96.0
Min	84.2	69.8	46.2	61.5	36.0	52.1	59.7	398	316	145	92.5	73.3
Ac-ft	5,689	4,722	4,144	4,130	2,796	3,704	8,376	30,009	28,940	12,080	6,985	4,963

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2020, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	90.7	78.4	68.3	63.4	60.5	63.8	162	526	609	287	150	107
Max	156	114	88.4	88.7	87.5	159	446	1,072	1,377	779	280	169
(WY)	(1987)	(1986)	(1983)	(2019)	(2017)	(2017)	(2017)	(1997)	(1986)	(2011)	(2011)	(2011)
Min	51.0	50.7	41.5	39.7	34.7	39.5	58.6	99.1	96.2	61.4	55.1	52.1
(WY)	(1978)	(1978)	(2002)	(2008)	(2003)	(1988)	(1975)	(1977)	(1977)	(1977)	(1977)	(1977)

Figure 2020.18 (cont.)

10039500 BEAR RIVER AT BORDER, WY

LOCATION.--Lat 42°12'40", long 111°03'11" referenced to North American Datum of 1927, in NE ¼ NE ¼ NE ¼ sec.15, T.14 S., R.46 E., Bear Lake County, ID, Hydrologic Unit 16010102, on left bank 0.2 mi west of Wyoming-Idaho State line, 0.5 mi west of Border, and 2.1 mi upstream from Thomas Fork.

DRAINAGE AREA.--2,480 mi².

PERIOD OF RECORD.--October 1937 to September 1996, October 1996 to September 2000 (seasonal), October 2000 to current year.

REVISED RECORDS.--WDR UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft above NGVD of 1929, unadjusted.

REMARKS.-- Natural flow of stream affected by regulation of upstream reservoirs, diversions for irrigation, and return flow from irrigated areas. Records are good except estimated discharges which are poor and the following exceptions: March 13 to August 15, 2017 which is rated fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s, Jun 7, 1983, gage height, 9.69 ft; minimum discharge, 24 ft³/s, Apr 29, 30, 1977.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	192	e176	e143	e167	e173	e155	e574	758	618	669	127	97.8
2	190	e176	e144	e167	e167	e158	e606	777	658	705	115	91.8
3	187	e183	e164	e167	e172	e159	e565	752	673	634	112	86.0
4	185	e185	e159	e163	e148	e165	e522	792	679	599	133	83.5
5	191	e185	e157	e160	e144	e170	e516	794	671	553	148	81.9
6	189	182	e158	e163	e161	e174	e525	820	667	516	148	81.1
7	186	183	e153	e169	e166	e169	e533	833	756	476	134	79.7
8	186	183	e155	e170	e162	e173	e551	839	794	448	134	80.3
9	184	180	e156	e167	e149	e182	e553	791	733	419	126	77.3
10	181	180	e148	e166	e137	e188	e578	685	668	401	118	79.6
11	181	183	e142	e166	e132	e201	e608	662	614	375	118	82.5
12	185	182	e144	e170	e139	e204	e578	637	590	368	131	85.4
13	183	181	e150	e176	e158	e221	e558	583	558	362	129	88.6
14	181	185	e149	e173	e155	e225	e552	578	568	393	128	88.0
15	179	181	e142	e164	e145	e247	537	528	567	392	124	85.0
16	178	182	e140	e158	e157	e279	534	501	576	358	119	83.8
17	178	181	e146	e156	e164	e315	511	483	740	323	118	86.5
18	182	180	e150	e156	e150	e373	486	487	773	284	117	84.9
19	187	205	e156	e156	e145	e408	457	495	743	257	116	84.8
20	190	201	e162	e160	e142	e415	448	521	748	242	113	88.2
21	190	187	e170	e165	e138	e421	449	589	767	218	113	88.4
22	189	185	e179	e171	e136	e451	466	577	737	204	116	92.5
23	189	e186	e183	e173	e134	e480	490	588	715	201	115	92.2
24	188	e180	e186	e174	e144	e479	508	574	681	201	e114	92.8
25	185	e162	e191	e177	e140	e510	506	490	638	181	111	92.5
26	185	e133	e180	e183	e132	e512	e506	461	600	169	107	94.5
27	188	e139	e163	e185	e138	e523	e522	429	588	160	103	96.1
28	e170	e155	e155	e183	e141	e534	e547	434	635	161	98.0	107
29	e144	e162	e156	e185	e150	e533	e584	436	681	160	98.4	101
30	e141	e158	e157	e185		e532	649	489	686	156	99.1	97.7
31	e165		e160	e154		e538		578		140	96.3	
Total	5,629	5,321	4,898	5,229	4,319	10,090	16,020	18,960	20,120	10,720	3,679	2,651
Mean	182	177	158	169	149	326	534	612	671	346	119	88.4
Max	192	205	191	185	173	538	649	839	794	705	148	107
Min	141	133	140	154	132	155	448	429	558	140	96.3	77.3
Ac-ft	11,160	10,550	9,715	10,370	8,567	20,020	31,770	37,610	39,910	21,270	7,297	5,259

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2020, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	196	214	186	171	194	366	697	964	1,124	525	215	167
Max	752	693	563	381	479	1,640	2,220	3,158	3,829	2,837	752	671
(WY)	(1983)	(1983)	(1983)	(1985)	(1986)	(2017)	(2017)	(1952)	(1983)	(2011)	(1983)	(1983)
Min	43.5	74.7	97.2	77.6	75.2	105	71.2	74.4	62.2	54.2	42.3	38.5
(WY)	(2002)	(2002)	(2002)	(1993)	(1993)	(1988)	(1977)	(1977)	(1977)	(1977)	(1940)	(1940)

Figure 2020.18 (cont.)

PACIFICORP

Daily Mean by Year

Rainbow Inlet Canal WY2020

Identifier: 10046000
Location: Rainbow Inlet Canal near Dingle ID
Units: ft^3/s

Year: **WY**2020

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	150 F	195 F	200 F	188 F	174 F	174 F	635 F	756 F	349 F	648 F	86.0 F	30.2 F
2	160 F	195 F	200 F	188 F	174 F	174 F	671 F	856 F	330 F	633 F	76.0 F	27.0 F
3	160 F	195 F	200 F	187 F	174 F	174 F	712 F	909 F	344 F	661 F	66.0 F	27.0 F
4	160 F	200 F	210 F	187 F	174 F	154 F	696 F	903 F	366 F	594 F	56.0 F	27.0 F
5	160 F	235 F	210 F	186 F	174 F	160 F	663 F	925 F	372 F	534 F	46.0 F	25.0 F
6	160 F	235 F	210 F	186 F	174 F	165 F	639 F	918 F	372 F	501 F	36.0 F	25.0 F
7	231 F	195 F	210 F	185 F	174 F	165 F	642 F	899 F	401 F	483 F	36.0 F	20.0 F
8	220 F	195 F	200 F	185 F	174 F	165 F	662 F	898 F	484 F	406 F	36.0 F	20.0 F
9	215 F	195 F	210 F	184 F	174 F	175 F	703 F	855 F	550 F	363 F	33.0 F	15.0 F
10	215 F	195 F	210 F	184 F	174 F	175 F	727 F	825 F	536 F	331 F	30.0 F	12.0 F
11	215 F	195 F	200 F	183 F	174 F	175 F	742 F	806 F	484 F	308 F	28.0 F	12.0 F
12	215 F	195 F	200 F	183 F	174 F	194 F	766 F	739 F	457 F	320 F	28.0 F	12.0 F
13	230 F	200 F	210 F	182 F	174 F	213 F	768 F	604 F	437 F	275 F	28.0 F	12.0 F
14	230 F	200 F	205 F	182 F	174 F	232 F	743 F	510 F	373 F	275 F	40.0 F	12.0 F
15	230 F	200 F	205 F	181 F	174 F	251 F	715 F	457 F	386 F	275 F	40.0 F	12.0 F
16	220 F	200 F	200 F	181 F	174 F	270 F	694 F	439 F	371 F	275 F	40.0 F	15.0 F
17	220 F	200 F	200 F	180 F	174 F	270 F	679 F	420 F	435 F	275 F	54.0 F	15.0 F
18	235 F	200 F	200 F	180 F	174 F	375 F	660 F	402 F	521 F	275 F	54.0 F	15.0 F
19	230 F	200 F	200 F	179 F	174 F	432 F	635 F	387 F	563 F	250 F	50.0 F	15.0 F
20	235 F	200 F	200 F	179 F	174 F	526 F	608 F	401 F	548 F	250 F	50.0 F	12.0 F
21	235 F	210 F	200 F	178 F	174 F	538 F	586 F	430 F	547 F	250 F	47.0 F	15.0 F
22	235 F	205 F	200 F	178 F	174 F	544 F	573 F	474 F	556 F	250 F	45.0 F	15.0 F
23	235 F	205 F	200 F	177 F	174 F	548 F	574 F	486 F	540 F	240 F	44.0 F	19.0 F
24	230 F	200 F	200 F	177 F	174 F	564 F	595 F	489 F	524 F	240 F	44.0 F	20.0 F
25	230 F	200 F	200 F	176 F	174 F	582 F	620 F	493 F	500 F	240 F	44.0 F	20.0 F
26	230 F	190 F	200 F	176 F	174 F	600 F	628 F	455 F	481 F	225 F	44.0 F	20.0 F
27	230 F	200 F	195 F	175 F	174 F	598 F	619 F	445 F	427 F	200 F	44.0 F	30.0 F
28	235 F	200 F	195 F	175 F	174 F	602 F	615 F	426 F	401 F	116 F	44.0 F	40.0 F
29	220 F	201 F	190 F	174 F	174 F	608 F	626 F	407 F	462 F	116 F	40.0 F	79.0 F
30	190 F	210 F	189 F	174 F		608 F	681 F	388 F	564 F	106 F	36.8 F	79.0 F
31	180 F		189 F	174 F		617 F		368 F		96.0 F	33.5 F	
Aggr	211	202	201	181	174	356	663	605	456	323	44.5	23.2
Min	150	190	189	174	174	154	573	368	330	96.0	28.0	12.0
Max	235	235	210	188	174	617	768	925	564	661	86.0	79.0
Total	13000	12000	12400	11100	10000	21900	39400	37200	27100	19900	2740	1230

Date Processed: November 10, 2020 12:53
Note: All flows rated fair.

AQUARIUS TIME-SERIES™ SOFTWARE

10055000 BEAR LAKE AT STATE PARK MARINA NR GARDEN CITY, UT

LOCATION - Lat 41°57'57.30", long 111°23'53.44" referenced to North American Datum of 1983, Rich County, UT, Hydrologic Unit 16010201,

PERIOD OF RECORD - October 1903 to June 1906, August 1909 to current year. Records from October 1903 to October 2019 collected by UP&L Co/PacifiCorp Power Company.

GAGE - Staff gage at Bear Lake at Fish Haven, ID from October 1903 to 1906, UP&L datum. Water-stage recorder at Lifton Pumping Station, ID from August 1909 to April 2004, UP&L datum. Staff gage at Bear Lake State Park Marina, Garden City, UT, from April 2004 to October 2019, UP&L datum. Water-stage recorder at Bear Lake State Park Marina, Garden City, UT, from October 2019 to present, NAVD88 and UP&L datum.

COOPERATION - Station operated by the U.S. Geological Survey, in cooperation with the Bear River Commission and Bear Lake Watch.

REMARKS - The Bear Lake elevations measured at State Park Marina reported by the U.S. Geological Survey are referenced to the NAVD 88 datum. The relation of the gage to this datum was established by U.S. Geological Survey personnel who performed two separate GNSS static observations on a local reference mark near the gage location on October 2 and 3, 2019. Utilizing additional GNSS static observations near the Lifton Bench Mark, U.S. Geological Survey personnel determined a difference between the datum of this gage (NAVD88) and the UP&L Co. datum (which has been historically used to quantify the elevation of Bear Lake) to be -6.88 feet. Bear Lake elevations are reported here relative to the NAVD88 datum. Additionally, Bear Lake elevations are reported here relative to the UP&L Co. datum by subtracting 6.88 feet from gage readings.

GAGE HEIGHT, FEET, [Elevation, ft (UP&L Co. Datum)]
YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES

Day	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020
1	5,917.9	5,917.84	5,917.93	5,918.01	5,918.08	5,918.02	5,918.15	5,918.78	5,919.41	5,919.44	5,918.50	5,917.13
2	5,917.9	5,917.84	5,917.93	5,918.02	5,918.08	5,918.01	5,918.17	5,918.81	5,919.42	5,919.42	5,918.46	5,917.10
3	5,917.9	5,917.84	5,917.93	5,918.01	5,918.11	5,918.00	5,918.18	5,918.84	5,919.42	5,919.43	5,918.43	5,917.07
4	5,917.9	5,917.84	5,917.93	5,918.01	5,918.11	5,917.99	5,918.19	5,918.86	5,919.41	5,919.42	5,918.39	5,917.04
5	5,917.9	5,917.85	5,917.95	5,918.01	5,918.10	5,917.98	5,918.22	5,918.88	5,919.40	5,919.42	5,918.34	5,917.02
6	5,917.9	5,917.86	5,917.95	5,918.01	5,918.11	5,917.97	5,918.24	5,918.91	5,919.40	5,919.42	5,918.30	5,916.98
7	5,917.9	5,917.86	5,917.95	5,918.01	5,918.12	5,917.97	5,918.26	5,918.93	5,919.44	5,919.41	5,918.26	5,916.95
8	5,917.9	5,917.86	5,917.96	5,918.01	5,918.12	5,917.96	5,918.29	5,918.96	5,919.42	5,919.39	5,918.21	5,916.88
9	5,917.9	5,917.87	5,917.96	5,918.01	5,918.12	5,917.96	5,918.31	5,918.98	5,919.41	5,919.37	5,918.17	5,916.83
10	5,917.9	5,917.87	5,917.95	5,918.01	5,918.12	5,917.96	5,918.33	5,919.00	5,919.41	5,919.34	5,918.13	5,916.79
11	5,917.9	5,917.88	5,917.95	5,918.01	5,918.12	5,917.95	5,918.36	5,919.03	5,919.41	5,919.30	5,918.09	5,916.76
12	5,917.8	5,917.88	5,917.96	5,918.02	5,918.12	5,917.94	5,918.38	5,919.07	5,919.41	5,919.26	5,918.04	5,916.72
13	5,917.8	5,917.88	5,917.96	5,918.02	5,918.12	5,917.93	5,918.40	5,919.10	5,919.40	5,919.21	5,917.98	5,916.70
14	5,917.8	5,917.89	5,918.00	5,918.04	5,918.13	5,917.92	5,918.41	5,919.12	5,919.40	5,919.16	5,917.92	5,916.67
15	5,917.8	5,917.89	5,918.00	5,918.05	5,918.12	5,917.92	5,918.44	5,919.13	5,919.39	5,919.10	5,917.87	5,916.64
16	---	5,917.89	5,918.00	5,918.05	5,918.13	5,917.91	5,918.47	5,919.15	5,919.41	5,919.04	5,917.83	5,916.62
17	5,917.87	5,917.90	5,918.00	5,918.05	5,918.13	5,917.91	5,918.49	5,919.17	5,919.46	5,918.98	5,917.80	5,916.61
18	5,917.87	5,917.90	5,918.01	5,918.05	5,918.13	5,917.92	5,918.52	5,919.18	5,919.46	5,918.94	5,917.76	5,916.59
19	5,917.86	5,917.90	5,918.00	5,918.05	5,918.12	5,917.93	5,918.54	5,919.19	5,919.46	5,918.90	5,917.72	5,916.58
20	5,917.87	5,917.90	5,918.00	5,918.05	5,918.11	5,917.94	5,918.56	5,919.21	5,919.45	5,918.86	5,917.68	5,916.56
21	5,917.87	5,917.90	5,918.00	5,918.05	5,918.09	5,917.94	5,918.58	5,919.23	5,919.46	5,918.83	5,917.64	5,916.54
22	5,917.86	5,917.90	5,918.00	5,918.06	5,918.08	5,917.94	5,918.59	5,919.26	5,919.46	5,918.80	5,917.60	5,916.52
23	5,917.86	5,917.90	5,918.00	5,918.06	5,918.07	5,917.95	5,918.61	5,919.30	5,919.46	5,918.79	5,917.56	5,916.51
24	5,917.86	5,917.90	5,918.00	5,918.06	5,918.07	5,917.97	5,918.63	5,919.31	5,919.46	5,918.76	5,917.52	5,916.49
25	5,917.86	5,917.90	5,918.01	5,918.07	5,918.06	5,918.03	5,918.64	5,919.32	5,919.46	5,918.73	5,917.48	5,916.47
26	5,917.86	5,917.89	5,918.01	5,918.07	5,918.05	5,918.05	5,918.67	5,919.34	5,919.45	5,918.70	5,917.44	5,916.45
27	5,917.86	5,917.89	5,918.01	5,918.07	5,918.03	5,918.06	5,918.69	5,919.35	5,919.45	5,918.67	5,917.40	5,916.41
28	5,917.85	5,917.91	5,918.00	5,918.07	5,918.02	5,918.08	5,918.71	5,919.36	5,919.45	5,918.64	5,917.35	5,916.39
29	5,917.84	5,917.94	5,918.00	5,918.08	5,918.02	5,918.08	5,918.73	5,919.38	5,919.44	5,918.61	5,917.30	5,916.37
30	5,917.84	5,917.94	5,918.00	5,918.08		5,918.10	5,918.76	5,919.39	5,919.42	5,918.57	5,917.25	5,916.35
31	5,917.84		5,918.00	5,918.07		5,918.12		5,919.41		5,918.54	5,917.20	
Mean		5,917.88	5,917.98	5,918.04	5,918.1	5,917.98	5,918.45	5,919.13	5,919.43	5,919.05	5,917.86	5,916.69
Max		5917.94	5918.01	5918.08	5918.13	5918.12	5918.76	5919.41	5919.46	5919.44	5918.50	5917.13
Min		5917.84	5917.93	5918.01	5918.02	5917.91	5918.15	5918.78	5919.39	5918.54	5917.20	5916.35

PACIFICORP

Daily Mean by Year

Bear Lake Outlet Canal WY2020

Identifier: 10059500
Location: Bear Lake Outlet Canal near Paris ID
Units: ft^3/s

Year: WY2020

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	143 G	0 G	198 G	198 G	198 G	520 G	0 G	0 G	75.0 G	657 G	1150 G	844 G
2	0 G	0 G	198 G	198 G	198 G	520 G	0 G	0 G	191 G	499 G	1150 G	674 G
3	0 G	0 G	198 G	198 G	198 G	520 G	0 G	0 G	377 G	494 G	1140 G	596 G
4	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	582 G	489 G	1150 G	722 G
5	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	602 G	484 G	1140 G	722 G
6	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	611 G	479 G	1140 G	720 G
7	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	633 G	661 G	1140 G	724 G
8	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	650 G	835 G	1140 G	722 G
9	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	522 G	1010 G	1130 G	723 G
10	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	419 G	1330 G	1130 G	723 G
11	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	493 G	1470 G	1120 G	722 G
12	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	486 G	1490 G	1120 G	717 G
13	0 G	0 G	198 G	198 G	198 G	599 G	0 G	0 G	479 G	1510 G	1130 G	599 G
14	0 G	0 G	198 G	198 G	198 G	720 G	0 G	0 G	478 G	1570 G	1140 G	495 G
15	0 G	0 G	198 G	198 G	198 G	720 G	0 G	0 G	471 G	1670 G	1130 G	497 G
16	0 G	0 G	198 G	198 G	198 G	720 G	0 G	0 G	482 G	1700 G	1130 G	494 G
17	0 G	0 G	198 G	198 G	198 G	420 G	0 G	0 G	486 G	1630 G	1120 G	492 G
18	0 G	87.0 G	198 G	198 G	349 G	420 G	0 G	0 G	498 G	1430 G	1120 G	489 G
19	0 G	199 G	198 G	198 G	520 G	608 G	0 G	0 G	500 G	1300 G	1110 G	490 G
20	0 G	199 G	198 G	198 G	520 G	608 G	0 G	0 G	498 G	1290 G	1100 G	486 G
21	0 G	194 G	198 G	198 G	520 G	620 G	0 G	0 G	501 G	1290 G	1100 G	422 G
22	0 G	200 G	198 G	198 G	520 G	620 G	0 G	0 G	502 G	1280 G	1090 G	363 G
23	0 G	201 G	198 G	198 G	520 G	370 G	0 G	0 G	545 G	1270 G	1090 G	360 G
24	0 G	200 G	198 G	198 G	520 G	330 G	0 G	0 G	588 G	1250 G	1090 G	360 G
25	0 G	198 G	198 G	198 G	520 G	330 G	0 G	0 G	601 G	1220 G	1090 G	360 G
26	0 G	198 G	198 G	198 G	520 G	330 G	0 G	0 G	717 G	1190 G	1090 G	364 G
27	0 G	198 G	198 G	198 G	520 G	330 G	0 G	0 G	857 G	1170 G	1060 G	370 G
28	0 G	198 G	198 G	198 G	520 G	330 G	0 G	0 G	857 G	1150 G	1030 G	360 G
29	0 G	198 G	198 G	198 G	520 G	330 G	0 G	0 G	857 G	1150 G	969 G	362 G
30	0 G	198 G	198 G	198 G		330 G	0 G	0 G	857 G	1150 G	837 G	359 G
31	0 G		198 G	198 G		162 G		0 G		1150 G	848 G	
Aggr	4.60	82.3	198	198	325	511	0	0	547	1140	1090	544
Min	0	0	198	198	198	162	0	0	75.0	479	837	359
Max	143	201	198	198	520	720	0	0	857	1700	1150	844
Total	283	4900	12200	12200	18700	31400	0	0	32600	69900	67300	32400

Date Processed: October 22, 2020 15:48
Note: All flows rated good.

AQUARIUS TIME-SERIES™ SOFTWARE

10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE

LOCATION.--Lat 42°00'47", long 111°55'14" referenced to North American Datum of 1927, in NE ¼ NW ¼ NE ¼ sec.29, T.16 S., R.39 E., Franklin County, ID, Hydrologic Unit 16010202, on left bank 1,050 ft downstream from inlet canal to Cub River pumps, 1.1 mi downstream from Weston Creek, 1.8 mi upstream from Idaho-Utah State line, and 3.5 mi southeast of Weston.

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR UT-74-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,420 ft above NGVD of 1929, from topographic map. Prior to September 10, 1982 at datum 12.00 ft higher. September 10, 1982 to September 30, 1985 at datum 10.0 ft higher.

REMARKS.-- Records good except for estimates, which are poor. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft^3/s, Jun 14, 1984, gage height, 19.20 ft, present datum; maximum gage height, 20.25 ft, Jun 12, 1971, present datum; minimum daily discharge, 24 ft^3/s, May 16, 2004.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	984	526	667	819	776	1,090	1,370	922	507	1,210	913	792
2	912	523	668	793	780	1,140	1,280	953	503	1,210	916	689
3	837	532	677	753	777	1,110	1,110	908	483	1,170	900	621
4	747	533	681	701	784	1,140	1,080	902	424	989	881	535
5	644	531	743	690	661	1,160	1,130	955	415	721	905	529
6	720	536	822	707	703	1,210	1,170	961	417	571	918	519
7	654	538	824	707	718	1,230	1,200	861	485	535	931	535
8	604	555	832	732	1,040	1,360	1,250	929	542	496	885	545
9	579	522	833	769	773	1,460	1,270	904	695	509	850	580
10	531	528	826	764	780	1,460	1,230	921	872	542	871	630
11	530	526	784	749	739	1,480	1,180	956	821	674	860	655
12	521	529	714	e753	721	1,490	1,160	850	704	783	735	671
13	520	543	752	e765	767	1,500	1,120	758	660	946	794	679
14	509	576	777	788	759	1,530	992	750	774	978	798	729
15	511	543	790	e789	765	1,600	977	653	748	1,020	774	656
16	502	594	746	e792	777	1,770	1,010	608	693	1,010	829	563
17	508	546	718	e785	779	1,780	1,010	546	754	1,020	811	535
18	511	534	e572	e779	780	1,790	931	549	757	983	808	518
19	543	555	e533	e771	796	1,770	936	570	851	912	833	548
20	528	562	e612	e762	831	1,760	938	547	931	811	820	559
21	587	615	697	e753	994	1,730	972	592	1,010	807	829	586
22	532	698	675	e746	1,080	1,710	953	570	955	824	867	580
23	528	708	724	e739	1,180	1,680	915	537	814	882	866	526
24	523	698	784	e740	1,190	1,730	923	544	578	915	885	473
25	504	708	851	745	1,120	1,870	918	562	501	978	887	442
26	495	727	850	736	1,090	1,790	892	544	537	1,000	910	428
27	515	729	819	771	1,090	1,690	898	579	537	1,000	906	442
28	526	705	786	779	1,140	1,580	916	582	633	973	893	459
29	542	689	789	780	1,100	1,500	879	539	904	955	859	462
30	573	709	796	851		1,400	893	512	1,090	921	849	464
31	521		801	753		1,350		501		907	809	
Total	18,240	17,820	23,140	23,560	25,490	46,860	31,500	22,070	20,590	27,250	26,590	16,950
Mean	588	594	747	760	879	1,512	1,050	712	687	879	858	565
Max	984	729	851	851	1190	1870	1370	961	1090	1210	931	792
Min	495	522	533	690	661	1090	879	501	415	496	735	428
Ac-ft	36,180	35,340	45,900	46,730	50,560	92,940	62,490	43,760	40,850	54,050	52,740	33,620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2020, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	790	844	854	837	873	1,077	1,279	1,300	1,177	941	882	805
Max	2,849	2,983	2,552	1,904	2,556	3,264	3,594	3,968	4,263	3,442	2,416	2,545
(WY)	(1984)	(1984)	(1985)	(1984)	(1986)	(1986)	(1986)	(1986)	(1986)	(1983)	(1984)	(1986)
Min	224	298	310	269	296	351	351	158	301	368	461	192
(WY)	(2004)	(1993)	(1982)	(2004)	(2002)	(1991)	(2003)	(2003)	(2004)	(2006)	(1993)	(1992)

Figure 2020.18 (cont.)

10109001 COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF LOGAN RIVER ABOVE STATE DAM AND CACHE HIGHLINE CANAL

Water-Data Report 2020

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e159	145	120	108	101	98.3	133	586	764	344	194	157
2	e155	144	123	106	101	96.3	133	523	744	324	193	154
3	154	141	125	105	102	96.2	127	520	718	314	189	153
4	153	141	122	104	96.1	96.2	123	520	696	307	186	152
5	154	139	124	103	98.6	98.0	127	489	681	301	186	151
6	151	139	121	103	103	102	138	493	680	292	184	149
7	143	138	121	106	110	104	158	514	710	284	182	149
8	150	136	127	106	104	116	181	487	647	276	181	157
9	149	137	122	106	101	116	206	502	573	271	179	154
10	151	136	119	103	99.1	115	235	529	517	266	177	151
11	148	135	118	103	95.0	114	250	555	482	259	174	149
12	149	134	124	105	99.7	116	239	642	473	255	174	148
13	148	134	123	105	98.6	117	207	679	479	251	172	146
14	146	133	123	106	98.3	117	190	593	477	250	171	145
15	143	133	115	104	97.7	119	188	526	459	245	170	143
16	143	132	116	103	99.6	122	181	504	462	240	169	141
17	143	131	105	105	98.0	126	169	508	492	236	167	140
18	146	129	111	100	94.5	131	169	571	447	232	166	139
19	146	130	116	99.8	90.8	127	176	645	424	228	165	142
20	150	130	113	101	89.5	122	183	690	407	223	165	142
21	144	130	109	103	94.0	121	203	646	401	220	165	138
22	145	129	111	104	96.7	121	231	557	397	226	163	136
23	146	127	111	104	94.9	120	273	517	393	221	163	135
24	143	125	115	104	94.4	130	286	470	387	213	161	133
25	141	126	114	103	93.9	133	278	438	382	210	160	133
26	142	124	111	103	92.1	126	296	427	373	205	162	132
27	141	122	108	104	93.7	122	345	445	364	203	159	131
28	143	130	105	102	94.8	119	378	544	363	208	157	131
29	148	128	100	102	96.7	118	429	609	368	205	156	130
30	137	126	109	102		117	500	697	355	200	157	128
31	144		98.6	100		122		748		197	157	
Total	4,555	3,983	3,580	3,212	2,829	3,598	6,732	17,170	15,120	7,705	5,304	4,289
Mean	147	133	115	104	97.5	116	224	554	504	249	171	143
Max	159	145	127	108	110	133	500	748	764	344	194	157
Min	137	122	98.6	99.8	89.5	96.2	123	427	355	197	156	128
Ac-ft	9,035	7,902	7,100	6,372	5,611	7,137	13,350	34,060	29,980	15,290	10,520	8,507

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2020, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	147	130	116	109	107	125	253	592	639	335	209	167
Max	262	221	187	165	230	405	629	1,186	1,465	1,118	477	312
(WY)	(2012)	(2012)	(1984)	(2012)	(2017)	(2017)	(1986)	(1936)	(1986)	(2011)	(2011)	(2011)
Min	74.2	71.9	69.0	63.1	61.6	80.3	111	163	141	103	86.4	79.9
(WY)	(1935)	(1993)	(1993)	(1993)	(1993)	(1942)	(1991)	(1977)	(1934)	(1934)	(1992)	(1934)

Figure 2020.18 (cont.)

10126000 BEAR RIVER NEAR CORINNE, UT

LOCATION.--Lat 41°34'35", long 112°06'00" referenced to North American Datum of 1927, in NE ¼ SE ¼ NE ¼ sec.30, T.10 N., R.2 W., Box Elder County, UT, Hydrologic Unit 16010204, on right bank 1.2 mi downstream from Salt Creek, 2.0 mi northeast of Corinne, and 2.8 mi downstream from Malad River.

DRAINAGE AREA.--7,029 mi^2.

PERIOD OF RECORD.--October 1949 to September 1957, October 1963 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area. Gage heights for discharge measurements 782 and 783 made on 8/15/2019 revised 02/09/2021

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,204.6 ft above NGVD of 1929, unadjusted. Auxiliary nonrecording gage 7,800 ft downstream July 27, 1950 to November 21, 1955.

REMARKS.-- Records good except for estimates, which are poor. Natural flow of stream affected by Cutler Dam many miles upstream of gage, power development, diversions for irrigation, and return flow from irrigated areas and backwater from Bear River Bird Refuge about 5 miles downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,770 ft^3/s, May 19, 1984, gage height, 17.50 ft; minimum daily discharge, 23 ft^3/s, Jul 30, 2004.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR 2019-10-01 to 2020-09-30
DAILY MEAN VALUES
[e, Value has been estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,900	1,150	1,470	e1,340	1,630	1,630	2,340	1,670	1,650	826	356	349
2	1,790	1,160	1,460	e1,450	1,520	1,750	2,240	1,650	1,190	1,220	349	462
3	1,570	1,160	1,410	e1,690	1,470	1,730	2,340	1,730	743	1,380	219	421
4	1,440	1,130	1,340	e1,680	1,460	1,670	2,190	1,660	691	1,360	200	410
5	1,390	1,130	1,390	1,570	1,550	1,730	2,050	1,620	677	1,330	250	407
6	1,200	1,120	1,400	1,610	1,530	1,830	1,950	1,640	737	1,100	264	336
7	1,080	1,100	1,410	1,480	1,420	1,880	1,930	1,510	987	566	235	277
8	1,160	1,090	1,620	1,410	1,410	2,140	1,990	1,300	925	272	272	254
9	1,110	1,090	1,670	1,390	1,480	2,570	2,020	1,150	1,190	207	220	257
10	853	1,100	1,710	1,390	1,900	3,000	2,050	1,180	1,450	182	237	372
11	1,140	1,080	1,660	1,390	1,800	3,300	2,190	1,250	1,400	170	381	312
12	908	586	1,600	1,450	1,610	3,330	2,200	1,150	1,390	161	320	279
13	882	174	1,570	1,470	1,680	3,280	2,190	1,100	1,280	150	239	402
14	910	113	1,710	1,370	1,650	3,020	2,130	1,650	1,000	148	203	579
15	908	103	1,760	1,390	1,620	2,800	2,090	1,910	671	154	185	488
16	886	120	1,770	1,430	1,630	2,620	1,940	1,650	771	160	174	586
17	878	757	1,650	1,440	1,570	2,710	1,930	1,260	830	167	170	492
18	852	1,050	e1,370	1,410	1,530	2,690	1,970	977	1,030	165	166	489
19	958	1,110	e1,130	1,370	1,660	2,710	1,860	479	1,430	165	172	399
20	1,070	1,190	e1,020	1,260	1,680	2,790	1,740	161	1,430	168	180	426
21	1,070	1,240	e998	1,370	1,450	2,740	1,670	814	1,320	167	183	498
22	996	1,320	e1,090	1,290	1,580	2,730	1,700	1,380	1,280	176	189	480
23	1,080	866	e1,320	1,570	1,800	2,680	1,690	1,490	e1,230	179	192	692
24	962	1,030	e1,320	1,530	1,650	2,660	1,790	1,140	1,180	183	199	567
25	965	1,210	e1,290	1,420	1,690	2,700	2,020	394	977	179	207	448
26	943	1,370	e1,570	1,390	1,780	2,780	2,010	1,340	520	181	216	448
27	1,410	1,500	1,650	1,430	1,660	2,830	1,890	1,530	201	194	241	324
28	1,780	1,540	e1,590	1,550	1,540	3,000	1,570	1,230	165	208	250	340
29	2,210	1,620	e1,510	1,500	1,720	2,960	1,550	412	199	439	314	394
30	1,650	1,520	e1,410	1,500		2,710	1,710	231	269	586	387	430
31	1,210		e1,310	1,580		2,460		1,260		529	379	
Total	37,160	30,730	45,180	45,120	46,670	79,430	58,940	37,920	28,810	13,070	7,549	12,620
Mean	1,199	1,024	1,457	1,455	1,608	2,562	1,965	1,223	960	422	244	421
Max	2210	1620	1770	1690	1900	3330	2340	1910	1650	1380	387	692
Min	852	103	998	1260	1410	1630	1550	161	165	148	166	254
Ac-ft	73,710	60,950	89,610	89,490	92,570	157,500	116,900	75,210	57,150	25,929	14,970	25,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2020, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,222	1,472	1,547	1,664	1,768	2,244	2,736	2,702	2,003	624	534	794
Max	4,240	4,471	4,414	3,639	5,966	6,041	7,258	9,598	9,201	4,186	3,045	3,423
(WY)	(1984)	(1985)	(1984)	(1984)	(1986)	(1986)	(1985)	(1984)	(1984)	(1983)	(1983)	(1984)
Min	95.6	621	535	620	723	897	638	71.8	77.6	40.4	46.8	62.2
(WY)	(1993)	(1995)	(1995)	(1993)	(1993)	(2015)	(1992)	(1992)	(1992)	(2003)	(2004)	(1992)

Figure 2020.18 (cont.)