US Army Corps of Engineers ®
Northwestern Division

Missouri River Basin
Water Management Division

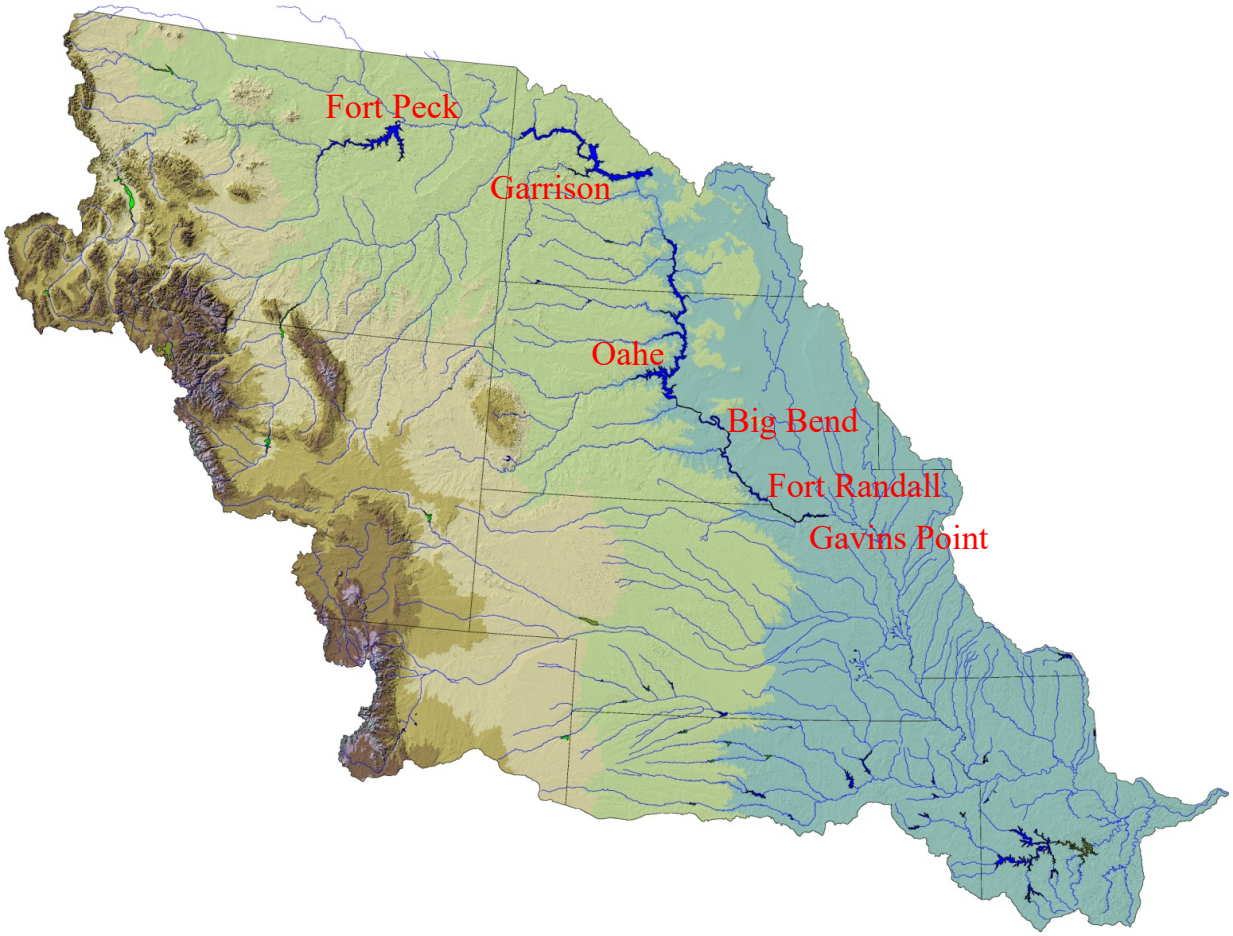
*Final*

# AOP

*2019-2020*

## *Missouri River Mainstem System*

# *2019-2020 Annual Operating Plan*




***Annual Operating Plan Process***
***67 Years Serving the Missouri River Basin***

***December 2019***

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**DEPARTMENT OF THE ARMY**
**U.S. ARMY CORPS OF ENGINEERS, NORTHWESTERN DIVISION**
**PO BOX 2870**
**PORTLAND, OR 97208-2870**

January 10th, 2020

Division Commander

Dear Stakeholders and Concerned Citizens,

Flooding in the Missouri River basin during 2019 has severely impacted many communities, homeowners, farmers and businesses. As we move forward in 2020, the Corps of Engineers is committed to working with other agencies and stakeholders to be prepare the system for the 2020 runoff season and reduce flood risk throughout the basin. This Annual Operating Plan (AOP) presents the Corps' regulation of the Missouri River Mainstem Reservoir System through December 2020. The information in this AOP is based upon water management guidelines designed to meet the reservoir regulation objectives of the 2018 Missouri River Master Water Control Manual (Master Manual).

The AOP presents plans for the regulation of the reservoir system under widely varying water supply conditions. The AOP is not intended to be a forecast for the coming year; rather the guidelines included in the Master Manual are applied to computer simulations of the reservoir system regulation assuming five statistically derived inflow scenarios based on an analysis of water supply records from 1898 to 2011. This approach provides a good range of water management simulation for dry, average, and wet conditions. The AOP provides a framework for the development of detailed monthly, weekly, and daily regulation schedules for the mainstem reservoir system's six individual dams during the upcoming year to serve its Congressionally-authorized project purposes. Actual real-time regulation is done using the best information and tools available and is adjusted to respond to changing conditions on the ground.

A draft of this AOP was made available to the public in September 2019. Seven public meetings were held across the basin in late October. As part of continued communication, monthly conference calls will be conducted by the Corps in 2020 with Federal, state, county and local officials, Tribes, emergency management officials, independent experts and the press to discuss conditions on the ground and current Corps' reservoir release plans and forecasts.

Runoff into the Missouri River basin in 2019 was 60.9 million acre feet. This makes 2019 the second highest runoff in 121 years of record. Higher than average releases through the summer and fall, and higher-than-average winter releases are planned as part of our effort to evacuate the 2019 runoff before the start of the 2020 runoff season. With consideration of ongoing critical levee repairs, we are committed to an aggressive release schedule throughout the winter and early spring as it appears that 2020 has the potential to be another high runoff year. We realize that the benefits provided by the reservoir system are vitally important to the Nation and the people that live and work in the Basin. We believe that the continued implementation of the Master Manual, and more specifically this AOP, will result in an appropriate balance of benefits provided to all of the people who rely on the reservoir system. Thank you for your interest in the regulation of the mainstem reservoir system.

Sincerely,

D. Peter Helmlinger, P.E.
Brigadier General, USA
Division Commander

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**MISSOURI RIVER MAINSTEM RESERVOIR SYSTEM**

**Annual Operating Plan**
**2019 - 2020**

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## ABBREVIATIONS

| | | |
|---|---|---|
| AOP | - | annual operating plan |
| ACHP | - | Advisory Council on Historic Preservation |
| AF | - | acre-feet |
| B | - | Billion |
| BiOp | - | Biological Opinion |
| BOR | - | Bureau of Reclamation |
| cfs | - | cubic feet per second |
| Corps | - | Corps of Engineers |
| CY | - | calendar year (January 1 to December 31) |
| elev | - | elevation |
| ESA | - | Endangered Species Act |
| ft | - | feet |
| FTT | - | Flow-to-Target |
| FY | - | fiscal year (October 1 to September 30) |
| GWh | - | gigawatt hour |
| ISAP | - | Independent Science Advisory Panel |
| KAF | - | 1,000 acre-feet |
| kcfs | - | 1,000 cubic feet per second |
| kW | - | kilowatt |
| kWh | - | kilowatt hour |
| MAF | - | million acre-feet |
| MRNRC | - | Missouri River Natural Resources Committee |
| MRBWMD | - | Missouri River Basin Water Management Division |
| msl | - | mean sea level |
| MW | - | megawatt |
| MWh | - | megawatt hour |
| NEPA | - | National Environmental Policy Act |
| plover | - | piping plover |
| PA | - | Programmatic Agreement |
| P-S MBP | - | Pick-Sloan Missouri Basin Program |
| RCC | - | Reservoir Control Center |
| RM | - | river mile |
| RPA | - | Reasonable and Prudent Alternative |
| SHPO | - | State Historic Preservation Officers |
| SR | - | Steady Release |
| System | - | Missouri River Mainstem System |
| tern | - | interior least tern |
| T&E | - | Threatened and Endangered |
| THPO | - | Tribal Historic Preservation Officers |
| USFWS | - | United States Fish and Wildlife Service |
| WY | - | water year |
| yr | - | year |

## DEFINITION OF TERMS

Acre-foot (AF, ac-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,850 gallons.

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute. The volume of water represented by a flow of 1 cubic foot per second for 24 hours is equivalent to 86,400 cubic feet, approximately 1.983 acre-feet, or 646,272 gallons.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded water.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Runoff in inches shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

**MISSOURI RIVER MAINSTEM RESERVOIR SYSTEM**

**Annual Operating Plan**
**2019 – 2020**

## I. FOREWORD

This Annual Operating Plan (AOP) presents pertinent information and plans for regulating the Missouri River Mainstem Reservoir System (System) through December 2020 under widely varying water supply conditions. It provides a framework for the development of detailed monthly, weekly, and daily regulation schedules for the System's six individual projects during the coming year to serve the Congressionally authorized project purposes; to fulfill the Corps' responsibilities to Native American Tribes; and to comply with environmental laws, including the Endangered Species Act (ESA). Regulation of the System is directed by the Missouri River Basin Water Management Division (MRBWMD), Northwestern Division, U. S. Army Corps of Engineers (Corps) located in Omaha, Nebraska. A map of the Missouri River basin is shown on ***Plate 1*** and the summary of engineering data for the six individual mainstem projects and System is shown on ***Plate 2***.

It is important to note that the AOP is not intended to be a forecast for the coming year; rather it examines a range of potential runoff scenarios which span 80 percent of the historic record. There is still a 10 percent chance that runoff will be higher than shown in the AOP and a 10 percent chance that it will be lower. The studies included in the AOP provide an array of reservoir levels and releases that may be expected under the various runoff scenarios. Actual real-time regulation of the System is accomplished using the best information and tools available and is adjusted to respond to changing conditions on the ground. As the runoff season unfolds, there is a possibility that real-time regulation plans will indicate runoff volumes, reservoir levels and releases outside those anticipated in this report. Should that occur, the Corps will appreciably increase its communication and outreach efforts to convey that information to stakeholders throughout the basin so that other Federal, state and local agencies, Tribes, communities, and local residents can take appropriate actions.

This plan may require adjustments such as when substantial departures from expected runoff occur; to meet emergencies including short-term intrasystem adjustments to protect human health and safety, to maintain minimum river or reservoir levels to keep intakes operational during periods of extended drought, and to prevent loss of historic and cultural properties; or to meet the provisions of applicable laws, including the ESA. These adjustments would be made to the extent possible after evaluating impacts to all System uses, would generally be short-term in nature, and would continue only until the issue is resolved.

This document provides the plan for future regulation of the System. Other documents that may be of interest include the "System Description and Regulation" report dated November 2007 or the "Summary of Actual 2018 Regulation," dated July 2019. Both reports are currently available at the "Reports and Publications" link on our website at: **www.nwd-mr.usace.army.mil/rcc**, or you may contact the Missouri River Basin Water Management Division at 1616 Capitol Avenue, Suite 365, Omaha, Nebraska 68102-4909, phone (402) 996-3841 for copies. The "Summary of Actual 2019 Regulation" will be available at the same site in late spring or early summer of 2020.

## II. BACKGROUND AND AOP PROCESS

Beginning in 1953, projected System reservoir regulation for the year ahead was developed annually as a basis for advance coordination with the various interested Federal, state, and local agencies and private citizens. Also beginning in 1953, a coordinating committee was organized to make recommendations on each upcoming year's System regulation. The Coordinating Committee on Missouri River Mainstem Reservoir Operations held meetings semiannually until 1981 and provided recommendations to the Corps. In 1982, the Committee was dissolved because it did not conform to the provisions of the Federal Advisory Committee Act. Since 1982, to continue providing a forum for public participation, one or more open public meetings are held semiannually in the spring and fall. The fall public meetings are conducted to take public input on the draft AOP, which typically is published in mid-September each year. The spring meetings are conducted to update the public on the current hydrologic conditions and projected System regulation for the remainder of the year as it relates to implementing the final AOP.

Under the terms of Stipulation 18 of the March 2004 "Programmatic Agreement for the Operation and Management of the Missouri River Main Stem System for Compliance with the National Historic Preservation Act, as amended" (PA) the Corps has agreed to consult/meet with the affected Tribes and Tribal Historic Preservation Officers (THPOs), State Historic Preservation Officers (SHPOs), the Advisory Council on Historic Preservation (ACHP) and other parties on the draft AOP. The purpose of this consultation/meeting is to determine whether operational changes are likely to cause changes to the nature, location or severity of adverse effects to historic properties or to the types of historic properties affected and whether amendments to the Corps Cultural Resources Management Plans and Five-Year Plan are warranted in order to better address such effects to historic properties. During 2006 the Corps worked with the affected Tribes to establish processes for consultation on AOPs under 36 CFR Part 800, the PA, and Executive Order 13175. The process consists of a series of informational meetings with the Tribes and/or government-to-government consultation with Tribes, as requested. A letter dated September 18, 2019 was sent to the Tribes offering consultation on the 2019-2020 AOP. Meeting times and locations of

the seven fall public meetings were also provided. Separate meetings will be scheduled for all Tribes requesting government-to-government consultation. All tribes, whether signatory to the PA or not, may request government-to-government consultation on this and all future AOPs. In addition, the Tribes have reserved water rights to the Missouri River and its major tributaries. In no way does this AOP attempt to define, regulate or quantify water rights or any other rights that the Tribes are entitled to by law or treaty.

The 2019 spring public meetings were held at the following locations and dates: April 9 at Fort Peck, Montana and Bismarck, ND; April 10 at Fort Pierre, South Dakota and Sioux City, Iowa; and April 11 at Smithville, Missouri and Nebraska City, Nebraska. The attendees were given an update regarding the outlook for 2019 runoff and projected System regulation for the remainder of 2019. Seven fall public meetings on the draft 2019-2020 AOP were held at the following locations: October 22 in Fort Peck, Montana and Bismarck, North Dakota; October 23 in Fort Pierre, South Dakota and Sioux City, Iowa; October 24 in Smithville, Missouri and Nebraska City, Nebraska and October 25 in Jefferson City, Missouri. In the spring of 2020, public meetings will be held to discuss the basin's hydrologic conditions and the effects those conditions are expected to have on the implementation of the final 2019-2020 AOP.

## III. MAINSTEM MASTER MANUAL AND ESA CONSULTATIONS

The System is comprised of six dam and reservoir projects authorized by the Rivers and Harbors Act of 1935 and the Flood Control Act of 1944. Section 9 of the 1944 Flood Control Act authorized the System to be operated for the purposes of flood control, navigation, irrigation, hydropower, water supply, water quality control, recreation and fish and wildlife. In addition, operation of the System must also comply with other applicable Federal statutory and regulatory requirements, including the ESA. The System is regulated using guidelines published in the Master Manual. The Master Manual presents the water control plan and operational objectives for the integrated regulation of the System. Annual water management plans (Annual Operating Plans) are prepared each year, based on the water control criteria contained in the Master Manual, in order to describe potential reservoir regulation of the System for the current operating year under a variety of runoff conditions.

First published in 1960 and subsequently revised during the 1970s, the Master Manual was again revised in March 2004, primarily to include more stringent drought conservation measures. In March 2006 the Master Manual was again revised to include technical criteria for a spring pulse to comply with a 2003 USFWS Amended Biological Opinion. Neither the 2004 Master Manual, nor the 2006 revisions to the Master Manual, changed the volume of storage in the System reserved for flood risk reduction or the basic principles of how that storage is regulated.

On November 30, 2011 the MRRP Independent Science Advisory Panel (ISAP) released its Final Report on Spring Pulses and Adaptive Management. This report, commissioned by the Missouri River Recovery Implementation Committee (MRRIC), evaluated the Gavins Point spring pulses that were implemented in regards to the biological outcomes the USFWS sought in the 2003 Amended BiOp. The ISAP concluded that spring pulses as implemented were not accomplishing their intended outcomes and provided recommendations towards achieving a new management paradigm for achieving compliance with the Endangered Species Act along the Missouri River.

Following the release of that report, the Corps and USFWS, in coordination with MRRIC, aggressively pursued completion of the recommendations laid out by the ISAP. At the center of this effort was the development of a Missouri River Recovery Management Plan and Environmental Impact Statement (MRRMP-EIS). The Record of Decision (ROD) for the MRRMP-EIS was signed on 20 November 2018. The MRRMP-EIS established an overarching adaptive management process for implementation of actions required to avoid jeopardizing the listed species in the Missouri River basin as a result of Corps projects. The preferred alternative selected no longer called for the spring pulse and reservoir unbalancing criteria in the 2006 Master Manual, therefore following the ROD, in 2018 the Master Manual was revised to remove these provisions.

Concurrent with the MRRMP-EIS process, the Corps conducted consultation with the USFWS, as required by Section 7 of the Endangered Species Act, resulting in a new BiOp being issued in April 2018. Current regulation of the System in accordance with the Master Manual to serve authorized project purposes is dependent on successful implementation of the 2018 BiOp. The Missouri River Recovery Program (MRRP), together with the MRBWMD, works to ensure implementation of the BiOp elements as described in the preferred alternative. Simply put, the Corps must comply with environmental laws including the ESA, and the MRRP is the vehicle used to accomplish this. This AOP identifies flow operations at Garrison, Fort Randall and Gavins Point for the benefit of the endangered interior least tern (tern) and the threatened piping plover (plover) while maintaining flood control and navigation as primary authorized purposes.

Additional information on other efforts undertaken through the MRRP to meet the requirements of the 2018 BiOp can be found on the MRRP website at: https://www.nwo.usace.army.mil/MRRP/.

## IV. ONGOING COORDINATION, STUDIES AND REPORTS

As committed to following the 2011 Flood, the Corps communicated more broadly and frequently in 2019 by holding monthly conference calls from January to May with Federal, state, county and local officials, Tribes, emergency management officials, independent experts and the media to discuss conditions on the ground and the current release plans and forecasts. In addition, ad-hoc and daily calls were held in mid-March, and weekly calls were held from June to August. Monthly calls resumed in September and were held through the fall. Recordings of the conference calls were made available to the public. Monthly outreach calls will continue in January 2020 or as needed if basin and/or weather conditions change dramatically.

The Corps continues to collaborate with other Federal, state and local agencies and our field offices to improve runoff forecasts, particularly as it relates to soil moisture and plains snowpack. This will require a collaborative effort to improve both data collection (i.e. plains snowpack water equivalent, soil moisture and frost depth) and hydrologic modeling. Refer to previous AOPs for details regarding the history of the Upper Missouri Basin Monitoring Network for Soil Moisture and Plains Snow (UMB MN). In 2018 the Corps allocated $100,000 to update the proposal with new equipment and costs, as well as to develop interagency agreements with partner federal, state and research/extension agencies regarding the purchase, installation and ongoing maintenance of equipment, retrieval, QA/QC, storage and dissemination of data, and development of soil moisture and plains snow products that could be integrated into runoff and water supply models and forecasting techniques. Those 2018 funds were primarily used to fund a study by South Dakota State University (SDSU), specifically the South Dakota Mesonet office, to establish an instrumentation test bed at the SDSU site, install and analyze equipment performance, and provide a recommendation for equipment to be purchased and installed at each UMB MN site. Funding was made available in 2019 for the purchase of some equipment. Effort is also continuing regarding other aspects of the UMB MN: 1) leveraging existing soil moisture networks to outfit them with plains snow monitoring equipment and possible upgrading of existing soil moisture and hydro-meteorological instrumentation; 2) identifying locations for new sites; 3) establishing interagency agreement with partners regarding installation and maintenance of the UMB MN; and 4) data management of the acquired data so it can accessed and utilized by partner agencies. The establishment of the UMB MN, which is expected to include up to 600 sites in the 270,000-square mile plains area of the Upper Missouri River basin, will likely take five to seven more years beyond 2019 to be fully implemented.

The Water Management office continues to participate in a variety of regional and national climate change teams. The National Oceanic and Atmospheric Administration (NOAA) also collaborated with the Corps and other agencies on a three-part study. The

first part was a climate attribution effort focusing on the 2011 event. The second part of the study was an assessment of the skill and reliability of predictions of seasonal climate and the ability to predict rapid transitions of cycles from wet to dry and dry to wet. The third part was a climate assessment of the causes for hydrologic extremes in the upper Missouri River basin which was completed by NOAA and the University of Colorado's Cooperative Institute of Research in Environmental Sciences. All three reports are available at https://www.drought.gov/drought/dews/missouri-river-basin/reports-assessments-and-outlooks.

## V. FUTURE RUNOFF: AUGUST 2019 - DECEMBER 2020

Runoff into the six System reservoirs is typically low and relatively stable during the August through February period. The August 1 calendar year runoff forecast is used as input to the basic reservoir regulation simulation (Basic) in the AOP studies for the period August 2019 through February 2020. The August 1 runoff forecast for 2019 was 52.9 million acre-feet (MAF). Two other runoff scenarios based on the August 1 runoff forecast were developed for the same period. These are the Upper Basic (wetter than forecast) and Lower Basic (drier than forecast) simulations. The Upper and Lower Basic simulations are based on a percentage of the Basic runoff. The adjusted Upper and Lower Basic values for each month and reach are shown as percentages in ***Tables I*** and ***II***. The percentages shown are used for the August through February period in the AOP simulations. These percentages are also used in the regularly updated monthly reservoir simulations. The report detailing the computation of these runoff factors was posted to the Corps' website in January 2015.

**TABLE I**
**UPPER BASIC RUNOFF PERCENTAGES**

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fort Peck | 120 | 120 | 135 | 145 | 135 | 145 | 145 | 130 | 120 | 120 | 120 | 120 |
| Garrison | 120 | 120 | 135 | 145 | 135 | 145 | 145 | 130 | 120 | 120 | 120 | 120 |
| Oahe | 140 | 140 | 150 | 155 | 155 | 145 | 140 | 135 | 135 | 135 | 135 | 135 |
| Fort Randall | 140 | 140 | 150 | 155 | 155 | 145 | 140 | 135 | 135 | 135 | 135 | 135 |
| Gavins Point | 140 | 140 | 150 | 155 | 155 | 145 | 140 | 135 | 135 | 135 | 135 | 135 |
| Sioux City | 140 | 140 | 150 | 155 | 155 | 145 | 140 | 135 | 135 | 135 | 135 | 135 |

**TABLE II**
**LOWER BASIC RUNOFF PERCENTAGES**

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fort Peck | 80 | 75 | 65 | 65 | 70 | 65 | 65 | 70 | 75 | 80 | 80 | 80 |
| Garrison | 80 | 75 | 65 | 65 | 70 | 65 | 65 | 70 | 75 | 80 | 80 | 80 |
| Oahe | 75 | 75 | 55 | 50 | 50 | 50 | 55 | 65 | 75 | 75 | 75 | 75 |
| Fort Randall | 75 | 75 | 55 | 50 | 50 | 50 | 55 | 65 | 75 | 75 | 75 | 75 |
| Gavins Point | 75 | 75 | 55 | 50 | 50 | 50 | 55 | 65 | 75 | 75 | 75 | 75 |
| Sioux City | 75 | 75 | 55 | 50 | 50 | 50 | 55 | 65 | 75 | 75 | 75 | 75 |

Simulations for the March 1, 2020 to February 28, 2021 time period use five statistically derived runoff scenarios based on an analysis of historic water supply. The report detailing the development of these runoff scenarios, "Runoff Volumes for Annual Operating Plan Studies", was updated in August 2013 to include five additional years of runoff data that now extends from 1898 to 2011. In addition to the five runoff scenarios, the updated analysis added two runoff scenarios, one each at the upper and lower end, to span 96 percent of the historic record. Using statistically derived runoff scenarios for the AOP provides a good range of simulation for dry, average, and wet conditions, and eliminates the need to forecast future precipitation months in advance. As noted in the second NOAA study (see Chapter IV), for the lead times (one to six months) and times of year of interest (January-February-March and April-May-June) in the Missouri River basin, there is no useful skill and reliability of precipitation forecasts. Real-time regulation of the System is based on all available and relevant hydrometerological information including, but not limited to, observed runoff volumes, National Weather Service short- and long-range outlooks, plains and mountain snow water equivalent data, observed base flows, soil moisture, and soil frost depths.

The five statistically derived runoffs used in the AOP are identified as the Upper Decile, Upper Quartile, Median, Lower Quartile and Lower Decile runoff conditions. Upper Decile runoff (34.5 MAF) has a 1 in 10 chance of being exceeded, Upper Quartile runoff (30.6 MAF) has a 1 in 4 chance of being exceeded, and Median runoff (24.6 MAF) has a 1 in 2 chance of being exceeded. Lower Quartile runoff (19.3 MAF) has a 1 in 4 chance of the occurrence of less runoff, and Lower Decile runoff (16.1 MAF) has a 1 in 10 chance of the occurrence of less runoff. There is still a 20 percent chance that a runoff condition may occur that has not been simulated; i.e., a 10 percent chance runoff could be lower than Lower Decile and a 10 percent chance runoff could be greater than Upper Decile.

The two additional runoff volumes included in the updated "Runoff Volumes for Annual Operating Plan Studies" report are the 2 percent and 98 percent exceedance levels. Annual runoff at the 2 percent exceedance (40.1 MAF) has a 1 in 50 chance of being exceeded; the 98 percent exceedance (11.4 MAF) has a 1 in 50 chance of the occurrence of less runoff. Although these runoff volumes were not included as

scenarios in this year's AOP, additional monthly studies could be performed based on these runoff volumes, or any prior year's runoff volume and distribution, as the 2019 runoff season unfolds should the runoff forecast exceed the Upper Decile runoff scenario or be lower than the Lower Decile runoff.

The Upper Decile and Upper Quartile simulations extend from the end of the Upper Basic simulation through February 2021. Likewise, the Median simulation extends from the end of the Basic simulation, and the Lower Quartile and Lower Decile simulations extend from the end of the Lower Basic simulation through February 2021.

The estimated natural flow at Sioux City, the corresponding post-1949 water use effects, and the net flow available above Sioux City are shown in ***Table III,*** where water supply conditions are quantified for the period August 2019 through February 2021. The natural water supply for calendar year (CY) 2018 totaled 42.1 MAF.

**TABLE III**
**NATURAL AND NET RUNOFF AT SIOUX CITY**
**(Volumes in 1,000 Acre-Feet)**

| | Natural 1/ | Post-1949 Depletions | Net 2/ |
|---|---|---|---|
| August 2019 through February 2020 (Basic Runoff Scenario) | | | |
| Basic | 9,500 | 1,000 | 10,500 |
| Upper Basic | 12,100 | 1,000 | 13,100 |
| Lower Basic | 7,100 | 400 | 7,500 |
| Runoff Year March 2020 through February 2021 (Statistical Analysis of Past Records) | | | |
| Upper Decile | 34,500 | -3,000 | 31,500 |
| Upper Quartile | 30,600 | -3,000 | 27,600 |
| Median | 24,600 | -3,000 | 21,600 |
| Lower Quartile | 19,300 | -3,100 | 16,200 |
| Lower Decile | 16,100 | -3,000 | 13,100 |

1/ The word "Natural" is used to designate runoff adjusted to the 1949 level of basin development, except that regulation and evaporation effects of the Fort Peck reservoir have also been eliminated during its period of regulation prior to 1949.

2/ The word "Net" represents the total runoff after deduction of the post-1949 irrigation, upstream storage, and other use effects.

## VI. ANNUAL OPERATING PLAN FOR 2019-2020

**A. General.** The anticipated regulation described in this AOP is designed to meet the regulation objectives presented in the current Master Manual. While some aspects of System and individual project regulation are clearly defined by technical criteria in the Master Manual, for example navigation service level and season length, others such as minimum releases for irrigation and water supply in the reaches between the reservoirs are based on regulation experience and may be adjusted as needed to respond to changing conditions. Consideration has been given to all of the authorized project purposes, to historic and cultural resources and to the needs of threatened and endangered (T&E) species. The "System Description and Regulation" report provides a concise summary of the primary aspects of System regulation and should be referred to for further information. For ease of use, a summary of the frequently used technical criteria included in the Master Manual is presented on ***Plate 3.***

The plan relies on a wealth of regulation experience. Reservoir regulation experience available for preparation of the 2019-2020 AOP includes 13 years of regulation at Fort Peck (1940) as the sole Mainstem project, plus 66 years of System experience as Fort Randall (1953), Garrison (1955), Gavins Point (1955), Oahe (1962), and Big Bend (1964) were brought progressively into System regulation. This regulation experience includes lessons learned during two major droughts of six and eight years (1987-1992 and 2000–2007) that have occurred since the System filled in 1967. It also includes the high runoff period 1993–1999 during which five of the seven years experienced runoff greater than Upper Quartile including the previous record runoff of 49.0 MAF in 1997, and the record runoff of 61.0 MAF in 2011. In addition to the long period of actual System reservoir regulation experience, many background regulation studies for the completed System are available for reference.

**B. 2019-2020 AOP Simulations.** Reservoir simulations for the Upper Basic, Basic, and Lower Basic runoff scenarios, which span the period of August 2019 through February 2020, are shown in the final section of this AOP as studies 1 through 3. AOP simulations for the five statistically derived runoff scenarios, which span the period of March 2020 through February 2021 are shown in the final section of this AOP as studies 4 through 8. As previously stated, the simulations use five statistically derived runoff scenarios and reflect 80 percent of the historic annual runoff volumes (between Upper Decile and Lower Decile). The simulations provide information for planning purposes on a range of future reservoir levels and release rates, and are not meant to represent a particular forecast. The simulations shown use a monthly time-step, and thus do not provide the level of detail necessary to address specific flood control regulations. Detailed routing of specific flood flows is accomplished using daily and hourly time-step models which incorporate real-time information including observed precipitation, and these situations are handled individually during real-time regulation.

The AOP studies, in summary, provide the following: the full flood control capacity of the reservoir system will be available at the start of the runoff season; use of the Exclusive Flood Control Zone is not anticipated under any of the five runoff scenarios covered in the AOP; full service flow support for all runoff scenarios to start the navigation season; full service flow support for Lower Quartile and above runoff scenarios after the July 1 System storage check and reduced flow support for Lower Decile runoff; a full length navigation season for all runoff scenarios; near normal winter releases for Median runoff, minimum winter releases for Lower Quartile and Lower Decile runoff, and above normal winter releases for Upper Decile and Upper Quartile runoff; a steady release-flow to target regulation during the tern and plover nesting season for Median and below runoff and nearly steady releases for Upper Decile and Upper Quartile runoff with flood water evacuation; emphasis on Garrison for steady to rising reservoir levels during the forage fish spawn; and reservoir releases and pool levels sufficient to keep all intakes operational under all runoff scenarios. Water conservation measures may be implemented if runoff conditions indicate that it would be appropriate including cycling releases from Gavins Point during the early part of the nesting season, only supporting flow targets in reaches being used by commercial navigation, and utilization of the Kansas River projects authorized for Missouri River navigation flow support. Additional details about the studies are provided in the following paragraphs. Results of the simulations are shown in ***Plate 4*** and ***Plate 5*** for the System storage and the Fort Peck, Garrison and Oahe pool elevations.

Under all runoff scenarios modeled for the AOP, the full flood control capacity of the System is available at the start of the 2020 runoff season. All scenarios begin the runoff season at the base of the Annual Flood Control and Multiple Use Zone.

The March 15 and July 1 System storage checks were used to determine the level of flow support for navigation and other downstream purposes as well as the navigation season length in 2020. Full service navigation flows or more are provided for Lower Quartile and above runoff throughout the navigation season. Service levels for Lower Decile start the season at full service, and drop slightly following the July 1 System storage check (see ***Plate 3***). Application of the July 1 System storage check indicated that a full length navigation season would be provided for all five runoff conditions, with the upper two runoff scenarios including a 10-day extension to the navigation season. Upper Quartile and Upper Decile simulations reach the desired 56.1 MAF System storage level on March 1, 2021. Storage is below the base of the Annual Flood Control and Multiple Use Zone for Median and lower runoff conditions.

For modeling purposes in this AOP, the Steady Release – Flow-to-Target (SR-FTT) regulation scenario for Gavins Point is shown during the 2020 tern and plover nesting season for Median and lower runoff conditions. For these simulations, the monthly average May release used in the simulations was determined by using the long-term

average May release (see ***Plate 3***), based on the service level, for the first third of the month, followed by the July table values for the remainder of the month to reflect a steady release regulation at the start of the nesting season. The modeled June release was set equal to the long-term average release for July (see ***Plate 3***) based on the service level for the first half of the navigation season. The long-term average releases (see ***Plate 3***) were used for July and August to indicate flowing to target. The Upper Decile and Upper Quartile runoff simulations follow the Master Manual, with much above normal runoff requiring release increases mid-year to evacuate flood water from the reservoirs. Although these modeled Gavins Point releases represent the best estimate of required releases during 2020, actual releases will be based on hydrologic conditions and the availability of habitat at that time. To the extent reasonably possible, measures to minimize incidental take of the protected species will be utilized. These may include not meeting flow targets in reaches without commercial navigation and utilizing the Kansas River tributary reservoirs for navigation flow support when appropriate. It may also be necessary to cycle releases for flood control regulation during the T&E species' nesting season or for water conservation if drought conditions develop.

The long-term average Gavins Point releases to meet target flows were used in the AOP studies for navigation support during the spring and fall months with the exception of Upper Decile and Upper Quartile. Under these runoff scenarios, releases were based on flood water evacuation. Based on the September 1 storage checks and flood evacuation criteria, modeled Gavins Point winter releases range from 20,000 cfs to 22,000 cfs during the 2019-2020 winter season and range from 12,500 cfs to 20,000 cfs during the 2020-2021 winter season depending on the runoff scenario. Gavins Point releases will be increased to meet downstream water supply requirements in critical reaches, to the extent reasonably possible, if downstream incremental runoff is low.

The Gavins Point releases shown in this and previous AOPs are estimates based on historic averages and experience. Adjustments are made as necessary in real-time based on hydrologic conditions.

Intrasystem releases are adjusted to best serve the multiple purposes of the projects with special emphasis placed on regulation for non-listed fisheries starting in early April and for T&E bird species beginning in early May and continuing through August. As part of the overall plan to rotate emphasis among the upper three reservoirs during low runoff years, Garrison is scheduled to be favored during the 2020 forage fish spawn while also attempting to maintain rising water levels at Fort Peck and Oahe. The Median, Upper Quartile, and Upper Decile simulations show that it is possible to provide steady-to-rising pool levels in each of the three large upper reservoirs during the spring forage fish spawn period. Insufficient runoff is available in the Lower Quartile and Lower Decile simulations to keep all three reservoirs rising. In the Lower Quartile and Lower Decile simulations, the Garrison reservoir levels decline

in April but rise in May. The Oahe reservoir level declines in April and May in the Lower Quartile and Lower Decile simulations.

Intrasystem releases are also adjusted so that the upper three reservoirs are shown in a balanced condition each year on March 1, the approximate start of the runoff season. This balancing is computed based on the percent of storage in the respective Carryover Multiple Use Zones.

Actual System regulation from January 1 through July 31, 2019 and the simulated regulating plans for each project through CY 2020 using the five runoff scenarios described on Page 4 are presented on ***Plate 6*** through ***Plate 11***, inclusive. Big Bend regulation is omitted since storage at that project is relatively constant and average monthly releases are essentially the same as those at Oahe. These plates also show, on a condensed scale, actual regulation since 1953.

***Plate 12*** illustrates Fort Peck, Garrison, Oahe, and Gavins Point actual releases (Regulated Flow) as well as the Missouri River flows that would have resulted if the reservoirs were not in place (Unregulated Flow) during the period January 2018 through July 2019. ***Plate 13*** presents past and simulated gross average monthly power generation and gross peaking capability for the System.

**C. <u>Actual Regulation for the Balance of the 2019 Navigation Season and Fall of 2019.</u>** The regulation of the System for the period of August through November 2019 is presented in the following paragraphs.

<u>Fort Peck</u>. Releases were held steady near 15,000 cfs from August through the end of November. The Fort Peck pool declined through the fall, ending the month of November at 2238.8 feet or 7.4 feet below the August 1 elevation of 2246.2 feet.

<u>Garrison</u>. Releases were maintained near 46,000 cfs through mid-October, and then increased to 48,000 cfs. Releases remained at that rate until mid-November when they were reduced to 24,000 cfs and held steady through the end of the month. The Garrison pool steadily dropped through the fall and ended the month of November at 1839.1 feet or 12.6 feet below the August 1 elevation of 1851.7 feet.

<u>Oahe</u>. The reservoir started the month of August at the base of the Exclusive Flood Control Pool, elevation 1617.0 feet. Releases averaged 57,000 cfs in August, 55,600 cfs in September, 62,200 cfs in October, and 64,900 cfs in November to evacuate the flood waters from the annual flood control pool. At the end of November, the Oahe pool was at elevation 1610.1 feet or 6.9 feet below the August 1 elevation.

Big Bend. Releases generally parallel those from Oahe. The Big Bend pool generally fluctuates between 1420.0 feet msl and 1421.0 feet msl for weekly cycling during high power load periods.

Fort Randall. Releases averaged 65,300 cfs in August, 63,800 cfs in September, 75,000 cfs in October, and 74,200 cfs in November to back up the releases from Gavins Point. High runoff in September delayed the start of the fall pool drawdown of Fort Randall until mid-September. The reservoir drawdown was completed near the end of November. Releases will be reduced after the navigation season ends to the level required to back up Gavins Point winter releases.

Gavins Point. Releases were scheduled above full service flows to evacuate water from the reservoir system through early December. A full length navigation season, plus a 10-day extension, were provided in accordance with the technical criteria for the July 1 System storage check presented in the Master Manual. In accordance with the Master Manual, during years of greater than normal water supply, the navigation season is extended as both an additional evacuation measure and to provide an increased benefit to navigation while striving to reach the base of the Annual Flood Control and Multiple Use Zone by March 1 the following season. The closing dates for the commercial navigation season ranged from December 2 at Sioux City, Iowa to December 11 at the mouth near St. Louis, Missouri. Releases were reduced from 80,000 cfs to 70,000 cfs in late November to slow the drawdown of the Fort Randall reservoir. Releases were then reduced, initially 5,000 cfs per day beginning on December 3, and then by 3,000 cfs per day, working toward the target winter release. The Gavins Point pool level was raised 1.5 feet to elevation 1207.5 feet msl in the late fall. The pool level will remain near that elevation during the winter months.

**D. Regulation Plan for Winter 2019-2020.** The regulation of the System presented in the following paragraphs is based on the previously discussed AOP simulations. Actual real-time regulation of the System is adjusted to respond to changing conditions on the ground. The latest long-term reservoir regulation forecasts, which are updated monthly, can be found on the Corps' website. The September 1 System storage check is used to determine the winter release rate from Gavins Point. A winter release of 12,000 cfs is scheduled if System storage is less than 55.0 MAF on September 1; 17,000 cfs is scheduled when System storage is above 58.0 MAF; and the release is prorated for System storages between 55.0 and 58.0 MAF. A modification to the winter release rate from Gavins Point dam may occur when the evacuation of System flood control storage cannot be accomplished by providing a full-service navigation season with a 10-day extension of the navigation season. With an excess annual water supply, the winter season Gavins Point release may be scheduled at a rate of up to 25,000 cfs to continue to evacuate the remaining excess water in System flood control storage. Based on the studies included in this AOP, the scheduled winter System release for 2019-2020 will range from 20,000 to 22,000 cfs. It is anticipated that this year's winter release will be

adequate to complete evacuation of stored flood waters and serve all downstream water intakes. Water supply is discussed in more detail in Chapter VII, Section B.

Fort Peck. Releases are expected to average 12,000 cfs in December, January and February to serve winter power loads and to help balance System storage. The Fort Peck pool level is expected to decline about 4.3 feet from December through February to near elevation 2234.0 feet by March 1. At the beginning of March, the Fort Peck pool will be at the base of its Annual Flood Control and Multiple Use Zone.

Garrison. Releases are scheduled to average 20,000 cfs in December increasing to 24,000 cfs for January and February to serve winter power loads and to help balance System storage. Releases will be held steady or lowered, most likely in December, to prevent ice-induced flooding at the time of freeze-in and then gradually increased as river conditions permit. These temporary reductions in the releases may be scheduled to prevent exceedance of a 13-foot stage at the Missouri River at Bismarck streamgaging station. The Bismarck flood stage is 14.5 feet. Water Management staff will coordinate closely with other Federal, state and local agencies during periods of freeze-in and ice-out to reduce flood risk and ensure communities and local residents are aware of the rapidly changing conditions and are prepared to take appropriate actions. The Garrison pool level will decline 2.5 feet from elevation 1840.0 feet at the end of November to near elevation 1837.5 feet by March 1, the base of its Annual Flood Control and Multiple Use Zone.

Oahe. Releases for the winter season will provide backup for the Fort Randall and Gavins Point releases as well as refill the recapture space available in the Fort Randall reservoir consistent with anticipated winter power loads. Monthly average releases may vary substantially with fluctuations in power loads occasioned by weather conditions but, in general, are expected to average between 22,400 cfs and 25,700 cfs. Daily and hourly releases will vary widely to best meet power loads. Peak hourly and minimum hourly releases, as well as daily energy generation, will be constrained to prevent urban flooding in the Pierre and Fort Pierre areas if severe ice conditions develop downstream of Oahe Dam. This potential reduction is coordinated with the Western Area Power Administration (Western). The Oahe pool level is expected to decline from 1608.3 feet at the end of November to 1606.8 feet at the end of December, hold steady through January before rising to near elevation 1607.5 feet by the end of February, the base of its Annual Flood Control and Multiple Use Zone.

Big Bend. The Big Bend pool level will be maintained in the normal 1420.0 feet to 1421.0 feet range during the winter.

Fort Randall. Releases will average about 20,200 cfs during the winter season to support Gavins Point winter releases. The Fort Randall pool level is expected to rise from its fall drawdown elevation of near 1337.5 feet near the end of November or early

December to near elevation 1350.0 feet, the seasonal base of flood control, by March 1. However, if the plains snowpack flood potential downstream of Oahe Dam is lower than normal, the Fort Randall pool level will be raised to near 1353.0 feet by March 1. It is likely that a pool level as high as 1355.0 feet could be reached by the end of March if spring runoff has commenced. The Fort Randall pool level above the White River delta near Chamberlain, South Dakota will remain at a higher elevation than the pool level below the delta from early October through December, due to the damming effect of this delta area.

Gavins Point. Gavins Point winter releases are discussed in the first paragraph of this section. The Gavins Point pool level will be near elevation 1207.5 feet until late February when it will be lowered to elevation 1206.0 feet to create additional capacity to store spring runoff.

System storage for all runoff conditions will be at the base of the annual flood control zone of 56.1 MAF by the beginning of next year's runoff season, approximately March 1, 2020.

**E. Regulation During the 2020 Navigation Season.** All five runoff scenarios modeled for this year's AOP follow the technical criteria presented in the current Master Manual for downstream flow support. Beginning in mid-March, Gavins Point releases will be gradually increased to provide navigation flow support at the mouth of the Missouri near St. Louis, Missouri by April 1, 2020, the normal navigation season opening date. The corresponding dates at upstream locations are Sioux City, March 23; Omaha, March 25; Nebraska City, March 26; and Kansas City, March 28. However, if during the 2020 navigation season there is no commercial navigation scheduled to use the upper reaches of the navigation channel, MRBWMD will consider not providing navigation flow support in those reaches to conserve water in the System, reduce flood risk, and/or minimize incidental take of the protected species during the nesting season.

Navigation flow support for the 2020 season will be determined by actual System storage on March 15 and July 1. Runoff scenarios modeled indicate full service flow support at the start of the 2020 navigation season for all runoff conditions. Following the July 1 System storage check, full service would be provided for Lower Quartile and above runoff scenarios. The service level would be 600 cfs below full service for Lower Decile runoff. The normal 8-month navigation season is provided for Median runoff scenarios and below as shown in ***Table IV***. A 10-day extension to the navigation season is provided for the upper two runoff scenarios.

**TABLE IV**
**NAVIGATION SERVICE SUPPORT**
**FOR THE 2020 SEASON**

| | Runoff Scenario (MAF) | System Storage March 15 (MAF) | System Storage July 1 (MAF) | Flow Level Above or Below Full Service (cfs) Spring | Flow Level Above or Below Full Service (cfs) Summer/Fall | Season Shortening (Days) |
|---|---|---|---|---|---|---|
| U.D. | 34.5 | 57.5 | 63.9 | 0 | +19,000 | 0* |
| U.Q. | 30.6 | 57.2 | 63.1 | 0 | +12,000 | 0* |
| Med. | 24.6 | 56.9 | 60.6 | 0 | 0 | 0 |
| L.Q. | 19.3 | 56.7 | 57.3 | 0 | 0 | 0 |
| L.D. | 16.1 | 56.6 | 56.3 | 0 | -600 | 0 |

*Includes 10-day extension for Upper Quartile and Upper Decile.

As previously stated, the modeled regulation for the 2020 nesting season below Gavins Point is SR-FTT. When the SR-FTT release scenario is used, the initial steady release, which has ranged from 24,000 cfs to 33,000 cfs in the several years just prior to recent high runoff years, will be based on hydrologic conditions and the availability of habitat at that time. Model runs included in this AOP have a Gavins Point release which is higher during the last 20 days of May to keep birds from nesting at low elevations. Gavins Point releases will be adjusted to meet downstream targets as tributary flows recede, but ideally the initial steady release will be sufficient to meet downstream targets until the majority of the birds have nested. The purpose of this regulation is to continue to meet the project purposes while minimizing the loss of nesting T&E species. A Gavins Point peaking cycle of two days down and one day up may be used for flood control regulation or to conserve water in the upper three reservoirs, if required. Gavins Point releases for the Upper Decile and Upper Quartile runoff simulations are much above normal to evacuate flood water from the reservoirs. Releases from Garrison and Fort Randall will follow repetitive daily patterns from early May, at the beginning of the T&E species' nesting season, to the end of the nesting season in late August. In addition to the intra-day pattern, Fort Randall releases may also be cycled with two days of lower releases and one day of higher releases during the early part of the nesting season to maintain release flexibility in that reach while minimizing the potential for take. If higher daily releases are required later in the nesting season, the daily peaking pattern may be adjusted, reduced or eliminated resulting in a steady release to avoid increased stages at downstream nesting sites.

Gavins Point releases may be quite variable during the 2020 navigation season but are expected to range from 26,000 to 51,000 cfs under the five modeled runoff scenarios. Release reductions necessary to minimize downstream flooding are not reflected in the

monthly averages shown in the simulations but will be implemented as conditions warrant. Reductions in System releases to integrate the use of downstream Missouri River flow support from the designated Kansas River projects (Milford, Tuttle Creek and Perry) authorized to provide Missouri River navigation flow support have not been modeled since they are based on downstream hydrologic conditions. However, this storage will be utilized to the extent possible as a water conservation measure, or to minimize incidental take of protected species during the nesting season if conditions indicate it is prudent to do so. Simulated storages and releases for the System and individual reservoirs within the System are shown on ***Plate 6*** through ***Plate 11.*** As experienced in 2011 and 2019, runoff above or below simulated levels can occur and result in releases beyond those modeled for the AOP. As previously stated, should that occur, the Corps will increase its efforts to convey that information throughout the basin so that state, Tribal, and local agencies, communities, and local residents can take appropriate action.

**F. Regulation Activities for T&E Species and Fish Propagation Enhancement.** The ability to provide steady-to-rising pool levels in the upper three reservoirs in low runoff years is very dependent on the volume, timing, and distribution of runoff. The reservoir regulation simulations presented in this AOP for the Upper Decile, Upper Quartile, and Median runoff scenarios show that steady-to-rising pool levels would occur during the spring fish spawn period for the upper three reservoirs. As part of the overall plan to rotate emphasis among the upper three reservoirs during low runoff years, Garrison is scheduled to be favored during the 2020 forage fish spawn if runoff is below the Median runoff scenario. This will be accomplished by setting releases at Fort Peck and Garrison at a level that would attempt to maintain a rising Garrison pool, but no less than the minimum required for downstream water supply requirements, including irrigation. These adjustments may be restricted when the terns and plovers begin nesting in May. The studies show that Garrison pool levels drop in April for both the Lower Quartile and Lower Decile runoff scenarios but then rise from May through June for both runoff scenarios. The studies show that inflows are sufficient to maintain a steady to rising pool at Fort Peck from April through June for the Lower Quartile runoff scenario. Fort Peck pool levels drop in April for the Lower Decile runoff scenario then rise in May before dropping again in June. The Oahe pool falls during the April to June period for both, the Lower Quartile and Lower Decile runoff scenarios. If drought conditions develop, emphasis during the fish spawn will be rotated among the upper three reservoirs and may also be adjusted to be opportunistic in regard to runoff potential. The upper three reservoirs will be managed to benefit forage fish to the extent reasonably possible, while continuing to serve the other Congressionally authorized project purposes.

Fort Peck. The repetitive daily pattern of releases from Fort Peck has not been implemented since the 2004 tern and plover nesting season. This adaptive management decision was made based on data collected during previous nesting seasons. In recent

years, birds in this reach have nested on available high elevation habitat, and thus were not expected to be impacted by the potential range of releases from Fort Peck during the summer. Releases during the 2020 nesting season will not be restricted by the repetitive daily pattern unless habitat conditions or nesting patterns warrant a change.

If high tributary flows enter the Missouri River below the project during the nesting season, hourly releases will generally be lowered to no less than 3,000 cfs in order to keep traditional riverine fish-rearing areas continuously inundated, while helping to lower river stages at downstream nesting sites. In rare instances releases below 3,000 cfs may be scheduled for flood damage reduction. April releases are expected to be adequate for trout spawning below the project.

Maintaining a rising Fort Peck pool level will be dependent upon the daily inflow pattern to the reservoir. The reservoir rises in April and May for Median and above runoff scenarios, but holds steady or declines slightly in April for the Lower Quartile and Decile runoff scenarios, respectively.

Garrison. As in previous years, releases from Garrison will follow a repetitive daily pattern during the T&E nesting season to limit peak stages below the project for nesting birds. Releases are scheduled to be 1,000 cfs lower in July and early August than the June releases to enhance conditions for the fledging of chicks. High elevation nesting habitat is expected to be sufficient below Garrison Dam during the 2020 nesting season for all runoff scenarios.

During 2020, coldwater habitat in Garrison should be adequate for all runoff scenarios. Coldwater habitat will continue to be monitored during the year and adjustments will be considered if conditions warrant.

A steady-to-rising pool at Garrison during the fish spawn in April and May will be dependent upon the daily inflow pattern to the reservoir. The reservoir rises in April and May for Median and above runoff scenarios, but declines in April before holding steady or rising in May under both lower runoff scenarios.

Oahe. Releases in the spring and summer will back up those from Gavins Point. The pool level should be steady to rising in the spring during the fish spawn for Median and above runoff scenarios. Under the Lower Quartile and Lower Decile runoff scenarios, the Oahe pool would decline in the April through May period, dropping 1.6 and 3.2 feet, respectively.

Fort Randall. To the extent reasonably possible, Fort Randall will be regulated to provide for a pool elevation near 1355.0 feet during the fish spawn period, provided water can be supplied from other reservoirs for downstream uses. The pool will not be drawn down below elevation 1337.5 feet in the fall to ensure adequate supply for water

intakes. As a measure to minimize take while maintaining the flexibility to increase releases during the nesting season, hourly releases from Fort Randall will follow a repetitive daily pattern to limit peak stages below the project for nesting birds. Daily average flows may be increased every third day to preserve the capability of increasing releases later in the summer with little or no incidental take if drier downstream conditions occur. If higher daily releases are required later in the nesting season, the daily peaking pattern may be adjusted, reduced or eliminated resulting in a steady release to avoid increased stages at downstream nesting sites. Periods of zero release will be minimized to the extent reasonably possible during the nesting season given daily average releases, real-time hydrologic conditions, and System generating constraints as defined in coordination with Western.

Gavins Point. It is anticipated that a sufficient amount of habitat to provide for successful nesting will be available at elevations above the planned release rates for all runoff conditions. This expectation is based on the high elevation habitat resulting from the record releases in 2011 and the resultant habitat from flows experienced in 2018 and 2019. Releases from Gavins Point may follow the flow-to-target (FTT) release scenario or the SR-FTT scenario. The FTT scenario limits releases from Gavins Point to those needed to meet downstream targets. The actual release scenario will be evaluated when birds begin nesting in early May. If monitoring determines that nests are likely to be initiated at a lower elevation which would be inundated later in the summer, a SR-FTT release scenario may be implemented. A full description of these release scenarios can be found in the Master Manual. Actual releases will be based on hydrologic conditions and the availability of habitat at that time.

All reasonable measures to minimize the loss of nesting T&E bird species will be used. While not anticipated because of the quantity of high elevation habitat available, these measures include, but are not limited to, a relatively high initial steady release during the peak of nest initiation, the use of the three designated Kansas River basin reservoirs for Missouri River navigation flow support, moving nests to higher ground, and monitoring nest fledge dates to determine if delaying an increase a few days might allow threatened chicks to fledge. The location of navigation tows and river conditions at intakes would also be monitored to determine if an increase could be temporarily delayed without impact. Cycling releases every third day may be used to conserve water early in the nesting season if extremely dry conditions develop. In addition, cycling may be used during downstream flood control regulation.

The Gavins Point pool will be regulated near 1206.0 feet in the spring and early summer, with minor day-to-day variations due to incremental inflows between Fort Randall and Gavins Point resulting from rainfall runoff. Several factors can limit the ability to protect nests from inundation in the upper end of the Gavins Point pool. First, because there are greater numbers of T&E bird species nesting below Gavins Point, regulation to minimize incidental take usually involves restricting Gavins Point

releases, which means that the Gavins Point pool can fluctuate significantly due to increased runoff from rainfall events. Second, rainfall runoff between Fort Randall and Gavins Point can result in relatively rapid pool rises because the Gavins Point project has a smaller storage capacity than the other System reservoirs. And third, the regulation of Gavins Point for downstream flood control may necessitate immediate release reductions to reduce downstream damage. When combined, all these factors make it difficult, and sometimes impossible, to prevent inundation of nests in the upper end of the Gavins Point reservoir. However, because of the quantity of habitat expected we do not anticipate a large number of nests being inundated. The pool will be increased to elevation 1207.5 feet late in August or early September when it is determined that there are no terns or plovers nesting along the reservoir.

**G. Regulation Activities for Historic and Cultural Properties.** As acknowledged in the 2004 Programmatic Agreement (PA) for the Operation and Management of the Missouri River Main Stem System, wave action and fluctuation in the level of the reservoirs results in erosion along the banks of the reservoirs. The Corps will work with the Tribes utilizing 36 CFR Part 800 and the PA to address the exposure of historic and cultural sites. The objective of a programmatic agreement is to deal "…with the potential adverse effects of complex projects or multiple undertakings…" The PA objective was to collaboratively develop a preservation program that would avoid, minimize and/or mitigate adverse effects along the System reservoirs. All tribes, whether signatory to the PA or not, may request government-to-government consultation on the regulation of the System and the resulting effect on historic and cultural properties and other resources.

Pool levels at the upper three reservoirs will likely be near normal in 2020 but will vary depending on runoff conditions. Continuing exposure of cultural sites along the shoreline is still possible. Actions to avoid, minimize or mitigate adverse impacts and expected results of the actions are covered under Chapter VII of this AOP. ***Plate 16*** shows the locations of the Tribal Reservations.

Fort Peck. Depending on runoff in the Missouri River basin, System regulation during 2020 could result in a Fort Peck pool elevation variation from a high of 2243 feet msl to a low of 2222 feet msl. This is based on the Upper and Lower Decile runoff scenarios (see ***Plate 8*** and the studies included at the end of this report). Based on a review of existing information, approximately 13 known sites could be affected during this period.

Garrison. Based on the Upper and Lower Decile runoff scenarios (see ***Plate 9*** and the studies included at the end of this report), Garrison pool elevations could range between 1847 and 1827 feet msl during 2020. Based on a review of existing information, approximately 49 known sites could be affected during this period.

Oahe. At the Oahe reservoir, the System regulation under the Upper and Lower Decile runoff scenarios could result in pool elevations ranging from 1616 to 1594 feet msl (see ***Plate 10*** and the studies included at the end of this report). Based on a review of existing information, approximately 201 known sites could be affected during this period.

Big Bend. System regulation will be adjusted to maintain the Big Bend pool level in the normal 1420 to 1421 feet msl range during 2020. Short-term increases above 1421 due to local rainfall may also occur. Based on a review of existing information, no known sites will be affected during this period.

Fort Randall. As part of the normal System regulation, the Fort Randall pool elevations will vary between 1350 and 1355 feet msl during the spring and summer of 2020 (see ***Plate 11*** and the studies included at the end of this report). Short-term increases above 1355 feet msl due to local rainfall may occur. The annual fall drawdown of the reservoir to elevation 1337.5 feet msl will begin prior to the close of the navigation season and will be accomplished by early December. The reservoir will then be refilled during the winter to elevation 1350 feet msl. Based on a review of existing information, approximately 22 known sites could be affected during this period.

Gavins Point. System regulation will be adjusted to maintain the Gavins Point pool level in the normal 1206 to 1207.5 feet msl range during 2020. Short-term increases above 1207.5 feet msl may occur due to local rainfall. Based on a review of existing information, one known site could be affected during this period.

## VII. SUMMARY OF RESULTS EXPECTED IN 2020

With regulation of the System in accordance with the 2019-2020 AOP outlined in the preceding pages, the following results can be expected. ***Table V*** summarizes the critical decision points throughout the year for all runoff conditions.

**Table V**
**Summary of 2019-2020 AOP Studies**

| Decision Points | 2020 Runoff Condition | | | | |
|---|---|---|---|---|---|
| | Upper Decile | Upper Quartile | Median | Lower Quartile | Lower Decile |
| | | | | | |
| **March 15 System Storage**<br>Spring Service Level | 57.4 MAF<br>Full service | 57.2 MAF<br>Full service | 56.9 MAF<br>Full service | 56.7 MAF<br>Full service | 56.6 MAF<br>Full service |
| **May Releases**<br>May Early/Late<br>May Avg GP Release | Not applicable<br>36.0 kcfs | 28.0/31.6 kcfs<br>29.9 kcfs | 28.0/31.6 kcfs<br>29.9 kcfs | 31.3/34.3 kcfs<br>32.8 kcfs | 31.3/34.3 kcfs<br>32.8 kcfs |
| **Fish Spawn Rise (Apr-Jun)**<br>FTPK Pool Elev Change<br>GARR Pool Elev Change<br>OAHE Pool Elev Change | +6.9 feet<br>+6.2 feet<br>+5.0 feet | +6.2 feet<br>+5.4 feet<br>+5.6 feet | +4.4 feet<br>+4.3 feet<br>+2.6 feet | +1.9 feet<br>+1.9 feet<br>-1.6 feet | -0.7 feet<br>+2.2 feet<br>-3.2 feet |
| **July 1 System Storage**<br>Sum-Fall Service Level (kcfs)<br>Nav Season Length | 63.9 MAF<br>Full Service<br>10 Day extension | 63.1 MAF<br>Full Service<br>10 Day extension | 60.6 MAF<br>Full Service<br>0 Days shortening | 57.3 MAF<br>Full Service<br>0 Days shortening | 56.3 MAF<br>0.6 kcfs blw Full Service<br>0 Days shortening |
| **September 1 System Storage**<br>Winter 2020-21 GP Release | 61.8 MAF<br>20.0 kcfs | 61.2 MAF<br>20.0 kcfs | 58.8 MAF<br>17.0 kcfs | 54.4 MAF<br>12.5 kcfs | 52.4 MAF<br>12.5 kcfs |
| **February 29 System Storage**<br>End-Year Pool Balance<br>Percent Pool | 56.1 MAF<br>Balanced<br>100% | 56.1 MAF<br>Balanced<br>100% | 55.3 MAF<br>Balanced<br>99% | 50.3 MAF<br>Balanced<br>90% | 47.8 MAF<br>Balanced<br>85% |

**A. <u>Flood Control</u>.** Flood control is the only authorized project purpose that requires the availability of empty storage space rather than impounded water. Actual flood events, especially those that are a result of rainfall runoff, are difficult to predict with much advance notice; therefore, detailed routing of specific major flood flows is accomplished when floods occur. There is a recurring pattern of high-risk flood periods during each year: a season when snowmelt, ice jams, and protracted heavy rains will almost surely occur with or without generating consequent floods; and a season when

these situations are less likely and the flood threat is correspondingly low. The high-risk flood season begins about March 1 and extends through the summer. As a consequence, regulation of the System throughout the fall and winter months is predicated on the achievement of a March 1 System storage level at or below the base of the Annual Flood Control and Multiple Use Zone. All runoff scenarios studied for this AOP will begin the March 1, 2020 runoff season with System storage at or below the desired 56.1 MAF base of the Annual Flood Control and Multiple Use Zone. Therefore, the entire System flood control storage of 16.3 MAF, (11.6 MAF in the Annual Flood Control and Multiple Use Zone and 4.7 MAF in the Exclusive Flood Control Zone) will be available to store runoff.

To the extent practical, the System is regulated to prevent damaging flows in the river reaches between and below the Mainstem dams. In 2020, the full capacity of the System will be available to capture a significant volume of runoff originating from the upper basin and meter it out over an extended period of time at a rate that does not contribute to flooding in the river reaches between and below the reservoirs. Additionally, the reservoir system will have the capacity to reduce releases and hold back water during periods of high runoff below the System to reduce peak stages and discharges on the lower river. The ability to significantly reduce peak stages on the lower river diminishes at locations further downstream due to the large uncontrolled drainage area and travel time from the dam.

The base of the Exclusive Flood Control Zone defines the maximum level of storage that will be accumulated for purposes other than flood control. When the Exclusive Flood Control Zone at a particular reservoir is encroached upon, the control of subsequent flood inflows becomes the dominant factor. During such periods, releases may substantially exceed the powerplant release capacity with the evacuation rate of any project dependent upon existing flood conditions, the potential for further inflows, and conditions of other reservoirs in the System. Maximum release rates at such times are based upon the Master Manual flood control criteria, the flood control status of the System, and the critical need to preserve the integrity of the dams. Detailed information regarding the adjustments of releases for flood control evacuation and downstream flood control constraints can be found in Chapter 7 of the Master Manual.

Due to release limitations imposed by the formation of downstream ice cover, a major portion of the required flood control space must be evacuated prior to the winter season. Higher releases may be made on occasions when the downstream channel conditions permit. If plains and/or mountain snowpack accumulations are much above normal during the winter of 2019-2020, and studies indicate that available storage in the Carryover Multiple Use Zone as well as the Annual Flood Control and Multiple Use Zone will be fully utilized, releases may be adjusted to the extent reasonably possible to evacuate water from the reservoir system early in the runoff season. High releases

during the late winter and early spring periods may exacerbate localized flooding if coincident with plains snowmelt or spring rains, and may also contribute to significant ice jam flooding. Therefore, if higher than normal releases are indicated, local conditions will need to be closely monitored. In addition, all 2020 runoff that is stored in the flood control zones will be evacuated prior to the start of the 2021 runoff season.

**B. Water Supply and Water Quality Control.** Water supply problems at intakes located in the river reaches both between and below the Mainstem dams and in the reservoirs are related primarily to intake elevations or river access rather than inadequate water supply. In emergency situations, short-term adjustments to protect human health and safety would be considered to keep intakes operational.

Low reservoir levels during the 2000-2007 drought contributed to both intake access and water quality problems for intakes on Garrison and Oahe reservoirs, including several Tribal intakes. A return to more normal reservoir elevations has eliminated concern over many of these intakes. If the drought conditions return, reservoir pool levels and releases may decline renewing the potential for intake access and water quality problems at both river and reservoir intakes. Under the Lower Decile runoff scenario, minimum reservoir levels in 2020 would be at least 22 feet higher than the record lows set in the 2000-2007 drought. Although not below the critical shut-down elevations for any intake, a return to lower reservoir levels would require extra monitoring to ensure the continued operation of the intakes.

Winter releases are determined based on the September 1 System storage check. The winter season extends from December through February and flows are provided during this time to support the Congressionally authorized project purposes of hydropower production and downstream water supply and water quality. Per the Master Manual, if September 1 System storage is 55.0 MAF or less, the winter release from Gavins Point will be 12,000 cfs. Planned winter release rates of 12,000 cfs may be less than required for downstream water supply intakes without sufficient incremental tributary flows below the System. Should that occur, releases may need to be set higher to ensure that downstream water supply intakes are operable. In 2012-2013, winter releases were set at 14,000 cfs rather than 12,000 cfs due to channel degradation and low incremental tributary flows below the System. Improved tributary flows in future winters would facilitate releases reaching the target level of 12,000 cfs. While the Master Manual indicates that the water control plan's purpose is to meet water supply requirements in river reaches downstream of the reservoirs to the extent reasonably possible, the Corps believes the minimum winter release of 12,000 cfs presented in the Master Manual represents a reasonable long-term goal for water intake operability and for owners to strive for as they make improvements to their facilities. A letter was sent to intake owners in the spring of 2013 informing them of the Master Manual criteria and encouraging them to take necessary action to ensure their intakes are able to operate at reduced release rates. Coordination with intake owners will continue prior to and

during the low release periods. In addition, it may be necessary at times to temporarily increase Gavins Point releases to provide adequate downstream flows during periods when excessive river ice formation is forecast or if ice jams or blockages form which temporarily restrict flow. Based on past experiences, these events are expected to occur infrequently and be of short duration.

Based on the studies included in this AOP, the scheduled winter System release for 2019-2020 will range from 20,000 cfs to 22,000 cfs. As shown in ***Table V***, 2020-2021 winter releases of 20,000 cfs would be made for the Upper Decile and Upper Quartile runoff scenarios, 17,000 cfs for Median, and 12,500 cfs under Lower Quartile and Lower Decile runoff scenarios. The additional 500 cfs on Lower Quartile and Lower Decile reflects how the Corps, when conditions warrant, temporarily increases Gavins Point releases during extreme cold periods to inhibit the formation of ice jams in the lower river reach.

During non-navigation open water periods in the spring and fall the Master Manual includes System releases as low as 9,000 cfs as a water conservation measure provided that enough downstream tributary flow exists to allow for continued operation of downstream water intakes. If a non-navigation year would occur in the future, summer releases (May through August) could average around 18,000 cfs from the System. However, it should be noted that System releases will be set at levels that meet the operational requirements of water intakes to the extent reasonably possible. Problems have occurred at several downstream intakes in the past, however in all cases the problems have been associated with access to the river or reservoir rather than insufficient water supply. In addition, the low summer release rate would likely result in higher water temperatures in the river, which could impact a powerplant's ability to meet their thermal discharge permits. Again, it should be noted that System releases will be set at levels that allow the downstream powerplant to meet their thermal discharge permit requirements to the extent reasonably possible. This may mean that actual System releases in the hottest part of the summer period may be set well above the 18,000 cfs level. The Corps continues to encourage intake operators between and below the mainstem dams to make necessary modifications to their intakes to allow efficient operation over the widest possible range of hydrologic conditions. While the current level of System storage should allow adequate access for all intakes during the coming year, intake operators that have experienced difficulty with access during the past drought years should continue to make adjustments to improve access and flexibility when drought returns to the basin.

**C. <u>Irrigation</u>.** Scheduled releases from the System reservoirs will be sufficient to meet the volumes of flow required for irrigation diversions from the Missouri River. Some access problems may be experienced, however, if Lower Quartile or Lower Decile runoff conditions return. Below Fort Peck, localized dredging may once again be required in the vicinity of irrigation intakes in order to maintain access to the water if

releases are low next summer. Intake access problems are the responsibility of the intake owner and the Corps will not guarantee access, only that the supply of water in the Missouri River is adequate to meet this project purpose. Fort Peck releases may be adjusted during the irrigation season to provide more consistent flows at downstream locations as tributary flows vary. Tributary irrigation water usage is fully accounted for in the estimates of water supply.

**D. Navigation.** The anticipated service level and season length for all runoff conditions simulated are shown in ***Table V***. Service to navigation in 2020 from the beginning of the navigation season through the July 1 storage check will be at full service for all runoff scenarios. After the July 1 storage check, Lower Quartile and higher runoff scenarios indicate at least full service to navigation. The July 1 storage check indicates 600 cfs below full service for the Lower Decile runoff scenario. In addition, the Upper Decile and Upper Quartile runoff scenarios indicate a 10-day extension to the navigation season based on the July 1 storage check. Median and below runoff indicates a full length navigation season. Although the AOP simulations provide a comparison of typical flow support under varying runoff conditions, the actual rate of flow support for the 2020 navigation season will be based on actual System storage on March 15 and July 1, 2020.

**E. Power.** ***Table VI*** and ***Table VII*** indicate the estimated monthly System load requirements and hydropower supply of the Eastern Division, Pick-Sloan Missouri Basin Program (P-S MBP), from August 2019 through December 2020. Estimates of monthly peak demands and energy include customer requirements for firm, short-term firm, summer firm, peaking, and various other types of power sales, System losses, and the effects of diversity. Also included in the estimated requirements are deliveries of power to the Western Division, P-S MBP, to help meet its firm power commitments. Under the Median runoff scenario, annual generation in 2020 is estimated to be 9.9 million MWh, 105 percent of the 1967-2018 average.

TABLE VI
PEAKING CAPABILITY AND SALES
(1,000 kW at plant)

| | Estimated Committed Sales* | Expected C of E Capability | | | | | Expected Bureau Capability** | | | | | Expected Total System Capability | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | | | U.B. | Basic | L.B. | | | U.B. | Basic | L.B. | | | U.B. | Basic | L.B. | |
| Aug | 2209 | | 2428 | 2425 | 2422 | | | 201 | 199 | 199 | | | 2629 | 2624 | 2621 | |
| Sep | 2016 | | 2398 | 2398 | 2404 | | | 201 | 199 | 198 | | | 2599 | 2597 | 2602 | |
| Oct | 1876 | | 2360 | 2366 | 2376 | | | 200 | 199 | 198 | | | 2560 | 2565 | 2574 | |
| Nov | 1982 | | 2310 | 2314 | 2329 | | | 199 | 198 | 197 | | | 2509 | 2512 | 2526 | |
| Dec | 2111 | | 2286 | 2293 | 2309 | | | 196 | 195 | 195 | | | 2482 | 2488 | 2504 | |
| 2020 | | | | | | | | | | | | | | | | |
| Jan | 2123 | | 2295 | 2300 | 2309 | | | 192 | 192 | 192 | | | 2487 | 2492 | 2501 | |
| Feb | 2106 | | 2312 | 2315 | 2316 | | | 189 | 190 | 191 | | | 2501 | 2505 | 2507 | |
| | | U.D. | U.Q. | Med | L.Q. | L.D. | U.D. | U.Q. | Med | L.Q. | L.D. | U.D. | U.Q. | Med | L.Q. | L.D. |
| Mar | 2041 | 2429 | 2422 | 2413 | 2407 | 2406 | 188 | 188 | 189 | 190 | 190 | 2617 | 2610 | 2602 | 2597 | 2596 |
| Apr | 1910 | 2451 | 2441 | 2419 | 2399 | 2396 | 180 | 180 | 187 | 190 | 190 | 2631 | 2621 | 2606 | 2589 | 2586 |
| May | 1879 | 2468 | 2457 | 2424 | 2394 | 2390 | 182 | 182 | 191 | 193 | 193 | 2650 | 2639 | 2615 | 2587 | 2583 |
| Jun | 2084 | 2485 | 2479 | 2450 | 2406 | 2396 | 198 | 198 | 195 | 194 | 194 | 2683 | 2677 | 2645 | 2600 | 2590 |
| Jul | 2194 | 2479 | 2475 | 2448 | 2394 | 2372 | 201 | 201 | 201 | 190 | 190 | 2680 | 2676 | 2649 | 2584 | 2562 |
| Aug | 2222 | 2459 | 2457 | 2431 | 2369 | 2345 | 199 | 199 | 199 | 190 | 188 | 2658 | 2656 | 2630 | 2559 | 2533 |
| Sep | 2017 | 2445 | 2445 | 2422 | 2354 | 2327 | 200 | 199 | 199 | 191 | 189 | 2645 | 2644 | 2621 | 2545 | 2516 |
| Oct | 1875 | 2419 | 2422 | 2404 | 2331 | 2303 | 200 | 199 | 199 | 193 | 192 | 2619 | 2621 | 2603 | 2524 | 2495 |
| Nov | 1979 | 2378 | 2383 | 2369 | 2293 | 2265 | 198 | 198 | 199 | 193 | 192 | 2576 | 2581 | 2568 | 2486 | 2457 |
| Dec | 2107 | 2335 | 2339 | 2331 | 2257 | 2226 | 191 | 192 | 196 | 192 | 191 | 2526 | 2531 | 2527 | 2449 | 2417 |

* Estimated sales, including system reserves. Power in addition to hydro production needed for these load requirements will be obtained from other power systems by interchange or purchase.
** Total output of Canyon Ferry and 1/2 of the output of Yellowtail powerplant.

TABLE VII
ENERGY GENERATION AND SALES
(Million kWh at plant)

| | Estimated Committed Sales* | Expected C of E Generation | | | | | Expected Bureau Generation ** | | | | | Expected Total System Generation | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2019 | | | U.B. | Basic | L.B. | | | U.B. | Basic | L.B. | | | U.B. | Basic | L.B. | |
| Aug | 858 | | 1568 | 1552 | 1523 | | | 96 | 87 | 76 | | | 1664 | 1639 | 1599 | |
| Sep | 745 | | 1531 | 1470 | 1243 | | | 86 | 75 | 60 | | | 1617 | 1545 | 1303 | |
| Oct | 741 | | 1543 | 1393 | 1154 | | | 83 | 68 | 57 | | | 1626 | 1461 | 1211 | |
| Nov | 808 | | 1429 | 1305 | 1094 | | | 75 | 63 | 53 | | | 1504 | 1368 | 1147 | |
| Dec | 913 | | 877 | 818 | 741 | | | 77 | 69 | 55 | | | 954 | 887 | 796 | |
| 2020 | | | | | | | | | | | | | | | | |
| Jan | 929 | | 834 | 795 | 772 | | | 76 | 68 | 49 | | | 910 | 863 | 821 | |
| Feb | 897 | | 757 | 728 | 711 | | | 70 | 59 | 45 | | | 827 | 787 | 756 | |
| | | U.D. | U.Q. | Med | L.Q. | L.D. | U.D. | U.Q. | Med | L.Q. | L.D. | U.D. | U.Q. | Med | L.Q. | L.D. |
| Mar | 814 | 647 | 656 | 653 | 657 | 669 | 77 | 77 | 64 | 48 | 48 | 724 | 733 | 717 | 705 | 717 |
| Apr | 767 | 769 | 717 | 758 | 832 | 837 | 95 | 95 | 65 | 43 | 43 | 864 | 812 | 823 | 875 | 880 |
| May | 718 | 1067 | 913 | 893 | 980 | 972 | 99 | 99 | 88 | 46 | 46 | 1166 | 1012 | 981 | 1026 | 1018 |
| Jun | 778 | 1263 | 1093 | 961 | 1008 | 992 | 97 | 97 | 96 | 46 | 46 | 1360 | 1190 | 1057 | 1054 | 1038 |
| Jul | 846 | 1469 | 1326 | 1037 | 1080 | 1043 | 100 | 100 | 78 | 56 | 54 | 1569 | 1426 | 1115 | 1136 | 1097 |
| Aug | 859 | 1470 | 1328 | 1074 | 1077 | 1039 | 97 | 90 | 75 | 54 | 52 | 1567 | 1418 | 1149 | 1131 | 1091 |
| Sep | 748 | 1350 | 1197 | 925 | 935 | 907 | 89 | 82 | 70 | 51 | 49 | 1439 | 1279 | 995 | 986 | 956 |
| Oct | 743 | 1241 | 1065 | 752 | 770 | 755 | 89 | 81 | 71 | 50 | 49 | 1330 | 1146 | 823 | 820 | 804 |
| Nov | 809 | 1217 | 1043 | 661 | 656 | 638 | 90 | 84 | 69 | 48 | 45 | 1307 | 1127 | 730 | 704 | 683 |
| Dec | 914 | 838 | 804 | 640 | 557 | 550 | 91 | 86 | 71 | 49 | 47 | 929 | 890 | 711 | 606 | 597 |
| CY TOT | | 12922 | 11733 | 9877 | 10035 | 9885 | 1072 | 1039 | 873 | 584 | 573 | 13994 | 12772 | 10750 | 10619 | 10458 |

* Estimated sales including system reserves and losses. Power in addition to hydro production needed for these load requirements will be obtained from other systems by interchange or purchase.
** Total output Canyon Ferry and 1/2 output of Yellowtail powerplant.

**F. Recreation, Fish and Wildlife.** The regulation of the System will continue to provide recreation and fish and wildlife opportunities in the project areas and along the Missouri River as well as other benefits of a managed system. Recreation access is expected to be near normal levels in 2020. If Lower Quartile or Lower Decile runoff were to occur in 2020, boat ramps that were lowered and low water ramps that were constructed during the two recent drought periods will provide adequate reservoir access. Special regulation adjustments incorporating specific objectives for these purposes will be made to the extent reasonably possible. Overall conditions should be favorable for the many visitors who enjoy the camping, boating, fishing, hunting, swimming, picnicking, and other recreational activities associated with the System reservoirs.

The effects of the simulated System regulation during 2020 on fish and wildlife are included in Chapter VI, Section F, entitled, "Regulation Activities for T&E Species and Fish Propagation Enhancement."

**G. Historic and Cultural Properties.** As mentioned in Chapter VI of this AOP, the regulation of the System during 2019 and 2020 will expose cultural sites due to erosion from the normal fluctuation of pool elevations. The Corps will work with the Tribes utilizing 36 CFR Part 800 and the PA to address the exposure of these sites. The objective of a programmatic agreement is to deal "…with the potential adverse effects of complex projects or multiple undertakings…" The PA objective was to collaboratively develop a preservation program that would avoid, minimize and/or mitigate the adverse effects of the System operation. All tribes, whether signatory to the PA or not, may request government-to-government consultation on the regulation of the System and the resulting effect on historic and cultural properties and other resources.

The planned preservation program for this AOP is outlined by multiple stipulations in the PA. One of the stipulations, or program components, is the Five-Year Plan. This plan outlines how the Corps will accomplish its responsibilities under the PA and the National Historic Preservation Act. The "Cultural Resource Program Final Five Year Plan, dated February 2012" (see http://www.nwo.usace.army.mil/Missions/CivilWorks/CulturalResources.aspx) is currently being implemented. The plan includes inventory, testing and evaluation, mitigation and other specific activities that will allow the Corps to avoid, minimize and/or mitigate the adverse effects to cultural sites on Corps lands within the System. Many of the actions listed in the plan are within the elevation ranges that will occur with the implementation of the Master Manual criteria in 2019 and 2020. Two critical components of the Five-Year Plan that are applicable to this AOP are monitoring and mitigation, which will be briefly discussed in the following paragraphs.

First, a collaboratively developed plan, entitled "Final Cultural Resource Monitoring Plan, dated June 2014" (see http://www.nwo.usace.army.mil/Missions/CivilWorks/CulturalResources.aspx) is in place. This monitoring plan outlines the sites that require monitoring and specifies a frequency for monitoring. The Corps is strategically monitoring sites, including those sites within the potential operating pool elevations, to document the effects of the implementation of the 2019-2020 AOP. Specific sites are identified in the draft Monitoring and Enforcement Plan for the monitoring team, comprised of Corps rangers and Tribal monitors, to visit and document impacts. This focused monitoring is resulting in more accurate data on the current impacts to sites along the river plus it is assisting with the identification of sites for mitigation. The most recent training for the monitoring teams was held in July 2019, and the most recent Archeological Resources Protection Act training was held in April of 2018.

Second, mitigation or protection of sites that are being adversely impacted continues. During the reporting period for the 2018 Annual Report by the Corps on the implementation of the Programmatic Agreement, 8 sites were either completed, started, or in the design phase. The annual report is available at http://www.nwo.usace.army.mil/Missions/CivilWorks/CulturalResources.aspx.

Results expected from the proposed monitoring and mitigation actions include more accurate horizontal and vertical data on existing cultural sites, detailed impact data, proactive protection and preservation of sites. The effects of the simulated System regulation during 2019-2020 on cultural sites are included in the Chapter VI, section G., entitled, "Regulation Activities for Historic and Cultural Properties."

**H. System Storage.** If the August 1, 2019 Basic runoff forecast verifies, System storage will decline to 56.5 MAF by the end of 2019. This would be 22.6 MAF higher than the record low System storage of 33.9 MAF set on February 9, 2007 and 0.3 MAF less than the 2018 end-of-year storage. This end-of-year storage is 3.5 MAF more than the 1967-2018 average. The lowest storage during the 1988-1992 drought was 40.8 MAF in January 1991, and the record low storage was set during the 2000-2007 drought at 33.9 MAF in February 2007. The end-of-year System storages have ranged from a maximum of 60.9 MAF in 1975 to the 2006 minimum of 34.4 MAF. Forecasted System storage on December 31, 2020 is presented in ***Table VIII*** for the runoff scenarios simulated.

**TABLE VIII**
**ANTICIPATED DECEMBER 31, 2020 SYSTEM STORAGE**

| Water Supply Condition | Total (12/31/20) | Carryover Storage Remaining 1/ | Unfilled Carryover Storage 2/ | Total Change CY 2020 |
|---|---|---|---|---|
| | (Volumes in 1,000 Acre-Feet) | | | |
| Upper Decile | 56,200 | 38,500 | 0 | 0 |
| Upper Quartile | 56,400 | 38,500 | 0 | 200 |
| Median | 55,500 | 37,900 | 600 | -600 |
| Lower Quartile | 50,200 | 32,600 | 5,900 | -6,800 |
| Lower Decile | 47,900 | 30,300 | 8,200 | -9,100 |

1/ Net usable storage above 17.6 MAF System minimum pool level established for power, recreation, irrigation diversions, and other purposes.

2/ System base of Annual Flood Control and Multiple Use Zone containing 56.1 MAF.

**I. Summary of Water Use by Functions.** Anticipated water use in CY 2019, under the regulation plan with the Basic forecast of water supply is shown in ***Table IX***. Under the reservoir regulation simulations in this AOP, estimated water use in CY 2020 also is shown in ***Table IX.*** Actual water use data for CY 2018 are included for information and comparison.

**TABLE IX**
**MISSOURI RIVER MAINSTEM SYSTEM**
**WATER USE FOR CALENDAR YEARS 2018, 2019, AND 2020 ABOVE SIOUX CITY, IOWA**
**in Million Acre-Feet (MAF)**

| | | CY 2018 Actual | CY 2019 Basic Simulation | Simulations for Calendar Year 2020 Upper Decile | Upper Quartile | Median | Lower Quartile | Lower Decile |
|---|---|---|---|---|---|---|---|---|
| Upstream Depletions | (1) | | | | | | | |
| Irrigation, Tributary Reservoir Evaporation & Other Uses | | 2.9 | 2.0 | | | | | |
| Tributary Reservoir Storage Change | | 0.1 | -0.1 | | | | | |
| Total Upstream Depletions | | 3.0 | 1.9 | 3.0 | 2.9 | 3.1 | 3.2 | 3.0 |
| System Reservoir Evaporation | (2) | 3.0 | 2.7 | 1.2 | 1.2 | 1.8 | 2.1 | 2.0 |
| Sioux City Flows | | | | | | | | |
| Navigation Season | | | | | | | | |
| Unregulated Flood Inflows Between Gavins Point & Sioux City | (3) | 0.5 | 2.0 | | | | | |
| Navigation Service Requirement | (4) | 15.2 | 15.2 | 16.7 | 16.3 | 15.9 | 16.3 | 15.8 |
| Supplementary Releases | | | | | | | | |
| T&E Species | (5) | 0.0 | 0.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Flood Evacuation | (6) | 14.3 | 24.9 | 8.1 | 4.7 | 0.0 | 0.0 | 0.0 |
| Non-navigation Season Flows | | 4.3 | 4.3 | 4.7 | 4.6 | 4.5 | 4.2 | 4.1 |
| Flood Evacuation Releases | (7) | 1.5 | 2.2 | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 |
| System Storage Change | | 0.3 | -0.3 | 0.0 | 0.2 | -1.0 | -6.8 | -9.1 |
| Total | | 42.1 | 52.9 | 34.5 | 30.6 | 24.6 | 19.3 | 16.1 |
| Project Releases | | | | | | | | |
| Fort Peck | | 9.3 | 8.2 | 8.6 | 7.9 | 6.7 | 6.5 | 6.5 |
| Garrison | | 24.6 | 21.5 | 20.9 | 19.0 | 16.2 | 15.8 | 15.1 |
| Oahe | | 25.3 | 27.9 | 23.9 | 21.2 | 17.5 | 18.8 | 19.5 |
| Big Bend | | 23.1 | 27.8 | 23.9 | 21.1 | 17.4 | 18.7 | 18.7 |
| Fort Randall | | 26.2 | 32.3 | 25.2 | 22.2 | 18.9 | 18.9 | 18.9 |
| Gavins Point | | 28.6 | 36.5 | 27.4 | 24.1 | 19.5 | 20.1 | 19.9 |

(1) Tributary uses above the 1949 level of development including agricultural depletions and tributary storage effects.
(2) Net evaporation is shown for 2020.
(3) Incremental inflows to reach which exceed those usable in support of navigation at the target level, even if Gavins Point releases were held to as low as 6,000 cfs.
(4) Estimated requirement for downstream water supply and water quality is approximately 6.0 MAF.
(5) Increased releases required for threatened and endangered species regulation.
(6) Includes flood control releases for flood control storage evacuation and releases used to extend the navigation season beyond the normal December 1 closing date at the mouth of the Missouri River.
(7) Releases for flood control storage evacuation in excess of a 17,000 cfs Gavins Point release.

## VIII. TENTATIVE PROJECTION OF REGULATION THROUGH FEBRUARY 2026

The 5-year extensions to the AOP (March 2021 to February 2026) have been prepared to serve as a guide for the Western Area Power Administration's marketing activities and to provide data to allow basin interests to conduct long-term planning. Three runoff conditions are modeled in the extension studies: Median, Lower Quartile, and Lower Decile.

The full 16.3 MAF of flood control capacity or more would be available at the start of each runoff season. The navigation service level and season length criteria described in ***Plate 3*** were applied to the extensions. The March 15 and July 1 System storage checks shown in ***Plate 3*** were used to determine the flow support for navigation and other downstream uses and the navigation season length. A steady release – flow-to-target (SR-FTT) regulation with cycling in May was modeled during the T&E bird species' nesting season. The Gavins Point releases to meet navigation target flows, as shown in ***Plate 3*** and as computed by the March 15 and July 1 System storage checks, were used prior to and following the nesting season. The September 1 System storage check was used to determine the winter System release. Navigation service support and season length, end of year System storage, and the winter release rate for the extensions are shown on ***Table X***. The criteria considered as each year of the extensions was modeled are listed, along with the results, in ***Tables XI through XIII*** for the Median, Lower Quartile, and Lower Decile extension studies, respectively.

**A. Median Runoff.** Studies 9 through 13 present the results of simulating Median runoff (24.6 MAF) from March 2021 through February 2026. The March 1, 2021 System storage would be 55.3 MAF and would decrease to 53.2 MAF by March 1, 2026, 2.9 MAF below the desired March 1 storage of 56.1 MAF, the base of the annual flood control and multiple use pool. The navigation service level would range between full service to 200 cfs below full service for the study period of 2021 to 2025. Winter releases would range from 17,000 cfs in the winter of 2021-2022 to 13,800 cfs in winter 2025-2026. For the entire study period, the carryover multiple use storage in Fort Peck, Garrison, and Oahe was balanced on March 1 of each year.

## TABLE X
## NAVIGATION SERVICE SUPPORT, WINTER RELEASES
## AOP EXTENSION STUDIES

| | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| **MEDIAN** | | | | | |
| Annual Runoff Volume (MAF) | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 |
| Flow Level Below Full Service | | | | | |
| Spring (kcfs) | Full | Full | Full | Full | Full-0.2 |
| Summer/Fall (kcfs) | Full | Full | Full | Full | Full |
| Season Length | 8 months | 8 months | 8 months | 8 months | 8 months |
| Dec 31 Storage (MAF) | 54.8 | 54.2 | 53.6 | 53.3 | 53.0 |
| Winter Release (kcfs) | 17.0 | 16.0 | 15.0 | 14.2 | 13.8 |
| **LOWER QUARTILE** | | | | | |
| Annual Runoff Volume (MAF) | 19.9 | 20.2 | 21.8 | 22.8 | 24.4 |
| Flow Level Below Full Service | | | | | |
| Spring (kcfs) | Full-3.8 | Full-6.0 | Full-6.0 | Full-6.0 | Full-6.0 |
| Summer/Fall (kcfs) | Full-4.0 | Full-6.0 | Full-6.0 | Full-6.0 | Full-4.8 |
| Season Length | 8 mnths | 8 mnths-8days | 8 mnths-12days | 8 mnths-9days | 8 mnths |
| Dec 31 Storage (MAF) | 47.1 | 45.6 | 45.5 | 46.2 | 47.5 |
| Winter Release (kcfs) | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| **LOWER DECILE** | | | | | |
| Annual Runoff Volume (MAF) | 17.1 | 17.5 | 18.5 | 19.3 | 19.5 |
| Flow Level Below Full Service | | | | | |
| Spring (kcfs) | Full-6.0 | Full-6.0 | Full-6.0 | Full-6.0 | Full-6.0 |
| Summer/Fall (kcfs) | Full-6.0 | Full-6.0 | Full-6.0 | Full-6.0 | Full-6.0 |
| Season Length | 8 mnths-13days | 8 mnths-30days | 8 mnths-30days | 8 mnths-30 days | 8 mnths-36days |
| Dec 31 Storage (MAF) | 43.7 | 40.6 | 38.4 | 37.0 | 36.1 |
| Winter Release (kcfs) | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |

## Table XI

## Median Extension Studies - Criteria Considered in the Modeling Process

| Study Number | | | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|
| | Units | Criteria | 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 | 2025-2026 |
| March 15 Storage | MAF | 31/49/54.5 | 56.2 | 55.5 | 54.9 | 54.5 | 54.3 |
| - Service Level | N/A or kcfs | No Sea/Min/Full Thresholds | Full | Full | Full | Full | Full - 0.2 |
| - 3rd Period March GP Q | kcfs | | 26.7 | 26.7 | 26.7 | 26.7 | 26.5 |
| - April Gavins Point Q | kcfs | | 26.7 | 26.7 | 26.7 | 26.7 | 26.5 |
| - Gavins Point Cycling Qs | kcfs | | 28.0/31.6 | 28.0/31.6 | 28.0/31.6 | 28.0/31.6 | 27.8/31.4 |
| - May Gavins Point Q | kcfs | | 29.9 | 29.9 | 29.9 | 29.9 | 29.6 |
| - June Gavins Point Q | kcfs | | 31.6 | 31.6 | 31.6 | 31.6 | 31.4 |
| July 1 Storage | MAF | 50.5/57 | 59.9 | 59.2 | 58.6 | 58.2 | 58.0 |
| - Service Level | N/A | Min/Full Thresholds | Full | Full | Full | Full | Full |
| - July Gavins Point Q | kcfs | | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 |
| - Aug Gavins Point Q | kcfs | | 33.2 | 33.2 | 33.2 | 33.2 | 33.2 |
| - Sept Gavins Point Q | kcfs | | 32.6 | 32.6 | 32.6 | 32.6 | 32.6 |
| July 1 Storage | MAF | 36.5/41&46.8/51.5 | 59.9 | 59.2 | 58.6 | 58.2 | 57.9 |
| - Season Length Shortening | days | 61/31&31/0 Thresholds | 0 | 0 | 0 | 0 | 0 |
| - Oct Gavins Point Q | kcfs | | 32.0 | 32.0 | 32.0 | 32.0 | 32.0 |
| - Nov Gavins Point Q | kcfs | | 27.7 | 27.7 | 27.7 | 27.7 | 27.7 |
| September 1 Storage | MAF | 55/58 | 58.1 | 57.4 | 56.8 | 56.3 | 56.1 |
| - Winter Gavins Point Q | kcfs | 12/17 Thresholds | 17.0 | 16.0 | 15.0 | 14.2 | 13.8 |
| End-of-Year Reservoir Storage (12/31) | MAF | | 54.8 | 54.2 | 53.6 | 53.3 | 53.0 |
| - Percent Full | N/A | | 98% | 97% | 96% | 95% | 94% |
| Fort Peck Rise 3/31-5/31 | N/A | | Yes | Yes | Yes | Yes | Yes |
| Garrison Rise 3/31-5/31 | N/A | | Yes | Yes | Yes | Yes | Yes |
| Oahe Rise 3/31-5/31 | N/A | | Yes | Yes | Yes | Yes | Yes |
| Favored Reservoir - Fish Spawn | N/A | | FP/OA | GA | FP/OA | GA | FP/OA |
| End of Water Year Storage (2/28) | MAF | | 54.6 | 54.1 | 53.7 | 53.4 | 53.2 |

## *Table XII*

## *Lower Quartile Extension Studies - Criteria Considered in the Modeling Process*

| Study Number | | | ***14*** | ***15*** | ***16*** | ***17*** | ***18*** |
|---|---|---|---|---|---|---|---|
| | Units | *Criteria* | ***2021-2022*** | ***2022-2023*** | ***2023-2024*** | ***2024-2025*** | ***2025-2026*** |
| *March 15 Storage* | *MAF* | *31/49/54.5* | 51.0 | 47.9 | 46.6 | 46.6 | 47.4 |
| *- Service Level* | *N/A or kcfs* | *No Sea/Min/Full Thresholds* | Full - 3.8 | Min Service | Min Service | Min Service | Min Service |
| *- 3rd Period March GP Q* | *kcfs* | | 26.0 | 23.8 | 23.8 | 23.8 | 23.8 |
| *- April Gavins Point Q* | *kcfs* | | 26.0 | 23.8 | 23.8 | 23.8 | 23.8 |
| *- Gavins Point Cycling Qs* | *kcfs* | | 27.5/30.5 | 25.3/28.3 | 25.3/28.3 | 25.3/28.3 | 25.3/28.3 |
| *- May Gavins Point Q* | *kcfs* | | 28.9 | 26.8 | 26.8 | 26.8 | 26.8 |
| *- June Gavins Point Q* | *kcfs* | | 30.5 | 28.3 | 28.3 | 28.3 | 28.3 |
| *July 1 Storage* | *MAF* | *50.5/57* | 52.7 | 50.2 | 49.6 | 50.1 | 51.8 |
| *- Service Level* | *N/A* | *Min/Full Thresholds* | Full - 4.0 | Min Service | Min Service | Min Service | Full - 4.8 |
| *- July Gavins Point Q* | *kcfs* | | 30.3 | 28.3 | 28.3 | 28.3 | 29.5 |
| *- Aug Gavins Point Q* | *kcfs* | | 30.0 | 28.0 | 28.0 | 28.0 | 29.2 |
| *- Sept Gavins Point Q* | *kcfs* | | 29.5 | 27.5 | 27.5 | 27.5 | 28.7 |
| *July 1 Storage* | *MAF* | *36.5/41&46.8/51.5* | 52.7 | 50.3 | 49.6 | 50.1 | 51.8 |
| *- Season Length Shortening* | *days* | *61/31&31/0 Thresholds* | 0 | 8 | 12 | 9 | 0 |
| *- Oct Gavins Point Q* | *kcfs* | | 29.1 | 27.1 | 27.1 | 27.1 | 28.3 |
| *- Nov Gavins Point Q* | *kcfs* | | 24.2 | 17.8 | 15.6 | 17.2 | 23.5 |
| *September 1 Storage* | *MAF* | *55/58* | 50.4 | 48.2 | 47.8 | 48.4 | 50.1 |
| *- Winter Gavins Point Q* | *kcfs* | *12/17 Thresholds* | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| *End-of-Year Reservoir Storage (12/31)* | *MAF* | | 47.1 | 45.6 | 45.5 | 46.2 | 47.5 |
| *- Percent Full* | *N/A* | | 84% | 81% | 81% | 82% | 85% |
| *Fort Peck Rise 3/31-5/31* | *N/A* | | Yes | Yes | Yes | Yes | Yes |
| *Garrison Rise 3/31-5/31* | *N/A* | | Yes | Yes | Yes | Yes | Yes |
| *Oahe Rise 3/31-5/31* | *N/A* | | No | No | No | Yes | Yes |
| *Favored Reservoir - Fish Spawn* | *N/A* | | FP/OA | GA | FP/OA | GA | FP/OA |
| *End of Water Year Storage (2/28)* | *MAF* | | 47.2 | 45.8 | 45.8 | 46.5 | 47.9 |

## Table XIII

## Lower Decile Extension Studies - Criteria Considered in the Modeling Process

| Study Number | | | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|
| | Units | Criteria | 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 | 2025-2026 |
| March 15 Storage | MAF | 31/49/54.5 | 48.4 | 44.3 | 41.4 | 39.4 | 38.0 |
| - Service Level | N/A or kcfs | No Sea/Min/Full Thresholds | Min Service | Min Service | Min Service | Min Service | Min Service |
| - 3rd Period March GP Q | kcfs | | 23.8 | 23.8 | 23.8 | 23.8 | 23.8 |
| - April Gavins Point Q | kcfs | | 23.8 | 23.8 | 23.8 | 23.8 | 23.8 |
| - Gavins Point Cycling Qs | kcfs | | 25.3/28.3 | 25.3/28.3 | 25.3/28.3 | 25.3/28.3 | 25.3/28.3 |
| - May Gavins Point Q | kcfs | | 26.8 | 26.8 | 26.8 | 26.8 | 26.8 |
| - June Gavins Point Q | kcfs | | 28.3 | 28.3 | 28.3 | 28.3 | 28.3 |
| July 1 Storage | MAF | 50.5/57 | 49.5 | 45.6 | 43.2 | 41.5 | 40.2 |
| - Service Level | N/A | Min/Full Thresholds | Min Service | Min Service | Min Service | Min Service | Min Service |
| - July Gavins Point Q | kcfs | | 28.3 | 28.3 | 28.3 | 28.3 | 28.3 |
| - Aug Gavins Point Q | kcfs | | 28.0 | 28.0 | 28.0 | 28.0 | 28.0 |
| - Sept Gavins Point Q | kcfs | | 27.5 | 27.5 | 27.5 | 27.5 | 27.5 |
| July 1 Storage | MAF | 36.5/41&46.8/51.5 | 49.5 | 45.6 | 43.2 | 41.5 | 40.2 |
| - Season Length Shortening | days | 61/31&31/0 Thresholds | 13 | 30 | 30 | 30 | 36 |
| - Oct Gavins Point Q | kcfs | | 27.1 | 23.9 | 23.9 | 23.9 | 20.4 |
| - Nov Gavins Point Q | kcfs | | 15.1 | 9.0 | 9.0 | 9.0 | 9.0 |
| September 1 Storage | MAF | 55/58 | 46.5 | 42.7 | 40.3 | 38.7 | 37.5 |
| - Winter Gavins Point Q | kcfs | 12/17 Thresholds | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| End-of-Year Reservoir Storage (12/31) | MAF | | 43.7 | 40.6 | 38.4 | 37.0 | 36.1 |
| - Percent Full | N/A | | 78% | 72% | 68% | 66% | 64% |
| Fort Peck Rise 3/31-5/31 | N/A | | Yes | No | Yes | Yes | Yes |
| Garrison Rise 3/31-5/31 | N/A | | No | Yes | No | Yes | Yes |
| Oahe Rise 3/31-5/31 | N/A | | No | No | No | No | No |
| Favored Reservoir - Fish Spawn | N/A | | FP/OA | GA | FP/OA | GA | FP/OA |
| End of Water Year Storage (2/28) | MAF | | 43.7 | 40.7 | 38.6 | 37.2 | 36.3 |

**B. <u>Lower Quartile Runoff</u>.** Studies 14 through 18 show the results of Lower Quartile runoff extensions. System storage on March 1, 2021 would be 50.3 MAF and decrease to 47.9 MAF by March 1, 2026. Navigation service levels would range between 4,800 cfs below full service to minimum service for the simulation period 2021 to 2025. The navigation season is shortened 0 days in 2021, 8 days in 2022, 12 days in 2023, 9 days in 2024, and 0 days in 2025. A 12,500-cfs average winter release is shown for the entire study period. Under Lower Quartile runoff, the carryover multiple use storage in the upper three reservoirs would be balanced each March 1.

**C. <u>Lower Decile Runoff</u>.** Studies 19 through 23 show the results of Lower Decile runoff extensions. System storage would be 47.8 MAF on March 1, 2021 and gradually decrease to 36.3 MAF on March 1, 2026. Navigation service levels would be at minimum navigation service levels throughout the season for all extension years. The navigation season would be shortened 13 days in 2021, 30 days in 2022 through 2024, and 36 days in 2025. The intrasystem storage is balanced each March 1 for the entire study period.

***Plate 14*** presents System storage, Gavins Point releases, and System peaking capability for Median, Lower Quartile, and Lower Decile runoff for the period 2021 through February 2026 Peak power, or peaking capability, is the amount of power available when all powerplants are operating at maximum.

***Plate 15*** presents reservoir pool elevations for Fort Peck, Garrison, Oahe, and Fort Randall for Median, Lower Quartile, and Lower Decile runoff for the period 2021 through February 2026.

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USACE Mainstem Project
USACE Tributary Project
USBR SECTION 7 PROJECT
☆ State Capitol
-------- District Boundary

**Missouri River Basin**

U.S. ARMY ENGINEERS, NORTHWESTERN DIVISION
CORPS OF ENGINEERS, OMAHA, NEBRASKA
AUGUST 2011

PLATE 1. Missouri River Basin Map.

## Summary of Engineering Data -- Missouri River Mainstem System

| Item No. | Subject | Fort Peck Dam - Fort Peck Lake | Garrison Dam - Lake Sakakawea | Oahe Dam - Lake Oahe |
|---|---|---|---|---|
| 1 | Location of Dam | Near Glasgow, Montana | Near Garrison, ND | Near Pierre, SD |
| 2 | River Mile - 1960 Mileage | Mile 1771.5 | Mile 1389.9 | Mile 1072.3 |
| 3 | Total & incremental drainage areas in square miles | 57,500 | 181,400 (2) 123,900 | 243,490 (1) 62,090 |
| 4 | Approximate length of full reservoir (in valley miles) | 134, ending near Zortman, MT | 178, ending near Trenton, ND | 231, ending near Bismarck, ND |
| 5 | Shoreline in miles (3) | 1520 (elevation 2234) | 1340 (elevation 1837.5) | 2250 (elevation 1607.5) |
| 6 | Average total & incremental inflow in cfs | 10,200 | 25,600 15,400 | 28,900 3,300 |
| 7 | Max. discharge of record near damsite in cfs | 137,000 (June 1953) | 348,000 (April 1952) | 440,000 (April 1952) |
| 8 | Construction started - calendar yr. | 1933 | 1946 | 1948 |
| 9 | In operation (4) calendar yr. | 1940 | 1955 | 1962 |
| | Dam and Embankment | | | |
| 10 | Top of dam, elevation in feet msl | 2280.5 | 1875 | 1660 |
| 11 | Length of dam in feet | 21,026 (excluding spillway) | 11,300 (including spillway) | 9,300 (excluding spillway) |
| 12 | Damming height in feet (5) | 220 | 180 | 200 |
| 13 | Maximum height in feet (5) | 250.5 | 210 | 245 |
| 14 | Max. base width, total & w/o berms in feet | 3500, 2700 | 3400, 2050 | 3500, 1500 |
| 15 | Abutment formations ( under dam & embankment) | Bearpaw shale and glacial fill | Fort Union clay shale | Pierre shale |
| 16 | Type of fill | Hydraulic & rolled earth fill | Rolled earth filled | Rolled earth fill & shale berms |
| 17 | Fill quantity, cubic yards | 125,628,000 | 66,500,000 | 55,000,000 & 37,000,000 |
| 18 | Volume of concrete, cubic yards | 1,200,000 | 1,500,000 | 1,045,000 |
| 19 | Date of closure | 24 June 1937 | 15 April 1953 | 3 August 1958 |
| | Spillway Data | | | |
| 20 | Location | Right bank - remote | Left bank - adjacent | Right bank - remote |
| 21 | Crest elevation in feet msl | 2225 | 1825 | 1596.5 |
| 22 | Width (including piers) in feet | 820 gated | 1336 gated | 456 gated |
| 23 | No., size and type of gates | 16 - 40' x 25' vertical lift gates | 28 - 40' x 29' Tainter | 8 - 50' x 23.5' Tainter |
| 24 | Design discharge capacity, cfs | 275,000 at elev 2253.3 | 827,000 at elev 1858.5 | 304,000 at elev 1644.4 |
| 25 | Discharge capacity at maximum operating pool in cfs | 230,000 | 660,000 | 80,000 |
| | Reservoir Data (6) | | | |
| 26 | Max. operating pool elev. & area | 2250 msl 245,000 acres | 1854 msl 383,000 acres | 1620 msl 386,000 acres |
| 27 | Max. normal op. pool elev. & area | 2246 msl 240,000 acres | 1850 msl 365,000 acres | 1617 msl 362,000 acres |
| 28 | Base flood control elev & area | 2234 msl 211,000 acres | 1837.5 msl 308,000 acres | 1607.5 msl 311,000 acres |
| 29 | Min. operating pool elev. & area | 2160 msl 89,000 acres | 1775 msl 125,000 acres | 1540 msl 115,000 acres |
| | Storage allocation & capacity | | | |
| 30 | Exclusive flood control | 2250-2246 971,000 a.f. | 1854-1850 1,495,000 a.f. | 1620-1617 1,107,000 a.f. |
| 31 | Flood control & multiple use | 2246-2234 2,704,000 a.f. | 1850-1837.5 4,211,000 a.f. | 1617-1607.5 3,208,000 a.f. |
| 32 | Carryover multiple use | 2234-2160 10,700,000 a.f. | 1837.5-1775 12,951,000 a.f. | 1607.5-1540 13,353,000 a.f. |
| 33 | Permanent | 2160-2030 4,088,000 a.f. | 1775-1673 4,794,000 a.f. | 1540-1415 5,315,000 a.f. |
| 34 | Gross | 2250-2030 18,463,000 a.f. | 1854-1673 23,451,000 a.f. | 1620-1415 22,983,000 a.f. |
| 35 | Reservoir filling initiated | November 1937 | December 1953 | August 1958 |
| 36 | Initially reached min. operating pool | 27 May 1942 | 7 August 1955 | 3 April 1962 |
| 37 | Estimated annual sediment inflow | 17,200 a.f./year 1073 yrs. | 21,600 a.f./year 1,086 yrs. | 14,800 a.f./year 1553 yrs. |
| | Outlet Works Data | | | |
| 38 | Location | Right bank | Right Bank | Right Bank |
| 39 | Number and size of conduits | 2 - 24' 8" diameter (nos. 3 & 4) | 1 - 26' dia. and 2 - 22' dia. | 6 - 19.75' dia. upstream, 18.25' dia. downstream |
| 40 | Length of conduits in feet (8) | No. 3 - 6,615, No. 4 - 7,240 | 1529 | 3496 to 3659 |
| 41 | No., size, and type of service gates | 1 - 28' dia. cylindrical gate 6 ports, 7.6' x 8.5' high (net opening) in each control shaft | 1 - 18' x 24.5' Tainter gate per conduit for fine regulation | 1 - 13' x 22' per conduit, vertical lift, 4 cable suspension and 2 hydraulic suspension (fine regulation) |
| 42 | Entrance invert elevation (msl) | 2095 | 1672 | 1425 |
| 43 | Avg. discharge capacity per conduit & total | Elev. 2250 22,500 cfs - 45,000 cfs | Elev. 1854 30,400 cfs - 98,000 cfs | Elev. 1620 18,500 cfs - 111,000 cfs |
| 44 | Present tailwater elevation (ft msl) | 2032-2036 5,000 - 35,000 cfs | 1669-1677 15,000- 60,000 cfs | 1422-1427 20,000-55,000 cfs |
| | Power Facilities and Data | | | |
| 45 | Avg. gross head available in feet (14) | 194 | 161 | 174 |
| 46 | Number and size of conduits | No. 1-24'8" dia., No. 2-22'4" dia. | 5 - 29' dia., 24' penstocks | 7 - 24' dia., imbedded penstocks |
| 47 | Length of conduits in feet (8) | No. 1 - 5,653, No. 2 - 6,355 | 1829 | From 3,280 to 4,005 |
| 48 | Surge tanks | PH#1: 3-40' dia., PH#2: 2-65' dia. | 65' dia. - 2 per penstock | 70' dia., 2 per penstock |
| 49 | No., type and speed of turbines | 5 Francis, PH#1-2: 128.5 rpm, 1-164 rpm , PH#2-2: 128.6 rpm | 5 Francis, 90 rpm | 7 Francis, 100 rpm |
| 50 | Discharge cap. at rated head in cfs | PH#1, units 1&3 170', 2-140' 8,800 cfs, PH#2-4&5 170'-7,200 cfs | 150' 41,000 cfs | 185' 54,000 cfs |
| 51 | Generator nameplate rating in kW | 1&3: 43,500; 2: 18,250; 4&5: 40,000 | 3 - 121,600, 2 - 109,250 | 112,290 |
| 52 | Plant capacity in kW | 185,250 | 583,300 | 786,030 |
| 53 | Dependable capacity in kW (9) | 181,000 | 388,000 | 534,000 |
| 54 | Avg. annual energy, million kWh (12) | 1,031 | 2,279 | 2,632 |
| 55 | Initial generation, first and last unit | July 1943 - June 1961 | January 1956 - October 1960 | April 1962 - June 1963 |
| 56 | Estimated cost September 1999 completed project (13) | $158,428,000 | $305,274,000 | $346,521,000 |

## Summary of Engineering Data -- Missouri River Mainstem System

| Big Bend Dam - Lake Sharpe | Fort Randall Dam - Lake Francis Case | Gavins Point Dam - Lewis & Clark Lake | Total | Item No. |
|---|---|---|---|---|
| 21 miles upstream Chamberlain, SD | Near Lake Andes, SD | Near Yankton, SD | | 1 |
| Mile 987.4 | Mile 880.0 | Mile 811.1 | | 2 |
| 249,330 (1) 5,840 | 263,480 (1) 14,150 | 279,480 (1) 16,000 | | 3 |
| 80, ending near Pierre, SD | 107, ending at Big Bend Dam | 25, ending near Niobrara, NE | 755 miles | 4 |
| 200 (elevation 1420) | 540 (elevation 1350) | 90 (elevation 1204.5) | 5,940 miles | 5 |
| 28,900 | 30,000 1,100 | 32,000 2,000 | | 6 |
| 440,000 (April 1952) | 447,000 (April 1952) | 480,000 (April 1952) | | 7 |
| 1959 | 1946 | 1952 | | 8 |
| 1964 | 1953 | 1955 | | 9 |
| 1440 | 1395 | 1234 | | 10 |
| 10,570 (including spillway) | 10,700 (including spillway) | 8,700 (including spillway) | 71,596 | 11 |
| 78 | 140 | 45 | 863 feet | 12 |
| 95 | 165 | 74 | | 13 |
| 1200, 700 | 4300, 1250 | 850, 450 | | 14 |
| Pierre shale & Niobrara chalk | Niobrara chalk | Niobrara chalk & Carlile shale | | 15 |
| Rolled earth, shale, chalk fill | Rolled earth fill & chalk berms | Rolled earth & chalk fill | | 16 |
| 17,000,000 | 28,000,000 & 22,000,000 | 7,000,000 | 358,128,000 cu. yds | 17 |
| 540,000 | 961,000 | 308,000 | 5,554,000 cu. yds. | 18 |
| 24 July 1963 | 20 July 1952 | 31 July 1955 | | 19 |
| Left bank - adjacent | Left bank - adjacent | Right bank - adjacent | | 20 |
| 1385 | 1346 | 1180 | | 21 |
| 376 gated | 1000 gated | 664 gated | | 22 |
| 8 - 40' x 38' Tainter | 21 - 40' x 29' Tainter | 14 - 40' x 30' Tainter | | 23 |
| 390,000 at elev 1433.6 | 620,000 at elev 1379.3 | 584,000 at elev 1221.4 | | 24 |
| 270,000 | 508,000 | 345,000 | | 25 |
| 1423 msl 62,000 acres | 1375 msl 102,000 acres | 1210 msl 29,000 acres | 1,206,000 acres | 26 |
| 1422 msl 60,000 acres | 1365 msl 94,000 acres | 1208 msl 25,000 acres | 1,146,000 acres | 27 |
| 1420 msl 58,000 acres | 1350 msl 76,000 acres | 1204.5 msl 21,000 acres | 984,000 acres | 28 |
| 1415 msl 51,000 acres | 1320 msl 36,000 acres | 1204.5 msl 21,000 acres | 437,000 acres | 29 |
| 1423-1422 61,000 a.f. | 1375-1365 986,000 a.f. | 1210-1208 54,000 a.f. | 4,674,000 a.f. | 30 |
| 1422-1420 118,000 a.f. | 1365-1350 1,306,000 a.f. | 1208-1204.5 79,000 a.f. | 11,626,000 a.f. | 31 |
| | 1350-1320 1,532,000 a.f. | | 38,536,000 a.f. | 32 |
| 1420-1345 1,631,000 a.f. | 1320-1240 1,469,000 a.f. | 1204.5-1160 295,000 a.f. | 17,592,000 a.f. | 33 |
| 1423-1345 1,810,000 a.f. | 1375-1240 5,293,000 a.f. | 1210-1160 428,000 a.f. | 72,428,000 a.f. | 34 |
| November 1963 | January 1953 | August 1955 | | 35 |
| 25 March 1964 | 24 November 1953 | 22 December 1955 | | 36 |
| 3,445 a.f./year 525 yrs. | 15,800 a.f./year 334 yrs. | 2,700 a.f./year 159 yrs. | 75,545 | 37 |
| | Left Bank | | | 38 |
| None (7) | 4 - 22' diameter | None (7) | | 39 |
| | 1013 | | | 40 |
| | 2 - 11' x 23' per conduit, vertical lift, cable suspension | | | 41 |
| 1385 (11) | 1229 | 1180 (11) | | 42 |
| | Elev 1375 | | | 43 |
| 1351-1355(10) 25,000-100,000 cfs | 32,000 cfs - 128,000 cfs<br>1228-1237 10,000-60,000 cfs | 1153-1161 15,000-60,000 cfs | | 44 |
| 70 | 117 | 48 | 764 feet | 45 |
| None: direct intake | 8 - 28' dia., 22' penstocks | None: direct intake | | 46 |
| | 1,074 | | 55,083 | 47 |
| None | 59' dia, 2 per alternate penstock | None | | 48 |
| 8 Fixed blade, 81.8 rpm | 8 Francis, 85.7 rpm | 3 Kaplan, 75 rpm | 36 units | 49 |
| 67' 103,000 cfs | 112' 44,500 cfs | 48' 36,000 cfs | | 50 |
| 67,275 (15) | 40,000 | 44,100 | | 51 |
| 517,470 | 320,000 | 132,300 | 2,524,350 kw | 52 |
| 497,000 | 293,000 | 74,000 | 1,967,000 kw | 53 |
| 982 | 1,720 | 726 | 9,369 million kWh | 54 |
| October 1964 - July 1966 | March 1954 - January 1956 | September 1956 - January 1957 | July 1943 - July 1966 | 55 |
| $107,498,000 | $199,066,000 | $49,617,000 | $1,166,404,000 | 56 |

(1) Includes 4,280 square miles of non-contributing areas.
(2) Includes 1,350 square miles of non-contributing areas.
(3) With pool at base of flood control.
(4) Storage first available for regulation of flows.
(5) Damming height is height from low water to maximum operating pool. Maximum height is from average streambed to top of dam.
(6) Based on latest available storage data.
(7) River regulation is attained by flows over low-crested spillway and through turbines.
(8) Length from upstream face of outlet or to spiral case.
(9) Based on 8th year (1961) of drought drawdown (From study 8-83-1985).
(10) Affected by level of Lake Francis case. Applicable to pool at elevation 1350.
(11) Spillway crest.
(12) 1967-2017 Average
(13) Source: Annual Report on Civil Works Activities of the Corps of Engineers. Extract Report Fiscal Year 1999.
(14) Based on Study 8-83-1985
(15) 67,275 kW on per unit basis 64,684 kW on facility basis

Corps of Engineers, U.S. Army
Compiled by
Northwestern Division
Missouri River Region
August 2019

**Plate 3**
**Summary of Master Manual Technical Criteria**

**NAVIGATION TARGET FLOWS**

| Location | Minimum Service (kcfs) | Full Service (kcfs) |
|---|---|---|
| Sioux City | 25 | 31 |
| Omaha | 25 | 31 |
| Nebraska City | 31 | 37 |
| Kansas City | 35 | 41 |

**RELATION OF SYSTEM STORAGE TO NAVIGATION SERVICE LEVEL**

| Date | System Storage (MAF) | Navigation Service Level |
|---|---|---|
| March 15 | 54.5 or more | 35,000 cfs (full-service) |
| March 15 | 49.0 to 31 | 29,000 cfs (minimum-service) |
| March 15 | 31.0 or less | No navigation service |
| | | |
| July 1 | 57.0 or more | 35,000 cfs (full-service) |
| July 1 | 50.5 or less | 29,000 cfs (minimum-service) |

**RELATION OF SYSTEM STORAGE TO NAVIGATION SEASON LENGTH**

| Date | System Storage (MAF) | Final Day of Navigation Support at Mouth of the Missouri River |
|---|---|---|
| July 1 | 51.5 or more | November 30 (8-month season) |
| July 1 | 46.8 through 41.0 | October 31 (7-month season) |
| July 1 | 36.5 or less | September 30 (6-month season) |

**RELATION OF SYSTEM WINTER RELEASE TO SYSTEM STORAGE**

| September 1 System Storage (MAF) | Average Winter Release for Gavins Point |
|---|---|
| 58.0 or more | 17,000 cfs |
| 55.0 or less | 12,000 cfs |

**Plate 3 (cont'd)**
**Summary of Master Manual Technical Criteria**

**GAVINS POINT RELEASES NEEDED TO MEET TARGET FLOWS**
**1950 to 1996 Data (kcfs)**

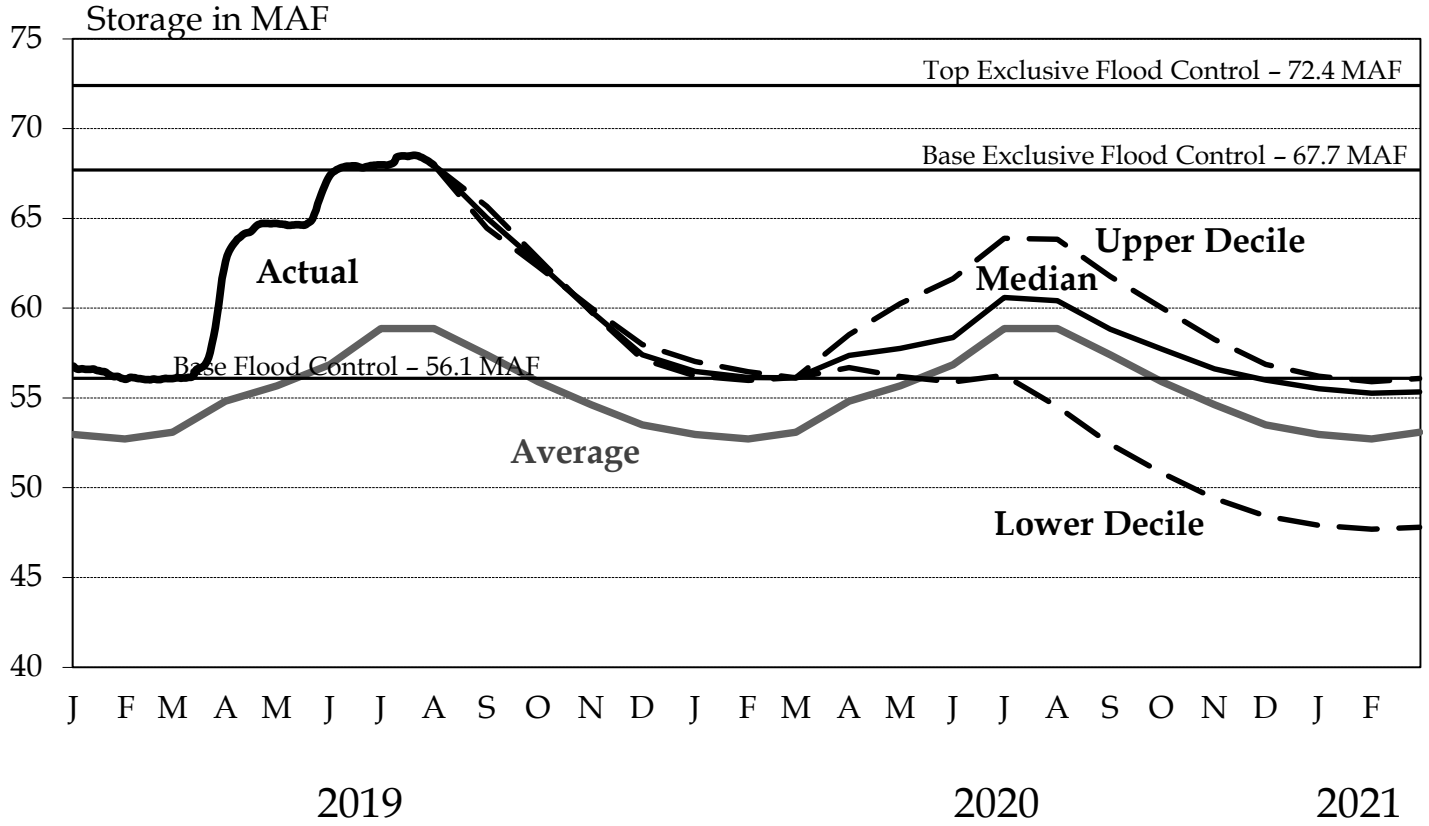
**Median, Upper Quartile, Upper Decile Runoff**

| | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov |
|---|---|---|---|---|---|---|---|---|
| Full Service | 26.7 | 28.0 | 27.9 | 31.6 | 33.2 | 32.6 | 32.0 | 31.1 |
| Minimum Service | 20.7 | 22.0 | 21.9 | 25.6 | 27.2 | 26.6 | 26.0 | 25.1 |

**Lower Quartile, Lower Decile Runoff**

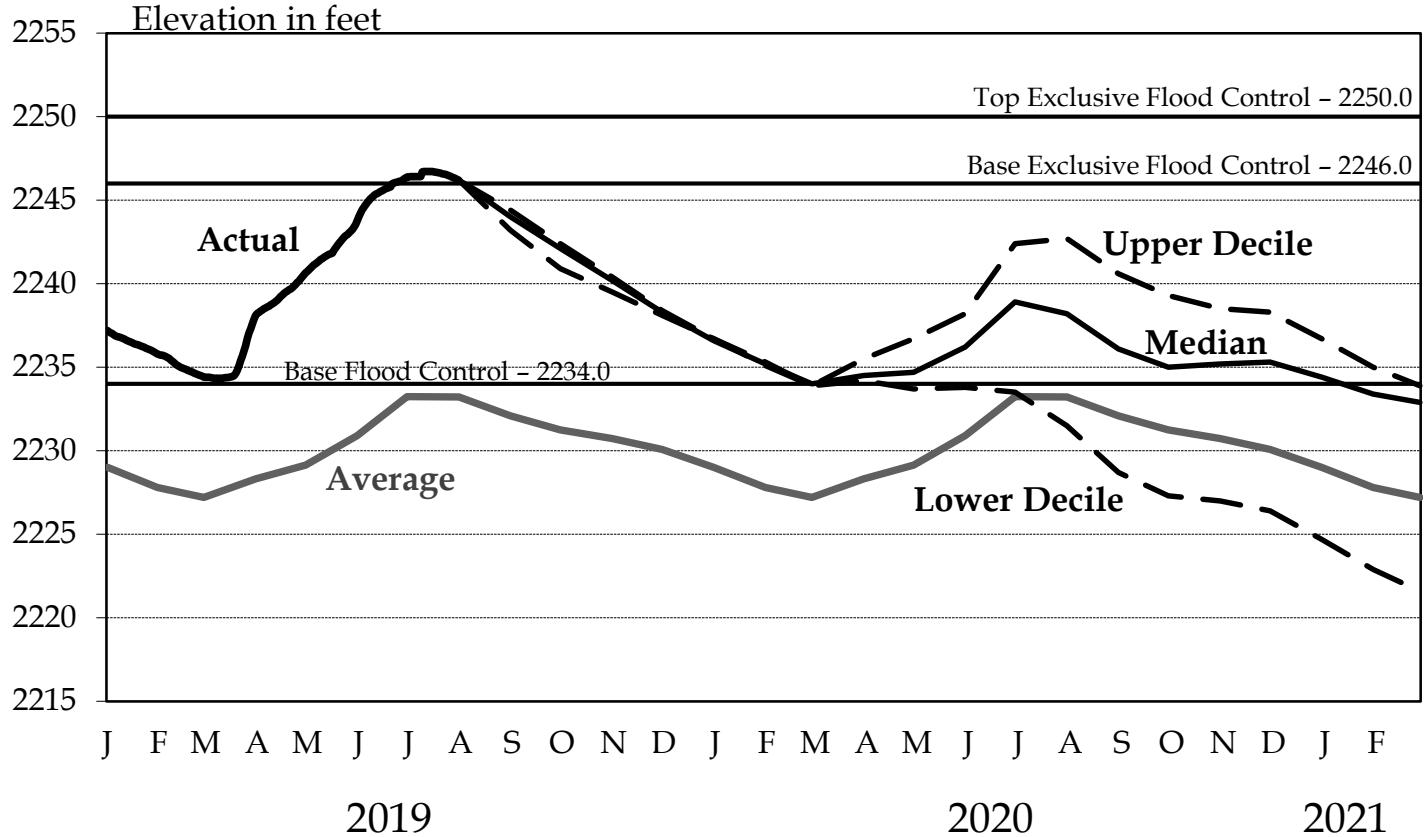
| | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov |
|---|---|---|---|---|---|---|---|---|
| Full Service | 29.8 | 31.3 | 31.2 | 34.3 | 34.0 | 33.5 | 33.1 | 31.2 |
| Minimum Service | 23.8 | 25.3 | 25.2 | 28.3 | 28.0 | 27.5 | 27.1 | 25.2 |

# System Storage
## 2019-2020 AOP




Average 1967-2018

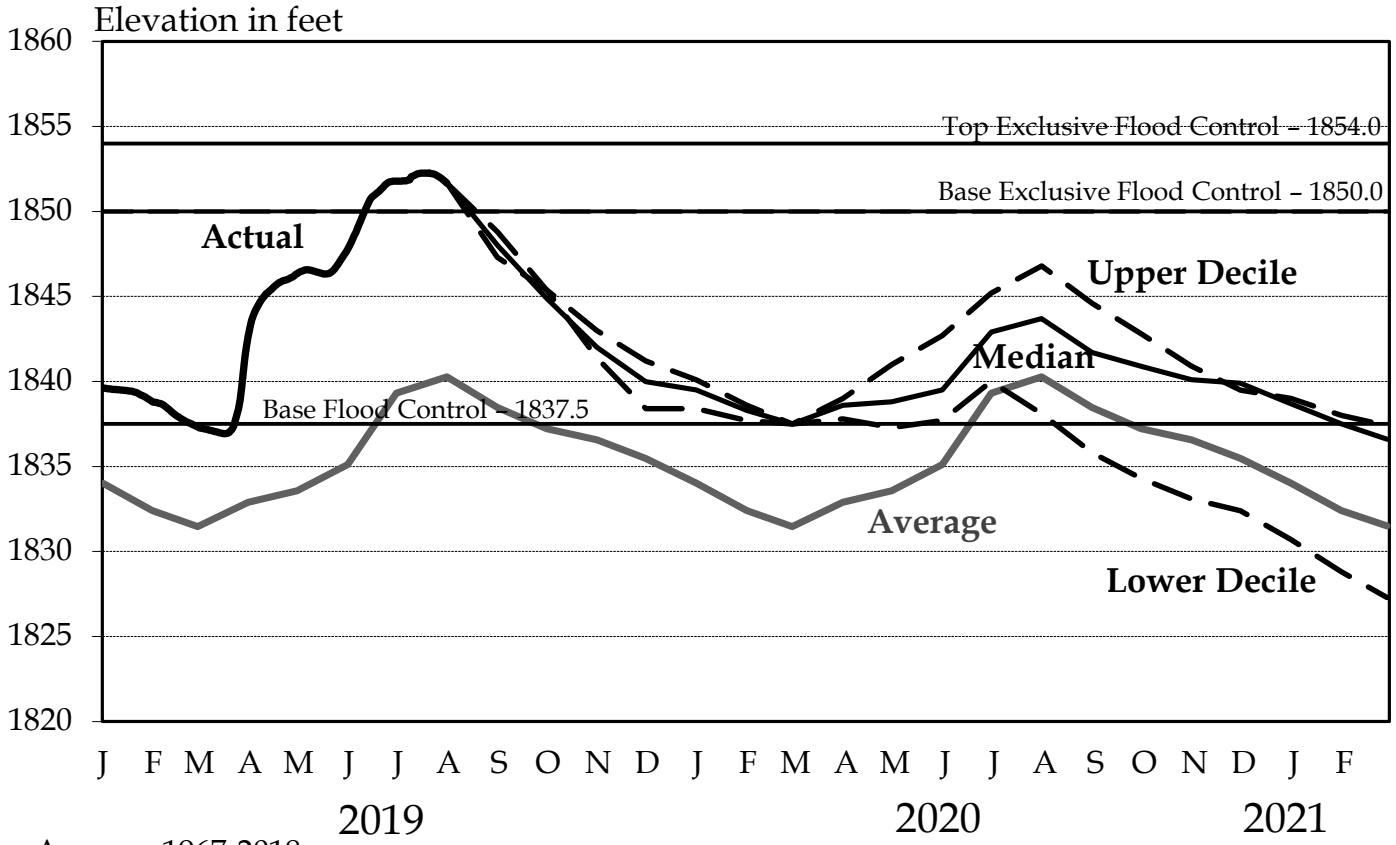
# Fort Peck
## 2019-2020 AOP




Average 1967-2018

# Garrison

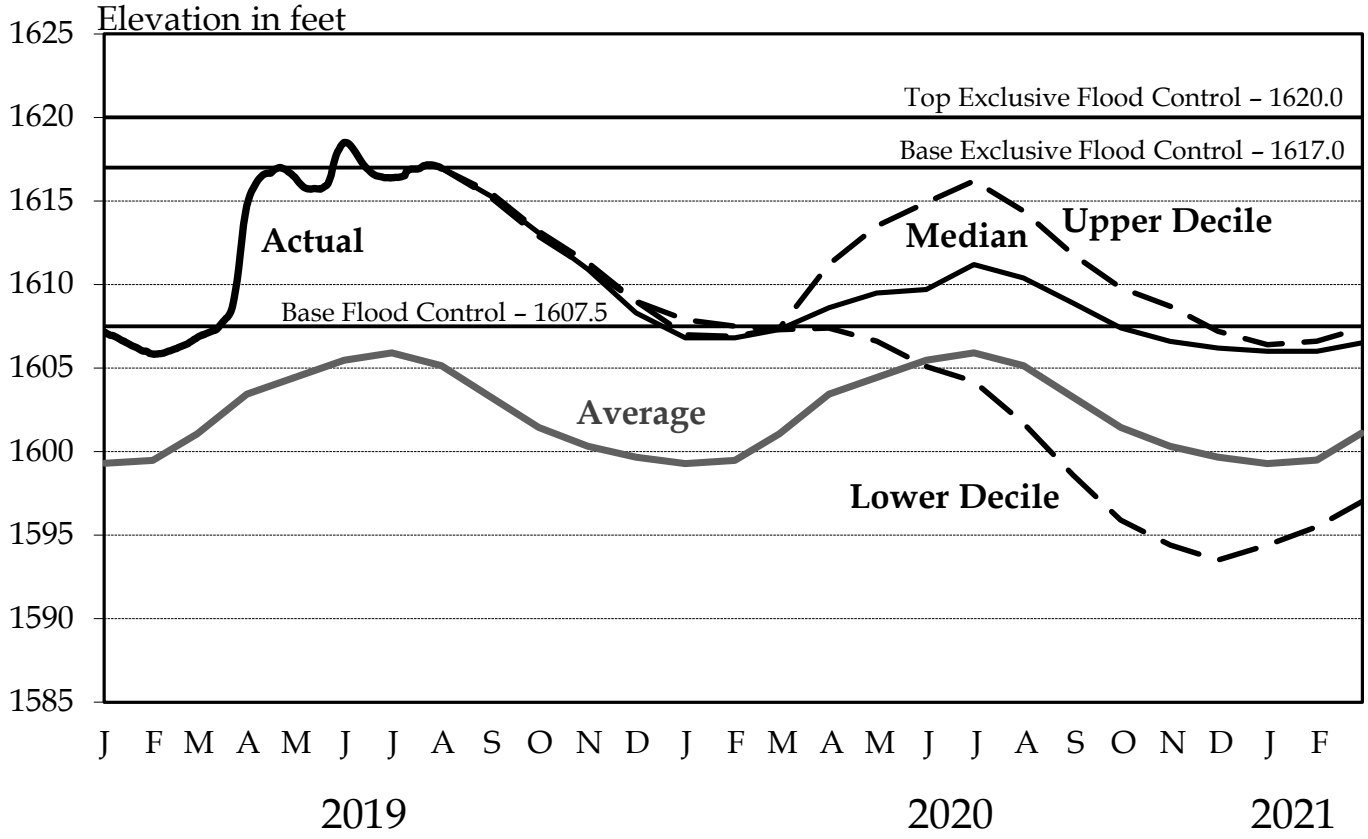
## 2019-2020 AOP




Average 1967-2018

# Oahe

## 2019-2020 AOP




Average 1967-2018

# System Storage

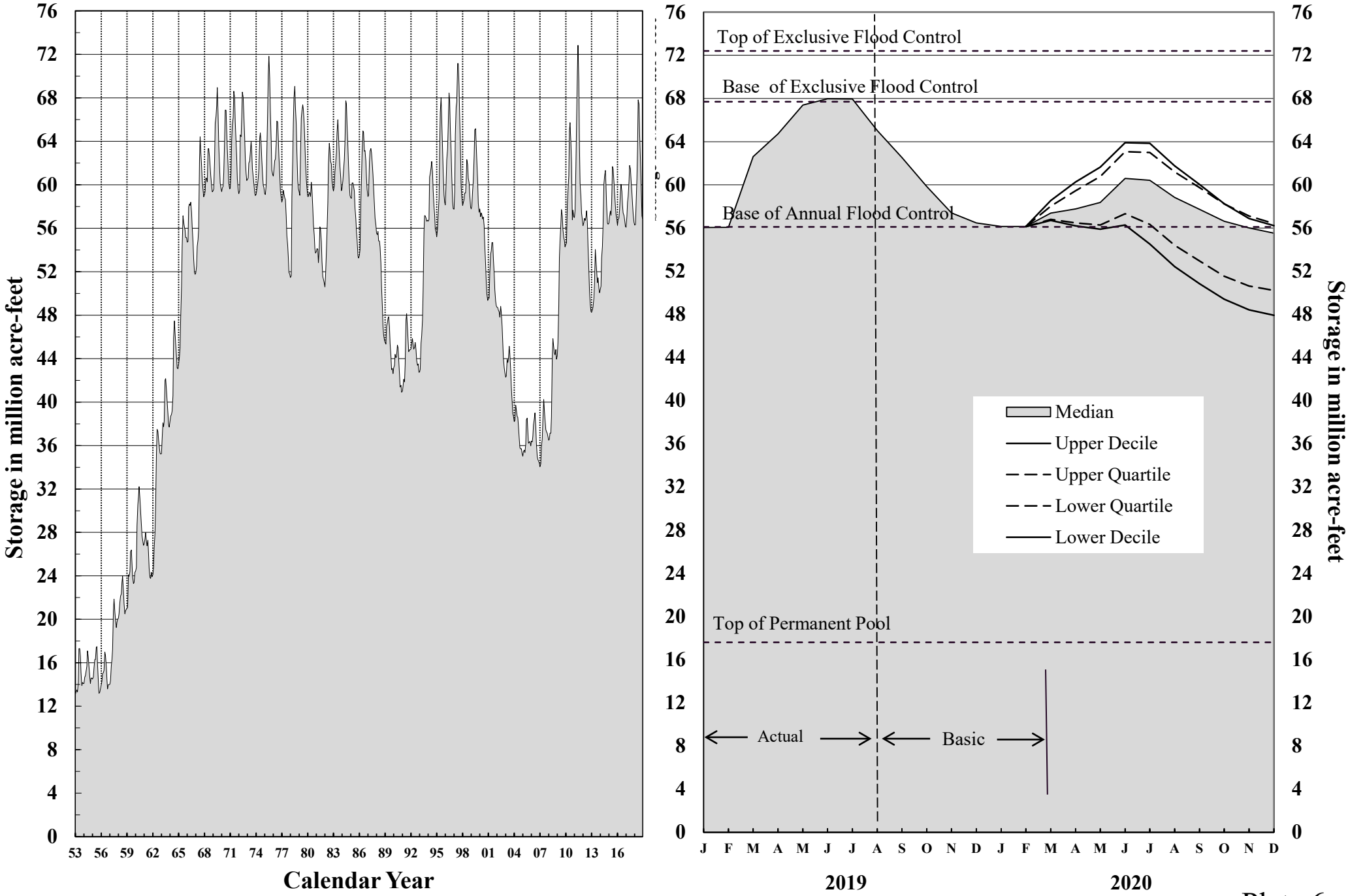



Plate 6

# Gavins Point Releases

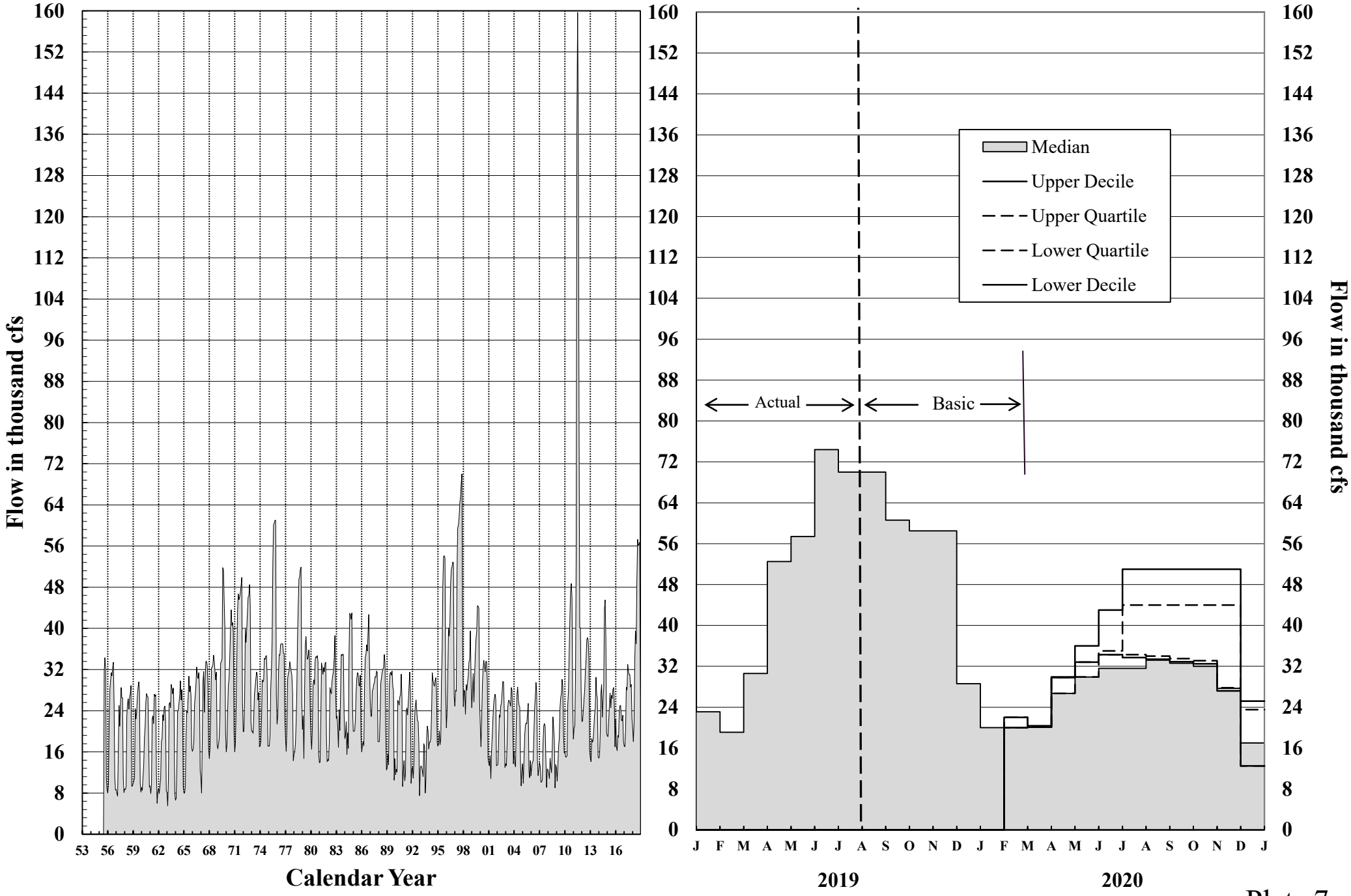



Plate 7

# Fort Peck

## Elevations and Releases

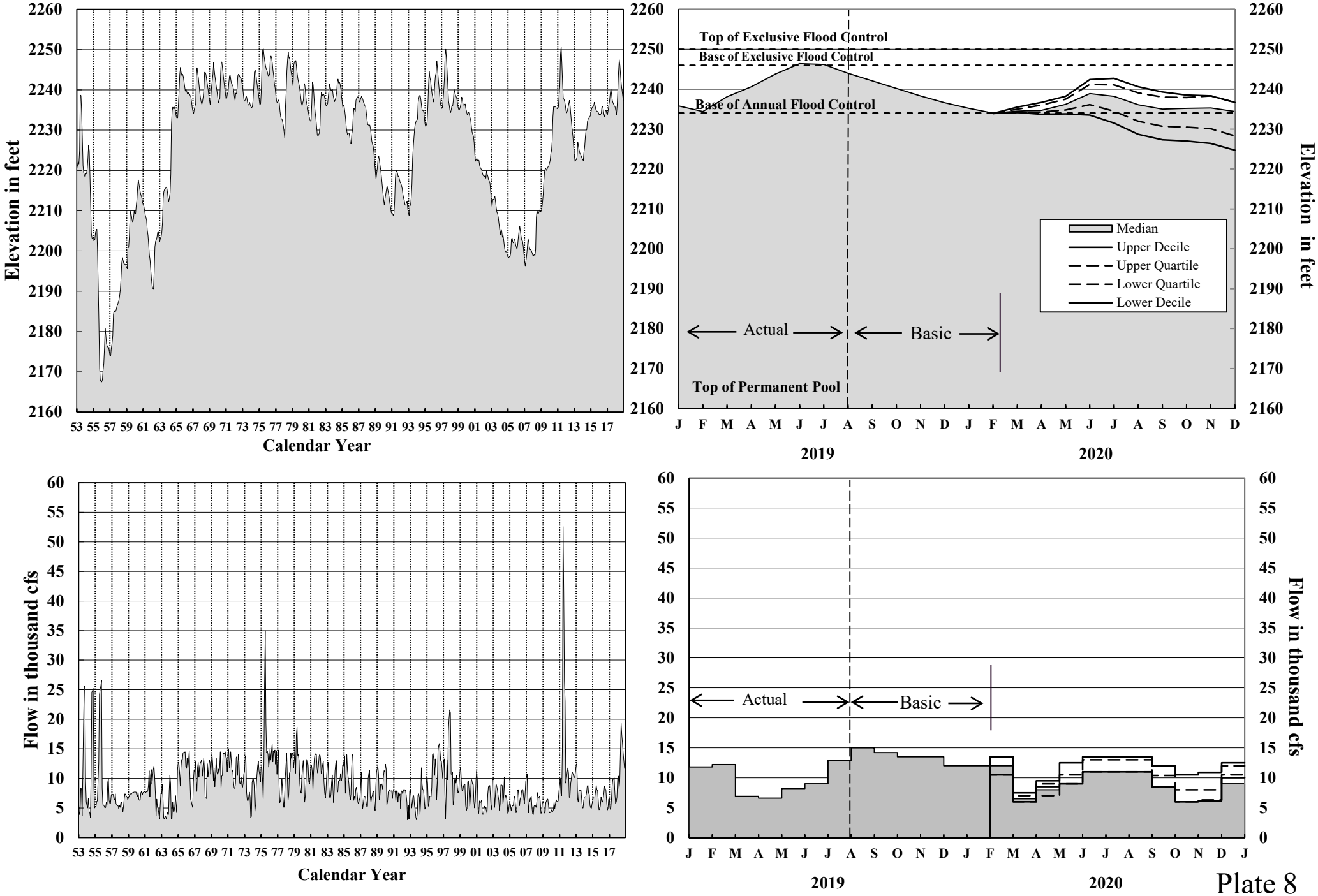
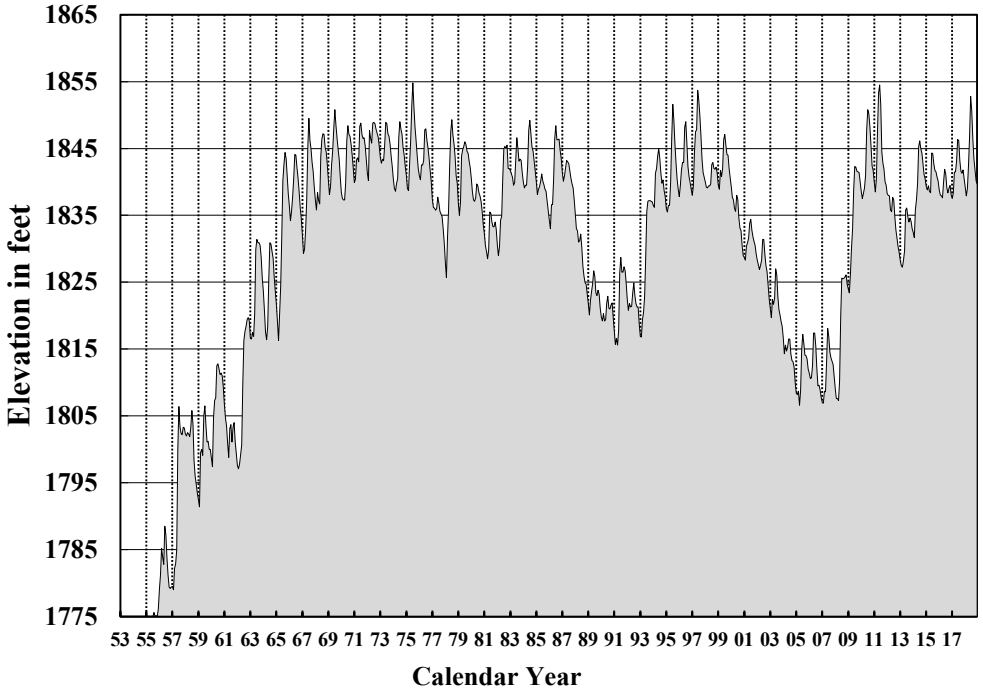
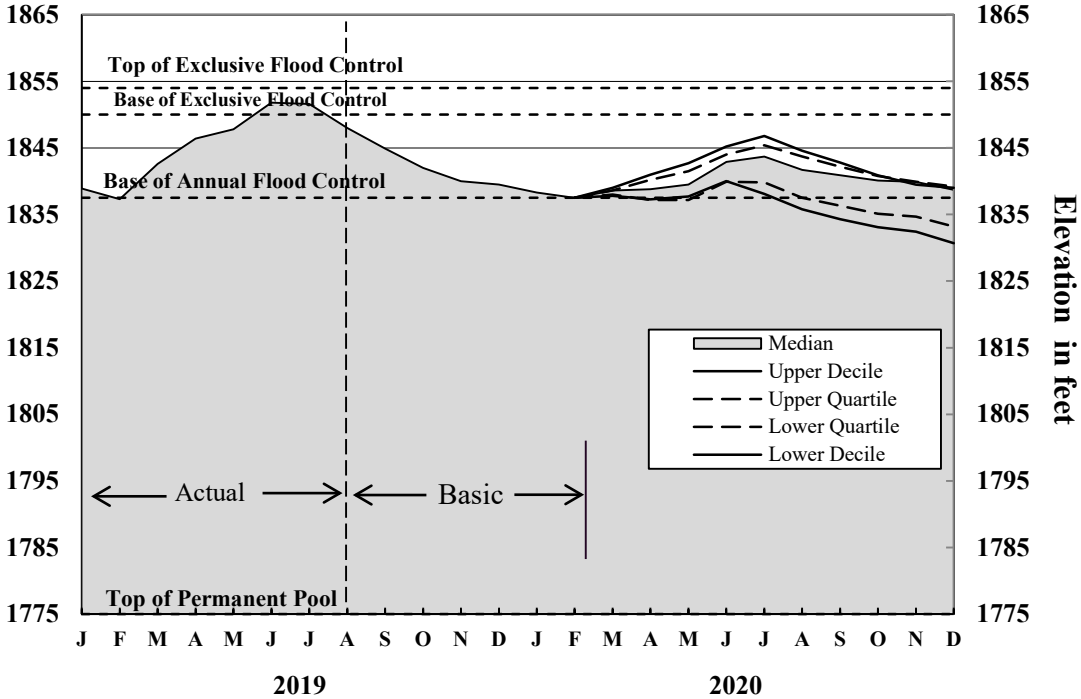
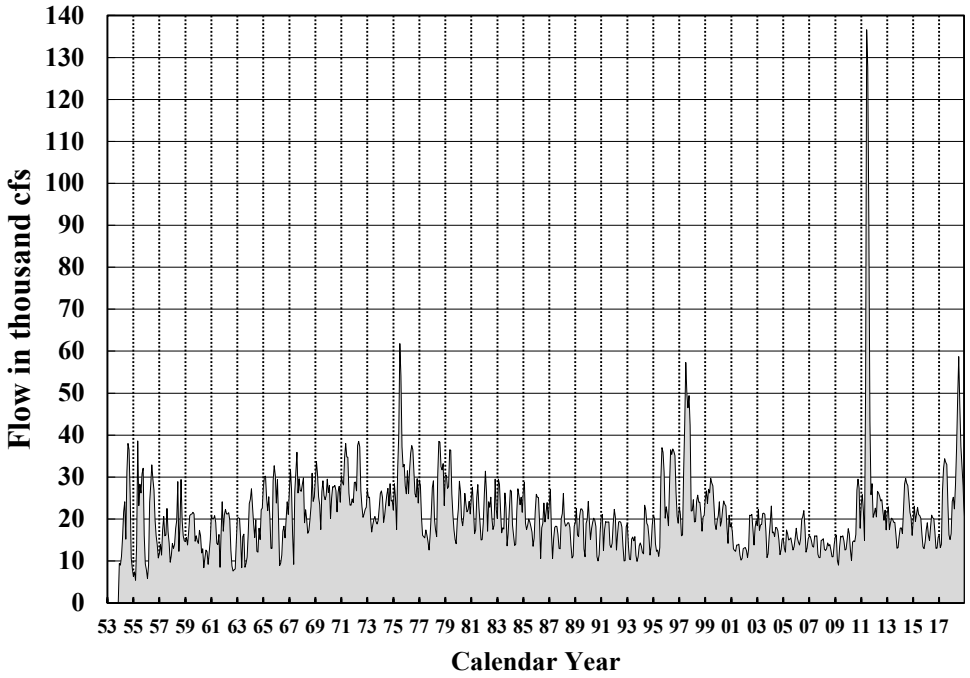


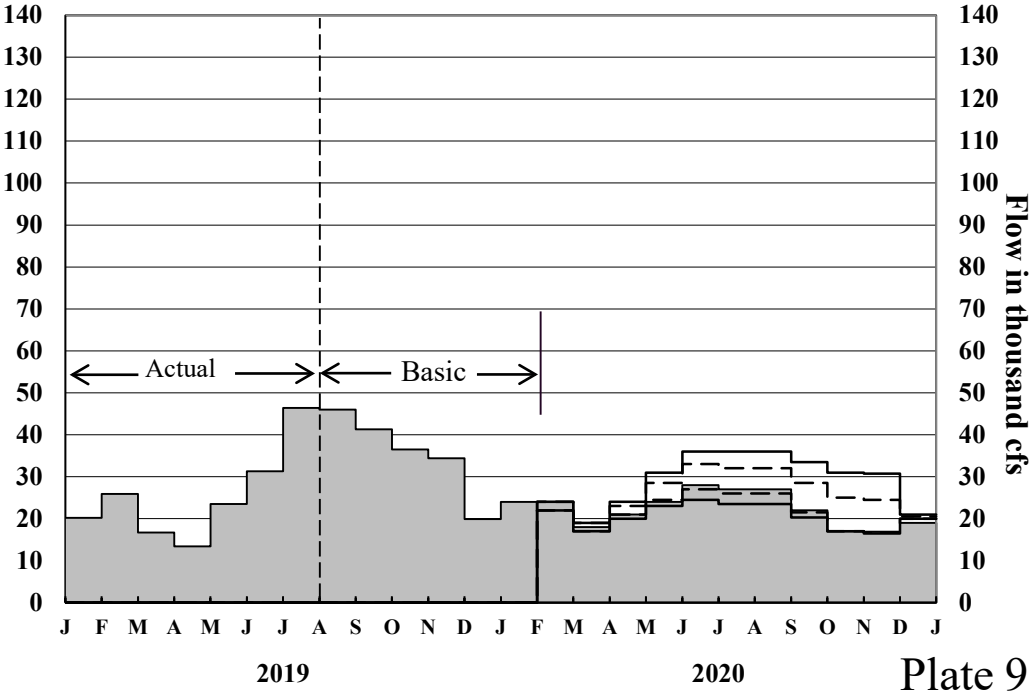

Plate 8

# Garrison
## Elevations and Releases



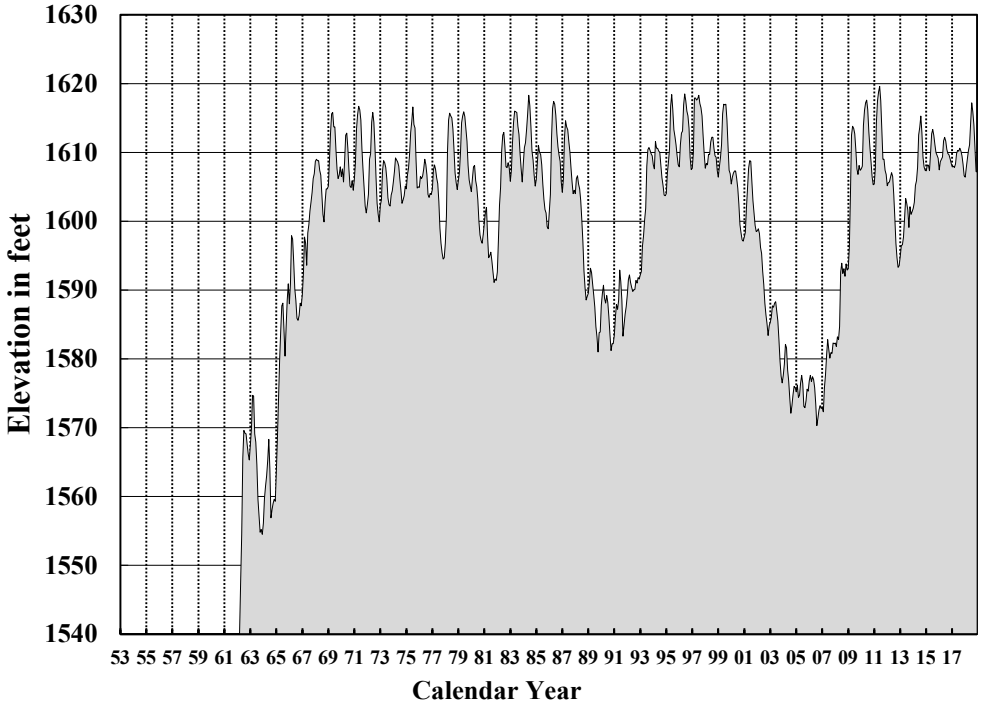



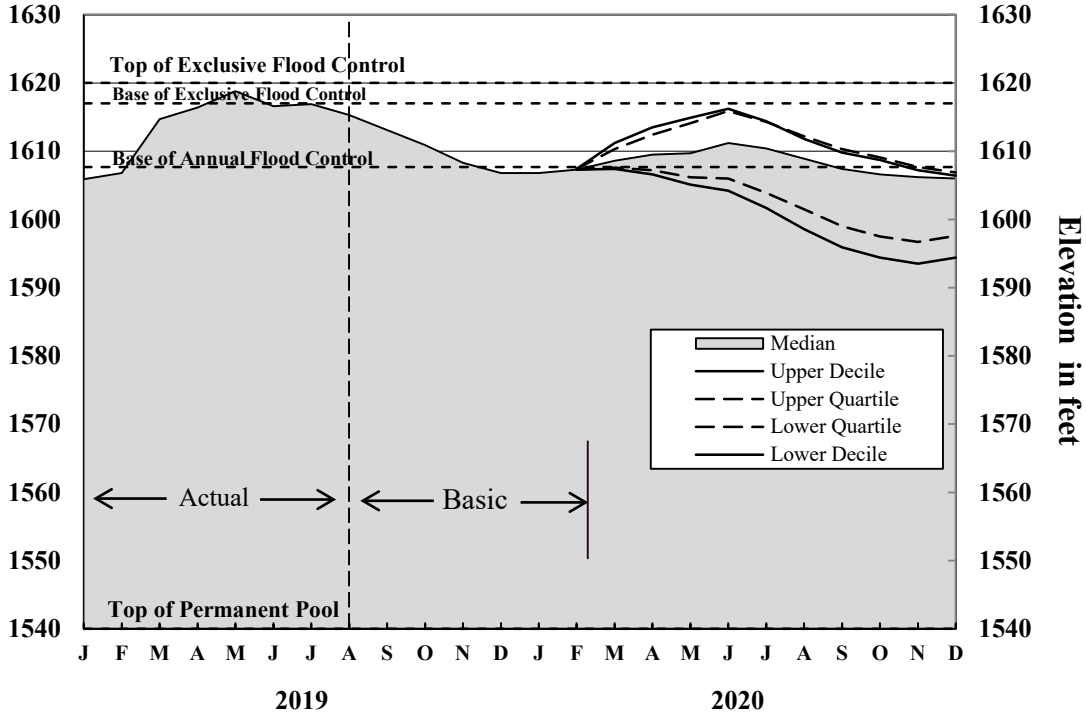



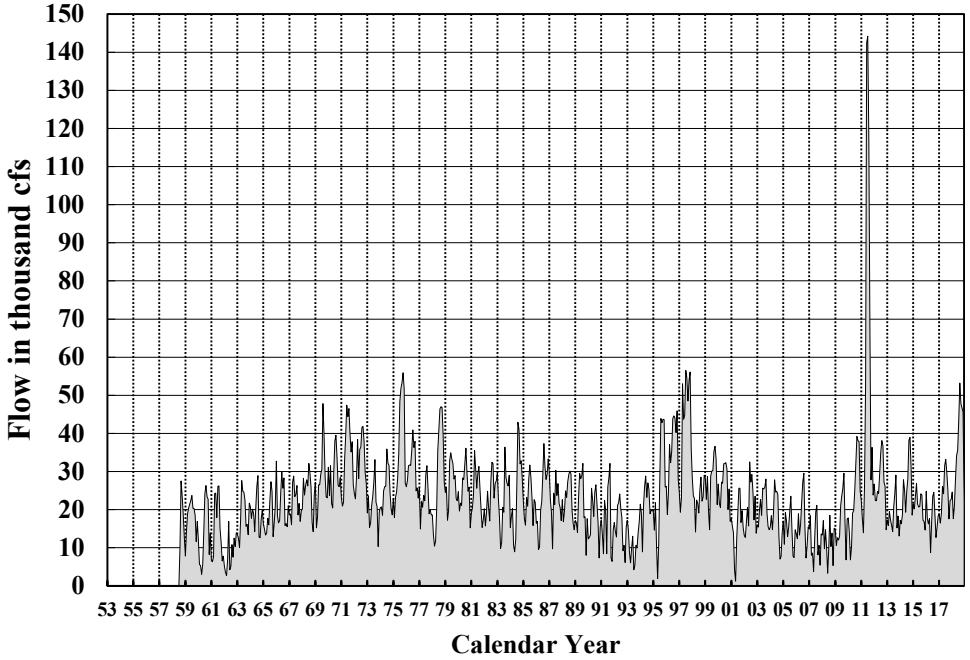



# Oahe

## Elevations and Releases



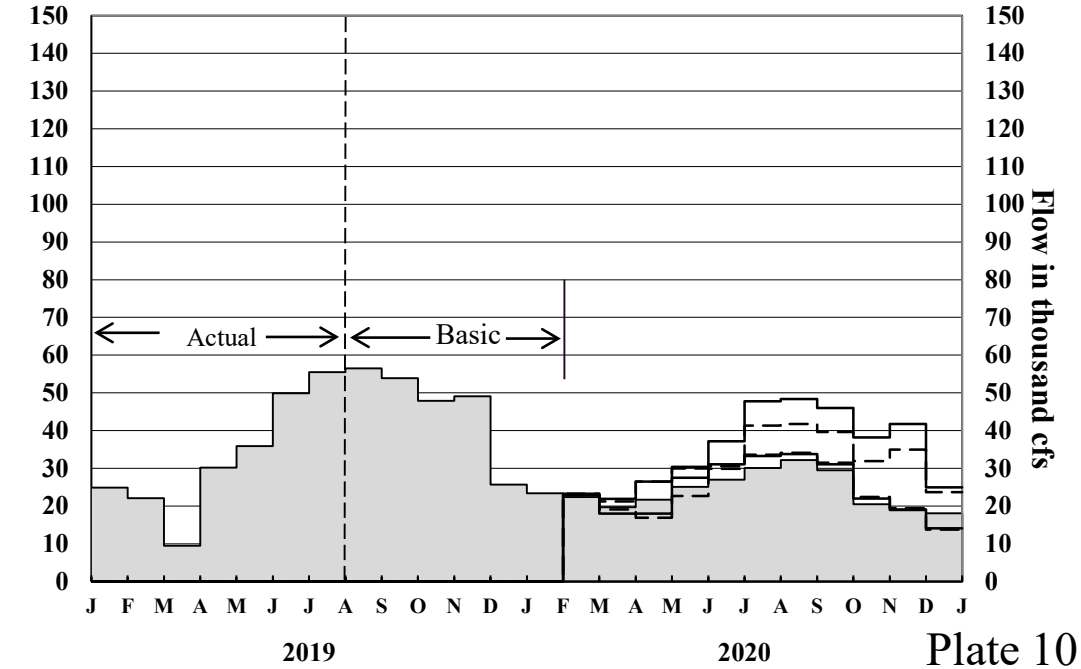
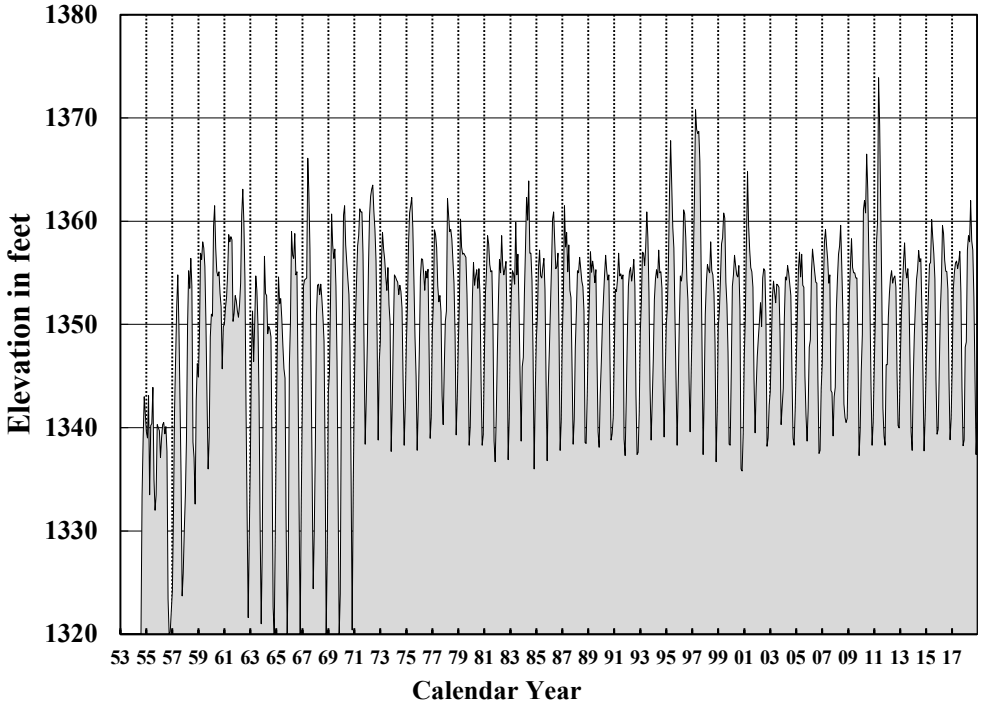
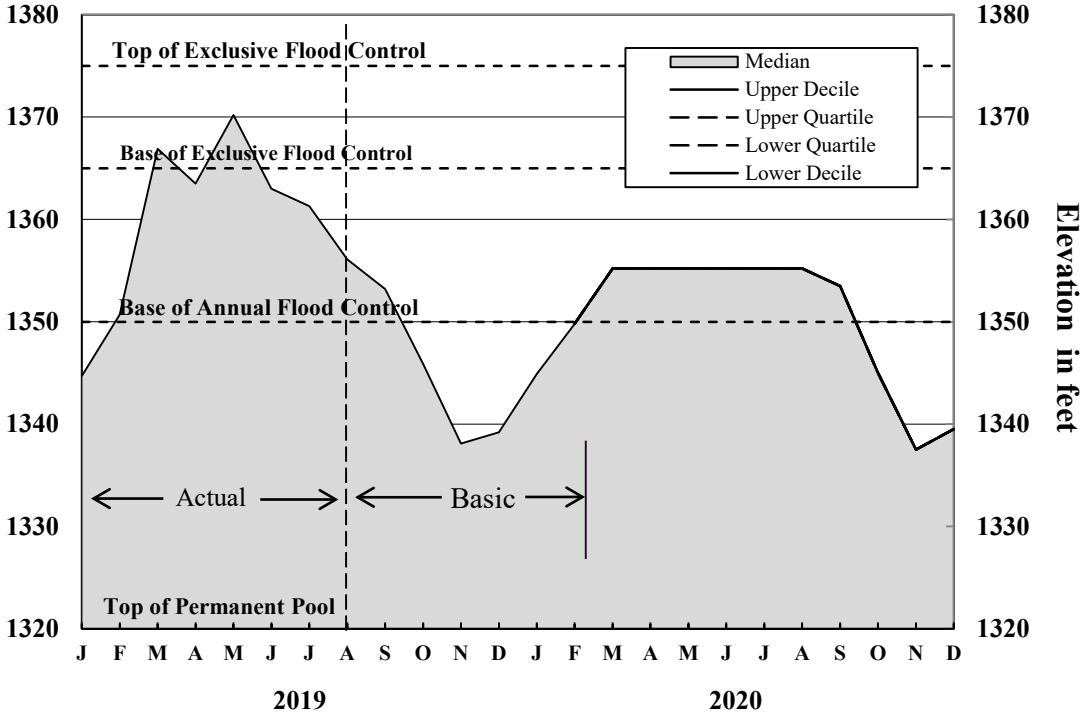
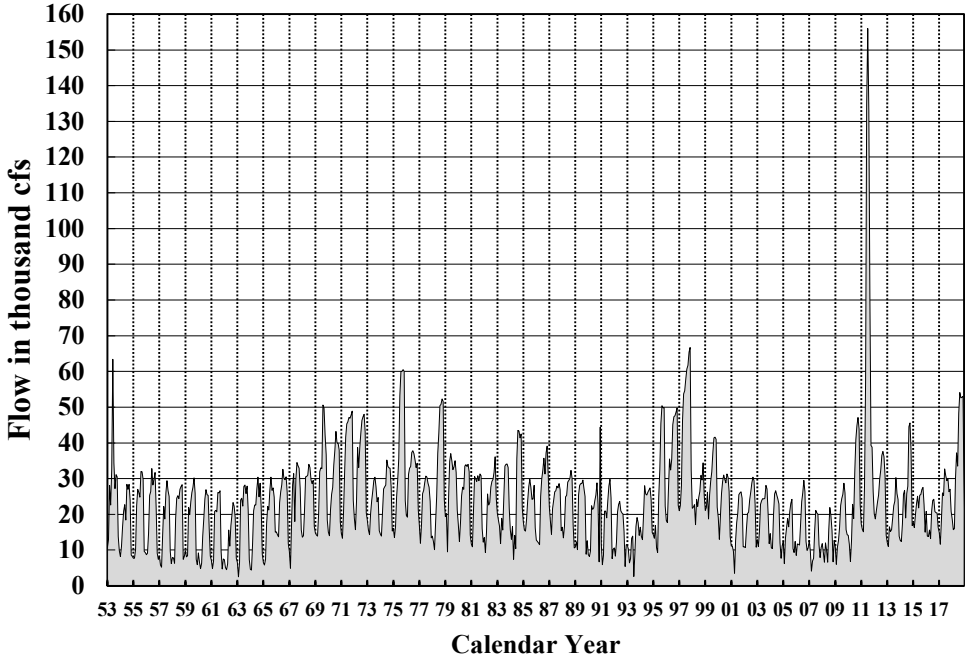



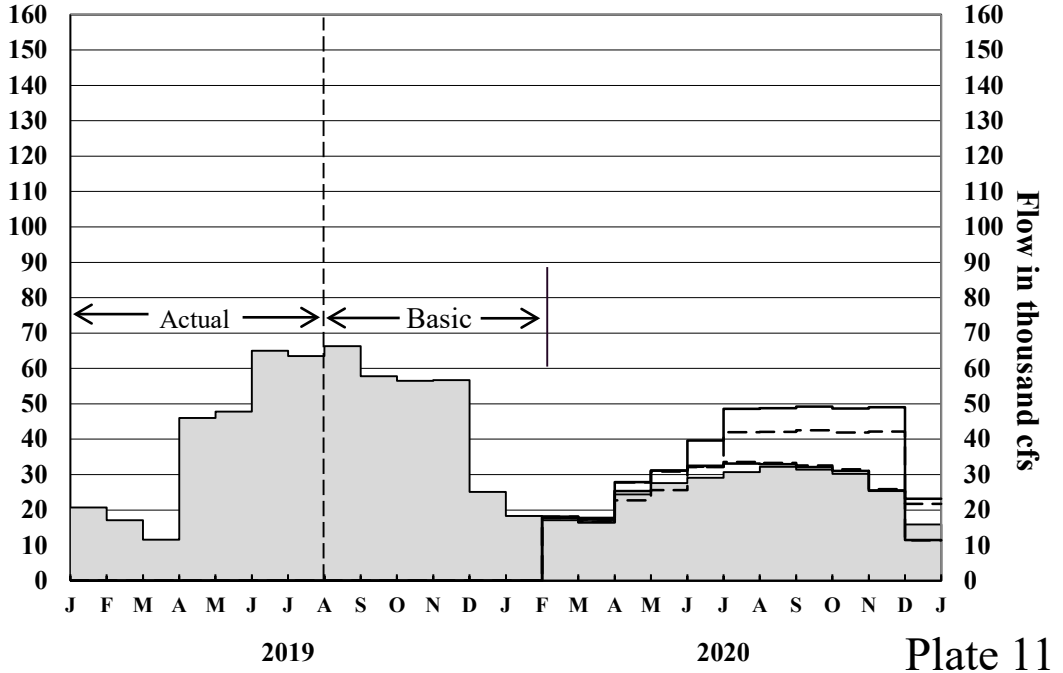

Plate 10

# Fort Randall
## Elevations and Releases

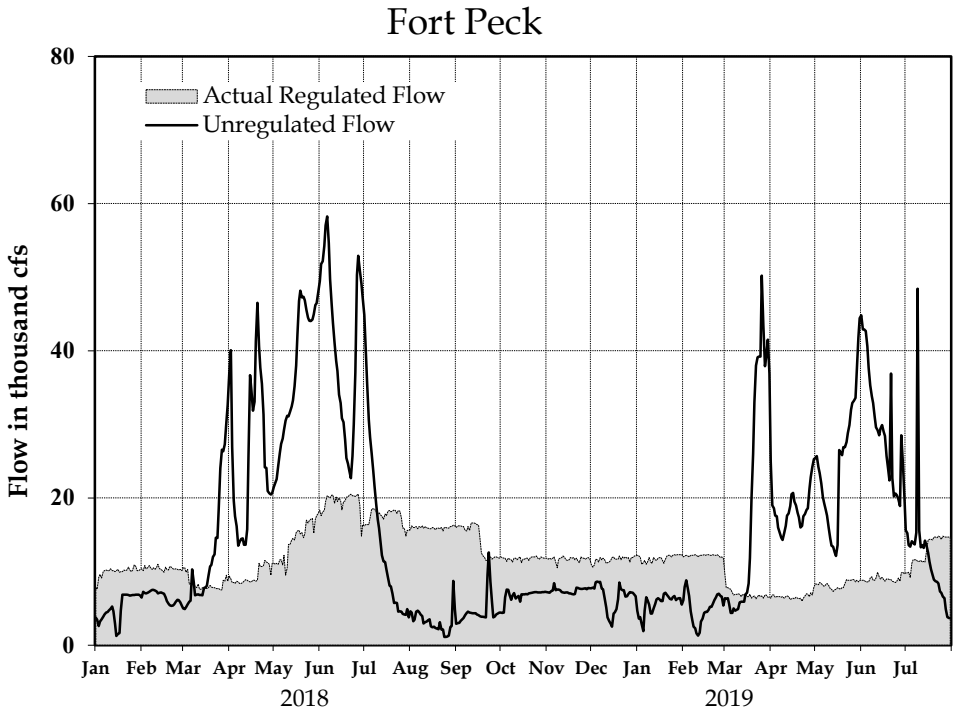


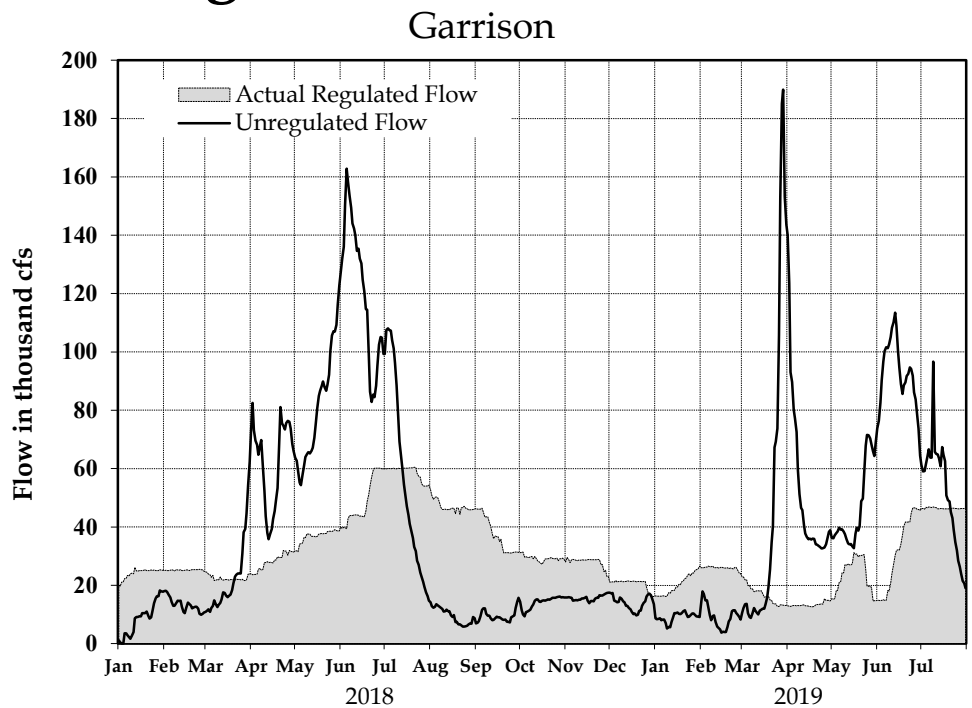



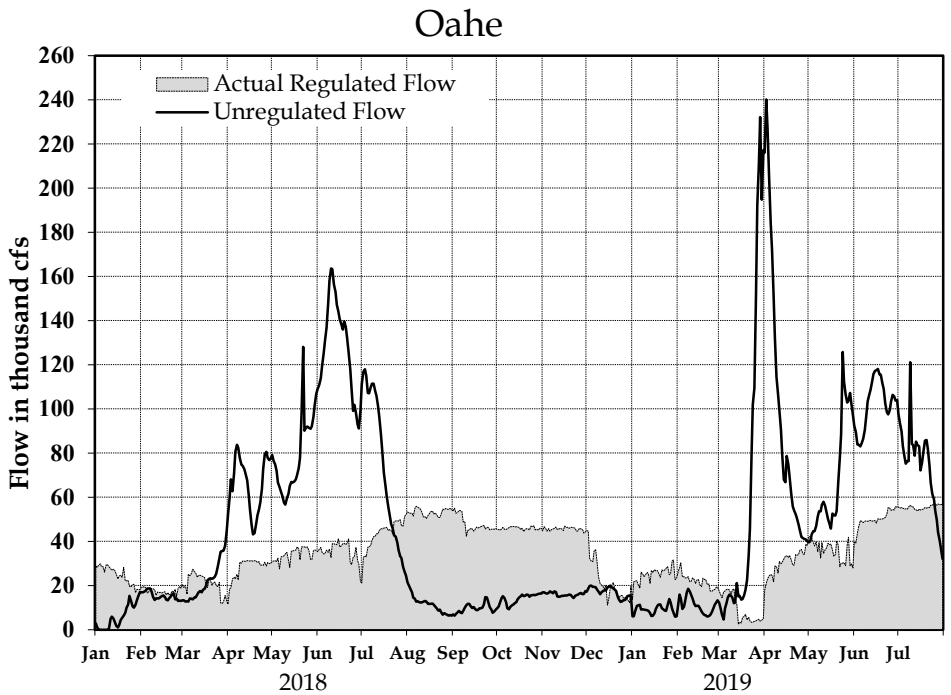



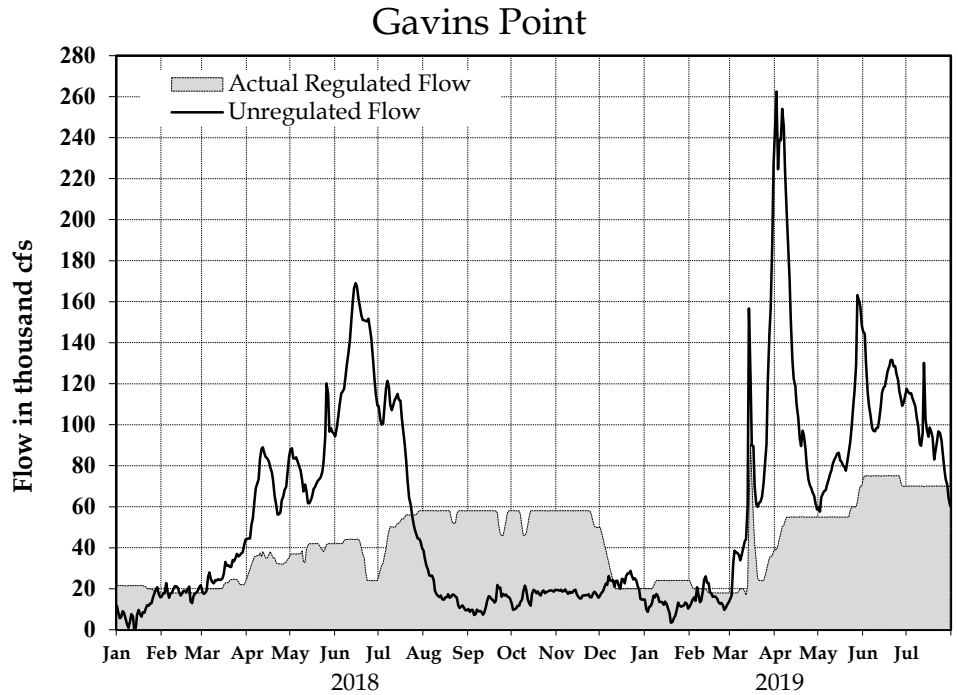



# Reservoir Release and Unregulated Flow



# System Gross Capability and Average Monthly Generation

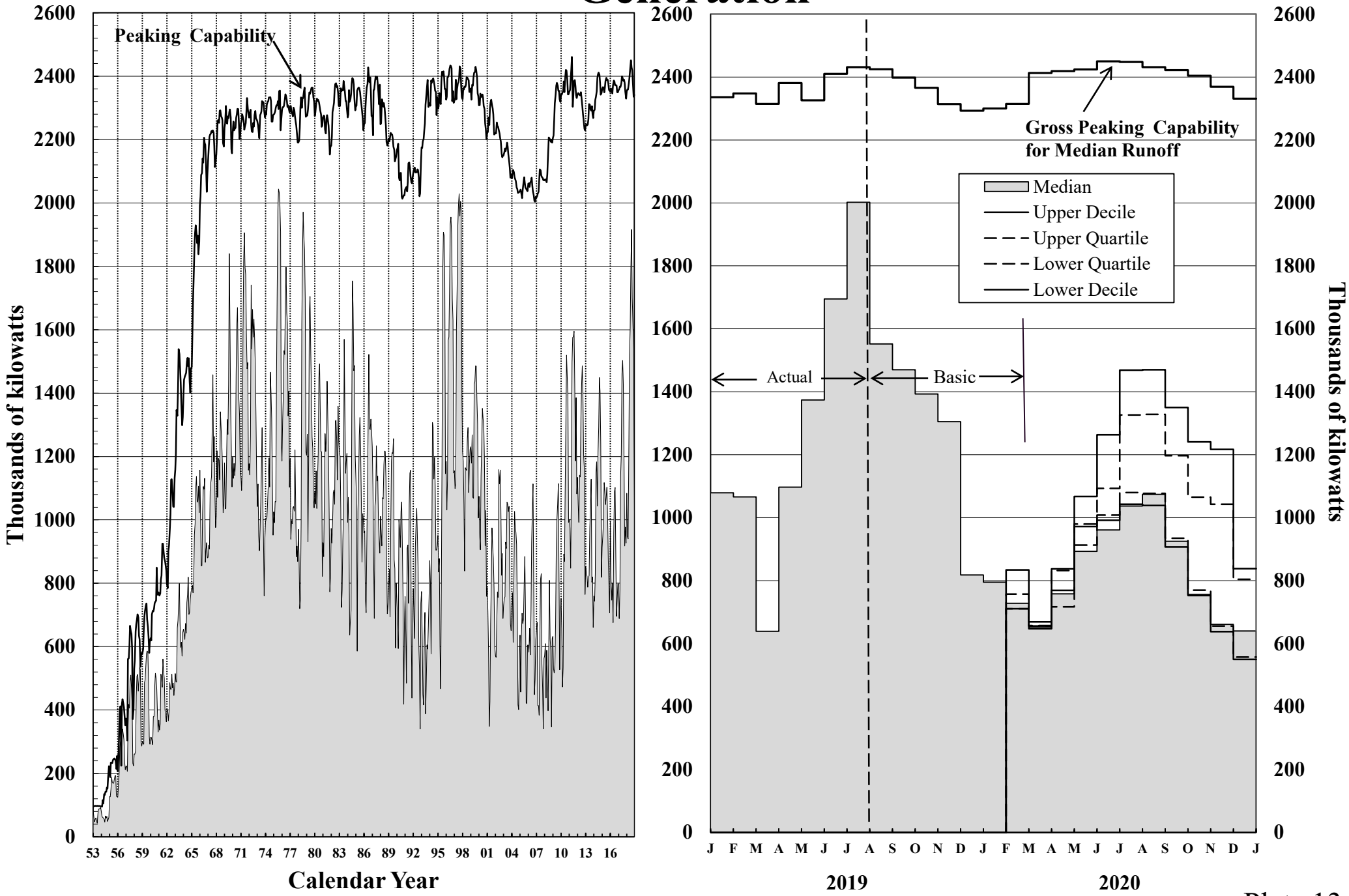



Plate 13

# Tentative Five Year Extensions of 2019-2020 AOP

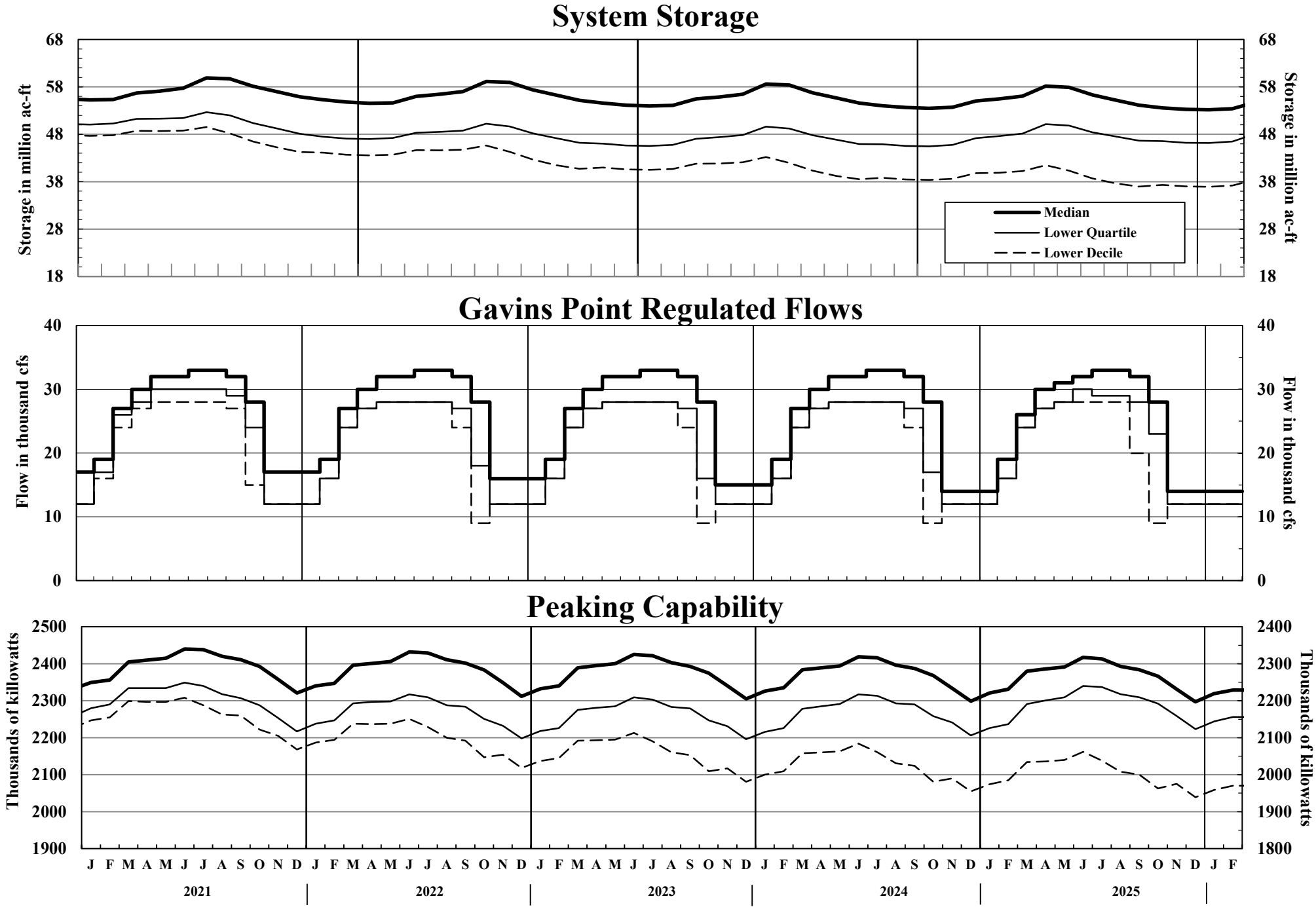



Plate 14

# Tentative Five Year Extensions of 2019-2020 AOP

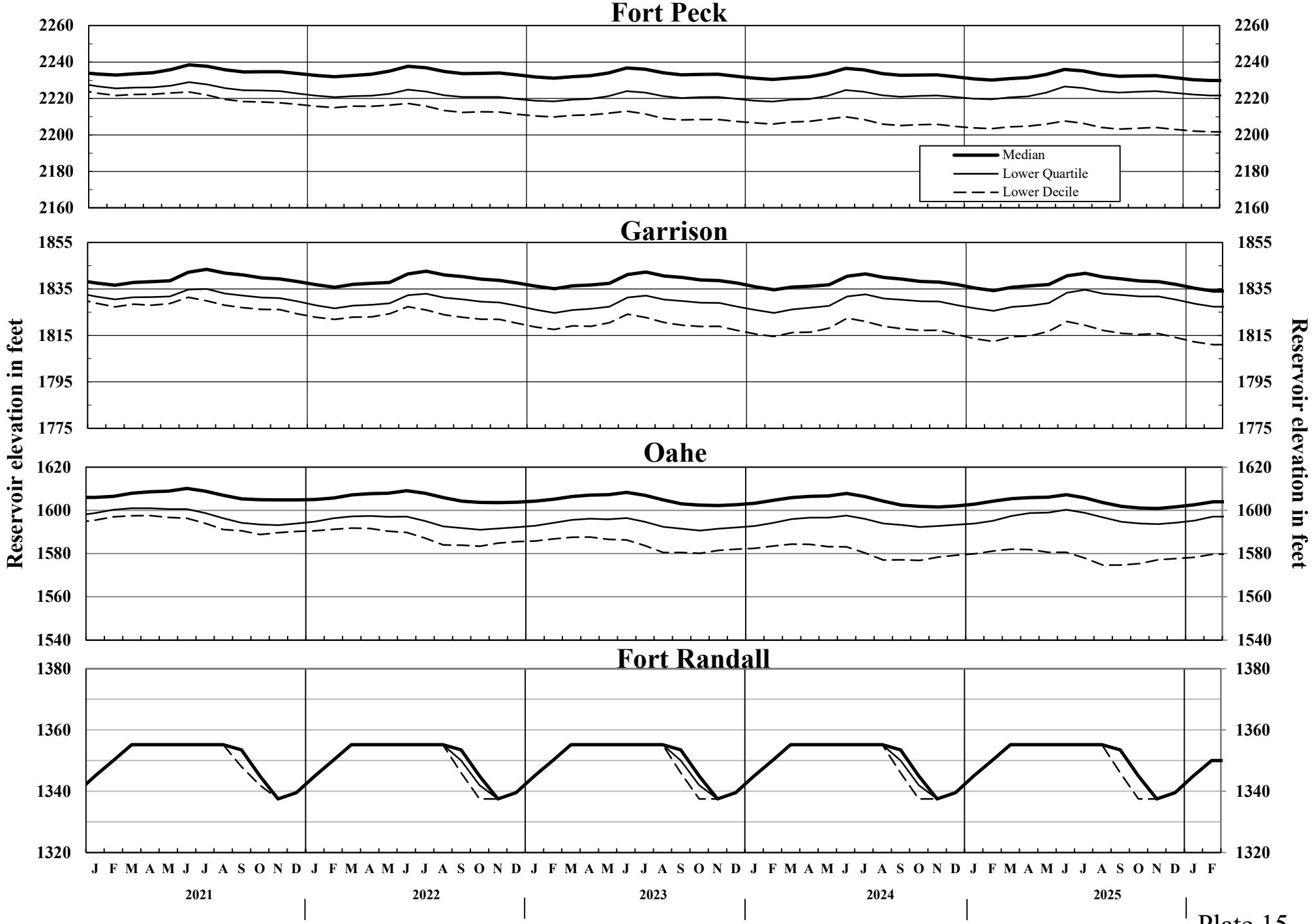



Plate 15

# Tribal Lands of the Missouri River Basin

US Army Corps of Engineers ®

RESERVATIONS
1. Rocky Boy
2. Fort Belknap
3. Fort Peck
4. Fort Berthold
5. Turtle Mountain
6. Fort Totten
7. Red Lake
8. Nett Lake
9. White Earth
10. Leech Lake
11. Fond du Lac
12. Bad River
13. Lac Courte Oreilles
14. Lac du Flambeau
15. Crow
16. Northern Cheyenne
17. Standing Rock
18. Cheyenne River
19. Sisseton
20. Wind River
21. Pine RIdge
22. Rosebud
23. Lower Brule
24. Crow Creek
25. Yankton
26. Winnebago
27. Omaha
28. Potawatomi
29. Ute Mountain
30. Southern Ute
31. Flathead
32. Blackfeet
33. Santee
34. Flandreau
35. Iowa
36. Sac and Fox
37. Kickapoo

Missouri River Basin

Bureau of Indian Affairs - Tribal Lands

Department of Defense - Military installations and U.S. Army Corps of Engineers Lands and Reservoirs

Plate 16

**Date of Study: 22Nov2019** **01Aug2019 / Basic Condition / 52.9 MAF / Balanced**
**Values in 1000 acre-ft Except as Indicated**
**F-Sum: Sum of Forecasted Values. *: Previous Month's Data**

| | 2019 *31Jul F-Sum | 31Aug | 30Sep | 31Oct | 30Nov | 31Dec | 2020 31Jan | 29Feb |
|---|---|---|---|---|---|---|---|---|
| **Fort Peck** | | | | | | | | |
| Reach Inflow | 2533 | 440 | 330 | 380 | 380 | 327 | 312 | 364 |
| Depletion | -715 | -56 | -186 | -110 | -59 | -103 | -119 | -82 |
| Reg Inflow | 3248 | 496 | 516 | 490 | 439 | 430 | 430 | 446 |
| Evap | 428 | 94 | 111 | 81 | 78 | 53 | 7 | 4 |
| Release | 5570 | 922 | 848 | 830 | 803 | 738 | 738 | 690 |
| Stor Change | -2753 | -523 | -443 | -421 | -442 | -361 | -314 | -248 |
| Storage | *17538 | 17015 | 16572 | 16151 | 15709 | 15348 | 15033 | 14785 |
| Elev NGVD29 | *2246.2 | 2244.0 | 2242.1 | 2240.2 | 2238.3 | 2236.6 | 2235.2 | 2234.0 |
| Disch kcfs | *12.9 | 15.0 | 14.2 | 13.5 | 13.5 | 12.0 | 12.0 | 12.0 |
| Ave Power MW | | 188 | 183 | 179 | 177 | 156 | 155 | 154 |
| Ave Cap MW | | 231 | 228 | 226 | 224 | 222 | 220 | 219 |
| Energy GWh | 656.5 | 140.0 | 132.1 | 133.1 | 127.7 | 116.4 | 115.6 | 107.5 |
| **Garrison** | | | | | | | | |
| Reach Inflow | 3133 | 830 | 500 | 533 | 391 | 253 | 264 | 362 |
| Depletion | -680 | 145 | -157 | -55 | -305 | -134 | -97 | -77 |
| Reg Inflow | 9405 | 1604 | 1517 | 1418 | 1499 | 1138 | 1099 | 1130 |
| Evap | 569 | 109 | 140 | 132 | 113 | 76 | -2 | 0 |
| Release | 13656 | 2828 | 2457 | 2244 | 2047 | 1224 | 1476 | 1380 |
| Stor Change | -4824 | -1337 | -1079 | -958 | -661 | -162 | -375 | -251 |
| Storage | *22568 | 21232 | 20152 | 19194 | 18533 | 18371 | 17996 | 17745 |
| Elev NGVD29 | *1851.7 | 1848.0 | 1844.9 | 1842.0 | 1840.0 | 1839.5 | 1838.3 | 1837.5 |
| Disch kcfs | *46.4 | 46.0 | 41.3 | 36.5 | 34.4 | 19.9 | 24.0 | 24.0 |
| Ave Power MW | | 567 | 521 | 474 | 441 | 258 | 308 | 306 |
| Ave Cap MW | | 567 | 562 | 557 | 552 | 551 | 545 | 539 |
| Energy GWh | 1589.5 | 421.5 | 375.5 | 352.3 | 317.6 | 191.9 | 229.2 | 213.3 |
| **Oahe** | | | | | | | | |
| Reach Inflow | 682 | 300 | 125 | 71 | 68 | 5 | 13 | 100 |
| Depletion | 226 | 141 | 33 | -14 | 1 | 14 | 20 | 31 |
| Reg Inflow | 14191 | 2989 | 2582 | 2329 | 2171 | 1202 | 1469 | 1450 |
| Evap | 579 | 94 | 144 | 129 | 111 | 87 | 9 | 5 |
| Release | 16854 | 3474 | 3207 | 2942 | 2924 | 1578 | 1441 | 1287 |
| Stor Change | -3245 | -583 | -769 | -742 | -864 | -463 | 19 | 157 |
| Storage | *21858 | 21275 | 20506 | 19764 | 18900 | 18437 | 18456 | 18614 |
| Elev NGVD29 | *1617.0 | 1615.3 | 1613.1 | 1610.9 | 1608.3 | 1606.8 | 1606.8 | 1607.3 |
| Disch kcfs | *55.5 | 56.5 | 53.9 | 47.9 | 49.1 | 25.7 | 23.4 | 22.4 |
| Ave Power MW | | 721 | 683 | 601 | 607 | 318 | 291 | 279 |
| Ave Cap MW | | 773 | 761 | 745 | 727 | 698 | 697 | 699 |
| Energy GWh | 2124.6 | 536.7 | 492.0 | 447.3 | 437.2 | 236.2 | 216.5 | 194.0 |
| **Big Bend** | | | | | | | | |
| Reg Inflow | 16867 | 3474 | 3210 | 2943 | 2924 | 1588 | 1440 | 1288 |
| Evap | 76 | 23 | 21 | 15 | 10 | 5 | 1 | 0 |
| Release | 16791 | 3460 | 3171 | 2948 | 2903 | 1580 | 1457 | 1272 |
| Storage | *1674 | 1664 | 1682 | 1661 | 1672 | 1675 | 1658 | 1674 |
| Elev NGVD29 | *1420.7 | 1420.6 | 1420.9 | 1420.5 | 1420.7 | 1420.8 | 1420.5 | 1420.7 |
| Disch kcfs | *51.9 | 56.3 | 53.3 | 48.0 | 48.8 | 25.7 | 23.7 | 22.1 |
| Ave Power MW | | 220 | 209 | 190 | 193 | 107 | 99 | 93 |
| Ave Cap MW | | 375 | 378 | 383 | 382 | 409 | 410 | 412 |
| Energy GWh | 659.7 | 163.6 | 150.8 | 141.5 | 139.1 | 79.5 | 74.0 | 64.9 |
| **Fort Randall** | | | | | | | | |
| Reach Inflow | 369 | 200 | 60 | 4 | 4 | 12 | 31 | 58 |
| Depletion | 35 | 15 | 7 | 1 | 2 | 3 | 3 | 3 |
| Reg Inflow | 17153 | 3642 | 3228 | 2950 | 2911 | 1604 | 1484 | 1334 |
| Evap | 114 | 28 | 34 | 30 | 15 | 6 | 1 | 1 |
| Release | 18020 | 4075 | 3441 | 3475 | 3373 | 1543 | 1127 | 986 |
| Stor Change | -982 | -461 | -247 | -555 | -476 | 55 | 356 | 347 |
| Storage | *3966 | 3504 | 3257 | 2702 | 2226 | 2281 | 2637 | 2984 |
| Elev NGVD29 | *1361.3 | 1356.1 | 1353.2 | 1345.9 | 1338.1 | 1339.2 | 1344.9 | 1349.8 |
| Disch kcfs | *63.5 | 66.3 | 57.8 | 56.5 | 56.7 | 25.1 | 18.3 | 17.1 |
| Ave Power MW | | 292 | 340 | 322 | 287 | 175 | 144 | 142 |
| Ave Cap MW | | 354 | 342 | 327 | 301 | 286 | 301 | 319 |
| Energy GWh | 1173.2 | 217.5 | 244.7 | 239.6 | 206.8 | 130.4 | 107.2 | 99.0 |
| **Gavins Point** | | | | | | | | |
| Reach Inflow | 984 | 250 | 150 | 130 | 120 | 100 | 100 | 134 |
| Depletion | 27 | 10 | -5 | 1 | 10 | 10 | 1 | -0 |
| Reg Inflow | 19134 | 4307 | 3633 | 3603 | 3485 | 1760 | 1230 | 1115 |
| Evap | 23 | 5 | 6 | 6 | 4 | 2 | 0 | 0 |
| Release | 19126 | 4304 | 3605 | 3597 | 3481 | 1758 | 1230 | 1150 |
| Stor Change | -15 | -2 | 22 | -0 | 0 | -1 | -0 | -35 |
| Storage | *342 | 340 | 362 | 362 | 363 | 362 | 362 | 327 |
| Elev NGVD29 | *1206.6 | 1206.6 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| Disch kcfs | *70.0 | 70.0 | 60.6 | 58.5 | 58.5 | 28.6 | 20.0 | 20.0 |
| Ave Power MW | | 98 | 104 | 107 | 107 | 86 | 71 | 71 |
| Ave Cap MW | | 126 | 127 | 127 | 127 | 127 | 127 | 126 |
| Energy GWh | 345.6 | 73.1 | 75.2 | 79.5 | 77.0 | 63.6 | 52.8 | 49.1 |
| **Sioux City** | | | | | | | | |
| Reach Inflow | 1775 | 590 | 400 | 300 | 200 | 125 | 55 | 105 |
| Depletion | 138 | 40 | 26 | 12 | 14 | 15 | 16 | 16 |
| Reg Flow | 20872 | 4854 | 4004 | 3885 | 3667 | 1954 | 1269 | 1239 |
| Reg Flow kcfs | | 78.9 | 67.3 | 63.2 | 61.6 | 31.8 | 20.6 | 21.5 |
| **Total** | | | | | | | | |
| Reach Inflow | 9476 | 2610 | 1565 | 1418 | 1163 | 822 | 775 | 1123 |
| Depletion | -969 | 294 | -281 | -164 | -337 | -196 | -176 | -109 |
| Evap | 1789 | 354 | 456 | 393 | 330 | 228 | 16 | 11 |
| Storage | *67946 | 65030 | 62532 | 59834 | 57402 | 56474 | 56142 | 56128 |
| Ave Power MW | | 2087 | 2042 | 1873 | 1813 | 1100 | 1069 | 1045 |
| Ave Cap MW | | 2425 | 2398 | 2366 | 2314 | 2293 | 2300 | 2315 |
| Energy GWh | 6548.9 | 1552.4 | 1470.1 | 1393.3 | 1305.3 | 818.1 | 795.2 | 727.6 |
| Daily GWh | | 50.1 | 49.0 | 44.9 | 43.5 | 26.4 | 25.7 | 25.1 |

**Date of Study: 22Nov2019** **01Aug2019 / Lower Basic Condition / 50.9 MAF / Balanced**
**Values in 1000 acre-ft Except as Indicated**
**F-Sum: Sum of Forecasted Values. *: Previous Month's Data**

| | 2019 *31Jul F-Sum | 31Aug | 30Sep | 31Oct | 30Nov | 31Dec | 2020 31Jan | 29Feb |
|---|---|---|---|---|---|---|---|---|
| **Fort Peck** | | | | | | | | |
| Reach Inflow | 1948 | 308 | 248 | 304 | 304 | 262 | 250 | 273 |
| Depletion | -397 | 2 | -46 | -89 | -40 | -77 | -90 | -57 |
| Reg Inflow | 2345 | 306 | 294 | 393 | 344 | 339 | 340 | 330 |
| Evap | 425 | 94 | 110 | 80 | 77 | 53 | 7 | 4 |
| Release | 4678 | 922 | 712 | 615 | 595 | 584 | 646 | 604 |
| Stor Change | -2761 | -713 | -528 | -302 | -329 | -298 | -313 | -278 |
| Storage | *17538 | 16824 | 16296 | 15994 | 15666 | 15367 | 15054 | 14776 |
| Elev NGVD29 | *2246.2 | 2243.2 | 2240.9 | 2239.5 | 2238.1 | 2236.7 | 2235.3 | 2233.9 |
| Disch kcfs | *12.9 | 15.0 | 12.0 | 10.0 | 10.0 | 9.5 | 10.5 | 10.5 |
| Ave Power MW | | 188 | 155 | 132 | 131 | 124 | 136 | 135 |
| Ave Cap MW | | 230 | 227 | 225 | 224 | 222 | 221 | 219 |
| Energy GWh | 652.5 | 139.8 | 111.7 | 98.3 | 94.5 | 92.2 | 101.2 | 94.1 |
| **Garrison** | | | | | | | | |
| Reach Inflow | 2380 | 581 | 375 | 426 | 313 | 202 | 211 | 271 |
| Depletion | -413 | 143 | -128 | -13 | -258 | -83 | -44 | -29 |
| Reg Inflow | 7506 | 1358 | 1257 | 1054 | 1166 | 874 | 893 | 904 |
| Evap | 573 | 109 | 140 | 134 | 115 | 77 | -2 | 0 |
| Release | 11758 | 2828 | 1791 | 1722 | 1631 | 1168 | 1353 | 1265 |
| Stor Change | -4829 | -1583 | -674 | -801 | -580 | -371 | -458 | -361 |
| Storage | *22568 | 20985 | 20311 | 19510 | 18930 | 18559 | 18100 | 17739 |
| Elev NGVD29 | *1851.7 | 1847.3 | 1845.4 | 1843.0 | 1841.2 | 1840.1 | 1838.6 | 1837.5 |
| Disch kcfs | *46.4 | 46.0 | 30.1 | 28.0 | 27.4 | 19.0 | 22.0 | 22.0 |
| Ave Power MW | | 566 | 397 | 367 | 356 | 248 | 284 | 282 |
| Ave Cap MW | | 566 | 562 | 558 | 555 | 552 | 547 | 540 |
| Energy GWh | 1587.2 | 421.1 | 285.5 | 273.3 | 256.4 | 184.2 | 211.2 | 196.2 |
| **Oahe** | | | | | | | | |
| Reach Inflow | 481 | 195 | 94 | 53 | 51 | 4 | 10 | 75 |
| Depletion | 226 | 141 | 33 | -14 | 1 | 14 | 20 | 31 |
| Reg Inflow | 12100 | 2884 | 1915 | 1789 | 1709 | 1151 | 1342 | 1310 |
| Evap | 581 | 95 | 143 | 129 | 111 | 89 | 9 | 5 |
| Release | 14755 | 3416 | 2591 | 2270 | 2271 | 1399 | 1470 | 1338 |
| Stor Change | -3239 | -630 | -820 | -610 | -673 | -337 | -136 | -33 |
| Storage | *21858 | 21228 | 20409 | 19799 | 19125 | 18788 | 18652 | 18619 |
| Elev NGVD29 | *1617.0 | 1615.2 | 1612.9 | 1611.0 | 1609.0 | 1607.9 | 1607.5 | 1607.3 |
| Disch kcfs | *55.5 | 55.5 | 43.5 | 36.9 | 38.2 | 22.8 | 23.9 | 23.3 |
| Ave Power MW | | 690 | 553 | 467 | 477 | 285 | 298 | 290 |
| Ave Cap MW | | 774 | 760 | 745 | 731 | 709 | 704 | 701 |
| Energy GWh | 2127.5 | 513.5 | 398.0 | 347.6 | 343.6 | 212.2 | 222.0 | 201.8 |
| **Big Bend** | | | | | | | | |
| Reg Inflow | 14769 | 3412 | 2602 | 2270 | 2271 | 1405 | 1469 | 1339 |
| Evap | 76 | 23 | 21 | 15 | 10 | 5 | 1 | 0 |
| Release | 14693 | 3394 | 2567 | 2276 | 2250 | 1397 | 1486 | 1323 |
| Storage | *1674 | 1669 | 1682 | 1661 | 1672 | 1675 | 1658 | 1673 |
| Elev NGVD29 | *1420.7 | 1420.6 | 1420.9 | 1420.5 | 1420.7 | 1420.8 | 1420.5 | 1420.7 |
| Disch kcfs | *51.9 | 55.2 | 43.1 | 37.0 | 37.8 | 22.7 | 24.2 | 23.0 |
| Ave Power MW | | 216 | 173 | 150 | 153 | 96 | 101 | 97 |
| Ave Cap MW | | 377 | 387 | 393 | 392 | 412 | 409 | 411 |
| Energy GWh | 656.8 | 160.6 | 124.4 | 111.6 | 110.2 | 71.2 | 75.4 | 67.3 |
| **Fort Randall** | | | | | | | | |
| Reach Inflow | 257 | 130 | 45 | 3 | 3 | 9 | 23 | 44 |
| Depletion | 35 | 15 | 7 | 1 | 2 | 3 | 3 | 3 |
| Reg Inflow | 14941 | 3503 | 2620 | 2276 | 2258 | 1409 | 1504 | 1371 |
| Evap | 113 | 27 | 33 | 30 | 15 | 6 | 1 | 1 |
| Release | 15806 | 4018 | 2755 | 2800 | 2717 | 1346 | 1153 | 1017 |
| Stor Change | -979 | -543 | -168 | -554 | -474 | 58 | 350 | 352 |
| Storage | *3966 | 3423 | 3255 | 2701 | 2226 | 2284 | 2634 | 2986 |
| Elev NGVD29 | *1361.3 | 1355.2 | 1353.2 | 1345.9 | 1338.2 | 1339.2 | 1344.9 | 1349.8 |
| Disch kcfs | *63.5 | 65.3 | 46.3 | 45.5 | 45.7 | 21.9 | 18.7 | 17.7 |
| Ave Power MW | | 288 | 341 | 324 | 292 | 162 | 147 | 147 |
| Ave Cap MW | | 350 | 341 | 327 | 301 | 286 | 301 | 319 |
| Energy GWh | 1173.8 | 214.3 | 245.7 | 241.2 | 210.3 | 120.7 | 109.6 | 102.0 |
| **Gavins Point** | | | | | | | | |
| Reach Inflow | 713 | 163 | 112 | 97 | 90 | 75 | 75 | 100 |
| Depletion | 27 | 10 | -5 | 1 | 10 | 10 | 1 | -0 |
| Reg Inflow | 16648 | 4180 | 2928 | 2896 | 2801 | 1499 | 1230 | 1115 |
| Evap | 23 | 5 | 6 | 6 | 4 | 2 | 0 | 0 |
| Release | 16641 | 4181 | 2896 | 2890 | 2797 | 1498 | 1230 | 1150 |
| Stor Change | -16 | -6 | 27 | 0 | 0 | -0 | -0 | -36 |
| Storage | *342 | 336 | 362 | 362 | 362 | 362 | 362 | 326 |
| Elev NGVD29 | *1206.6 | 1206.4 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1205.9 |
| Disch kcfs | *70.0 | 68.0 | 48.7 | 47.0 | 47.0 | 24.4 | 20.0 | 20.0 |
| Ave Power MW | | 99 | 108 | 110 | 110 | 81 | 71 | 71 |
| Ave Cap MW | | 126 | 127 | 127 | 127 | 127 | 127 | 126 |
| Energy GWh | 351.8 | 73.4 | 77.6 | 81.7 | 79.1 | 60.2 | 52.8 | 49.1 |
| **Sioux City** | | | | | | | | |
| Reach Inflow | 1272 | 384 | 300 | 225 | 150 | 94 | 41 | 79 |
| Depletion | 138 | 40 | 26 | 12 | 14 | 15 | 16 | 16 |
| Reg Flow | 17885 | 4529 | 3216 | 3103 | 2933 | 1636 | 1255 | 1213 |
| Reg Flow kcfs | | 73.7 | 54.0 | 50.5 | 49.3 | 26.6 | 20.4 | 21.1 |
| **Total** | | | | | | | | |
| Reach Inflow | 7052 | 1760 | 1174 | 1109 | 911 | 646 | 610 | 842 |
| Depletion | -384 | 350 | -112 | -100 | -271 | -119 | -95 | -36 |
| Evap | 1791 | 353 | 454 | 393 | 332 | 231 | 16 | 11 |
| Storage | *67946 | 64466 | 62315 | 60027 | 57982 | 57035 | 56461 | 56119 |
| Ave Power MW | | 2047 | 1726 | 1551 | 1520 | 995 | 1038 | 1021 |
| Ave Cap MW | | 2422 | 2404 | 2376 | 2329 | 2309 | 2309 | 2316 |
| Energy GWh | 6549.6 | 1522.7 | 1242.8 | 1153.8 | 1094.1 | 740.6 | 772.1 | 710.5 |
| Daily GWh | | 49.1 | 41.4 | 37.2 | 36.5 | 23.9 | 24.9 | 24.5 |

**Date of Study: 22Nov2019** **01Aug2019 / Upper Basic Condition / 55.0 MAF / Balanced**
**Values in 1000 acre-ft Except as Indicated**
**F-Sum: Sum of Forecasted Values. *: Previous Month's Data**

| | 2019 *31Jul F-Sum | 31Aug | 30Sep | 31Oct | 30Nov | 31Dec | 2020 31Jan | 29Feb |
|---|---|---|---|---|---|---|---|---|
| **Fort Peck** | | | | | | | | |
| Reach Inflow | 3084 | 572 | 396 | 456 | 456 | 392 | 374 | 437 |
| Depletion | -708 | -50 | -172 | -97 | -64 | -116 | -120 | -89 |
| Reg Inflow | 3792 | 622 | 568 | 553 | 520 | 509 | 494 | 526 |
| Evap | 429 | 94 | 112 | 81 | 78 | 53 | 7 | 4 |
| Release | 6130 | 954 | 924 | 922 | 893 | 830 | 830 | 777 |
| Stor Change | -2770 | -430 | -467 | -451 | -450 | -375 | -343 | -255 |
| Storage | *17538 | 17108 | 16641 | 16190 | 15740 | 15365 | 15022 | 14768 |
| Elev NGVD29 | *2246.2 | 2244.4 | 2242.4 | 2240.4 | 2238.4 | 2236.7 | 2235.1 | 2233.9 |
| Disch kcfs | *12.9 | 15.5 | 15.5 | 15.0 | 15.0 | 13.5 | 13.5 | 13.5 |
| Ave Power MW | | 188 | 187 | 185 | 184 | 176 | 175 | 174 |
| Ave Cap MW | | 231 | 229 | 227 | 224 | 222 | 220 | 219 |
| Energy GWh | 652.8 | 140.1 | 134.5 | 137.9 | 132.3 | 131.0 | 130.0 | 120.8 |
| **Garrison** | | | | | | | | |
| Reach Inflow | 3843 | 1079 | 600 | 640 | 469 | 304 | 317 | 434 |
| Depletion | -764 | 132 | -162 | -62 | -315 | -152 | -116 | -89 |
| Reg Inflow | 10746 | 1890 | 1694 | 1624 | 1677 | 1298 | 1262 | 1300 |
| Evap | 568 | 110 | 141 | 132 | 111 | 74 | -2 | 0 |
| Release | 15003 | 2828 | 2737 | 2828 | 2523 | 1230 | 1476 | 1380 |
| Stor Change | -4828 | -1052 | -1184 | -1336 | -957 | -6 | -211 | -81 |
| Storage | *22568 | 21516 | 20332 | 18996 | 18039 | 18033 | 17821 | 17740 |
| Elev NGVD29 | *1851.7 | 1848.8 | 1845.4 | 1841.4 | 1838.4 | 1838.4 | 1837.7 | 1837.5 |
| Disch kcfs | *46.4 | 46.0 | 46.0 | 46.0 | 42.4 | 20.0 | 24.0 | 24.0 |
| Ave Power MW | | 567 | 561 | 549 | 500 | 257 | 307 | 306 |
| Ave Cap MW | | 567 | 563 | 557 | 548 | 543 | 540 | 538 |
| Energy GWh | 1587.7 | 421.7 | 404.2 | 408.4 | 360.1 | 191.5 | 228.2 | 212.9 |
| **Oahe** | | | | | | | | |
| Reach Inflow | 926 | 405 | 169 | 96 | 92 | 7 | 18 | 140 |
| Depletion | 226 | 141 | 33 | -14 | 1 | 14 | 20 | 31 |
| Reg Inflow | 15782 | 3094 | 2873 | 2938 | 2692 | 1222 | 1474 | 1490 |
| Evap | 581 | 94 | 144 | 129 | 112 | 88 | 9 | 5 |
| Release | 18414 | 3536 | 3520 | 3452 | 3344 | 1736 | 1507 | 1319 |
| Stor Change | -3216 | -540 | -791 | -643 | -764 | -601 | -42 | 166 |
| Storage | *21858 | 21319 | 20527 | 19884 | 19120 | 18519 | 18477 | 18642 |
| Elev NGVD29 | *1617.0 | 1615.5 | 1613.2 | 1611.3 | 1609.0 | 1607.0 | 1606.9 | 1607.4 |
| Disch kcfs | *55.5 | 57.5 | 59.1 | 56.1 | 56.2 | 28.2 | 24.5 | 22.9 |
| Ave Power MW | | 734 | 709 | 697 | 691 | 349 | 304 | 286 |
| Ave Cap MW | | 773 | 762 | 746 | 733 | 701 | 698 | 699 |
| Energy GWh | 2127.9 | 546.1 | 510.4 | 518.3 | 497.7 | 260.0 | 226.5 | 198.7 |
| **Big Bend** | | | | | | | | |
| Reg Inflow | 18427 | 3535 | 3518 | 3454 | 3345 | 1748 | 1507 | 1320 |
| Evap | 76 | 23 | 21 | 15 | 10 | 5 | 1 | 0 |
| Release | 18351 | 3525 | 3476 | 3459 | 3323 | 1740 | 1522 | 1305 |
| Storage | *1674 | 1661 | 1682 | 1661 | 1672 | 1675 | 1659 | 1674 |
| Elev NGVD29 | *1420.7 | 1420.5 | 1420.9 | 1420.5 | 1420.7 | 1420.7 | 1420.5 | 1420.7 |
| Disch kcfs | *51.9 | 57.3 | 58.4 | 56.3 | 55.9 | 28.3 | 24.8 | 22.7 |
| Ave Power MW | | 223 | 227 | 220 | 219 | 117 | 104 | 96 |
| Ave Cap MW | | 374 | 373 | 376 | 376 | 405 | 408 | 411 |
| Energy GWh | 656.8 | 166.2 | 163.3 | 163.7 | 157.4 | 87.0 | 77.1 | 66.5 |
| **Fort Randall** | | | | | | | | |
| Reach Inflow | 503 | 270 | 81 | 5 | 5 | 16 | 43 | 81 |
| Depletion | 35 | 15 | 7 | 1 | 2 | 3 | 3 | 3 |
| Reg Inflow | 18847 | 3776 | 3547 | 3464 | 3334 | 1772 | 1562 | 1391 |
| Evap | 114 | 28 | 34 | 30 | 15 | 6 | 1 | 1 |
| Release | 19713 | 3985 | 3989 | 3986 | 3797 | 1709 | 1209 | 1038 |
| Stor Change | -982 | -238 | -476 | -551 | -478 | 58 | 352 | 351 |
| Storage | *3966 | 3728 | 3252 | 2701 | 2223 | 2281 | 2633 | 2984 |
| Elev NGVD29 | *1361.3 | 1358.6 | 1353.2 | 1345.9 | 1338.1 | 1339.2 | 1344.9 | 1349.8 |
| Disch kcfs | *63.5 | 64.8 | 67.0 | 64.8 | 63.8 | 27.8 | 19.7 | 18.1 |
| Ave Power MW | | 296 | 341 | 319 | 286 | 187 | 154 | 149 |
| Ave Cap MW | | 358 | 344 | 327 | 301 | 286 | 301 | 319 |
| Energy GWh | 1173.8 | 220.3 | 245.4 | 237.4 | 205.9 | 139.5 | 114.7 | 104.0 |
| **Gavins Point** | | | | | | | | |
| Reach Inflow | 1340 | 337 | 202 | 176 | 162 | 135 | 140 | 188 |
| Depletion | 27 | 10 | -5 | 1 | 10 | 10 | 1 | -0 |
| Reg Inflow | 21189 | 4307 | 4194 | 4171 | 3959 | 1973 | 1353 | 1232 |
| Evap | 23 | 5 | 6 | 6 | 4 | 2 | 0 | 0 |
| Release | 21180 | 4304 | 4165 | 4165 | 3957 | 1970 | 1353 | 1265 |
| Stor Change | -13 | -2 | 23 | 0 | -2 | 2 | -0 | -33 |
| Storage | *342 | 340 | 362 | 362 | 360 | 362 | 362 | 329 |
| Elev NGVD29 | *1206.6 | 1206.5 | 1207.5 | 1207.5 | 1207.4 | 1207.5 | 1207.5 | 1206.1 |
| Disch kcfs | *70.0 | 70.0 | 70.0 | 67.7 | 66.5 | 32.0 | 22.0 | 22.0 |
| Ave Power MW | | 99 | 102 | 105 | 105 | 91 | 78 | 77 |
| Ave Cap MW | | 126 | 127 | 127 | 127 | 127 | 127 | 126 |
| Energy GWh | 351.8 | 73.6 | 73.3 | 77.8 | 75.5 | 67.9 | 57.9 | 53.8 |
| **Sioux City** | | | | | | | | |
| Reach Inflow | 2404 | 797 | 540 | 405 | 270 | 169 | 77 | 147 |
| Depletion | 138 | 40 | 26 | 12 | 14 | 15 | 16 | 16 |
| Reg Flow | 23551 | 5060 | 4679 | 4566 | 4213 | 2222 | 1414 | 1396 |
| Reg Flow kcfs | | 82.3 | 78.6 | 74.3 | 70.8 | 36.1 | 23.0 | 24.3 |
| **Total** | | | | | | | | |
| Reach Inflow | 12099 | 3460 | 1988 | 1777 | 1454 | 1023 | 970 | 1427 |
| Depletion | -1046 | 288 | -272 | -158 | -353 | -227 | -196 | -128 |
| Evap | 1791 | 355 | 458 | 394 | 330 | 227 | 16 | 11 |
| Storage | *67946 | 65672 | 62796 | 59794 | 57154 | 56234 | 55974 | 56137 |
| Ave Power MW | | 2108 | 2127 | 2075 | 1985 | 1178 | 1121 | 1087 |
| Ave Cap MW | | 2428 | 2398 | 2360 | 2310 | 2286 | 2295 | 2312 |
| Energy GWh | 6550.7 | 1568.0 | 1531.1 | 1543.5 | 1428.9 | 876.8 | 834.2 | 756.7 |
| Daily GWh | | 50.6 | 51.0 | 49.8 | 47.6 | 28.3 | 26.9 | 26.1 |

TIME OF STUDY: 09:34:37 STUDY NO 4

VALUES IN 1000 AF EXCEPT AS INDICATED

| 29FEB20 | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2020 | | | | | | | | | | | 2021 | | | |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 9450 | 341 | 159 | 205 | 825 | 1400 | 2355 | 1205 | 440 | 385 | 480 | 288 | 134 | 153 | 350 | 310 | 420 |
| DEPLETION | 568 | -42 | -19 | -25 | -16 | 312 | 591 | 293 | 17 | -110 | -78 | -28 | -13 | -15 | -110 | -112 | -77 |
| EVAPORATION | 327 | | | | | | | 22 | 70 | 86 | 75 | 18 | 8 | 9 | 39 | | |
| MOD INFLOW | 8555 | 383 | 179 | 230 | 841 | 1088 | 1764 | 890 | 353 | 409 | 483 | 298 | 139 | 159 | 421 | 422 | 497 |
| RELEASE | 8556 | 223 | 104 | 134 | 565 | 769 | 803 | 830 | 830 | 713 | 646 | 312 | 146 | 190 | 769 | 799 | 722 |
| STOR CHANGE | -1 | 160 | 74 | 96 | 276 | 319 | 961 | 60 | -477 | -305 | -162 | -15 | -7 | -32 | -347 | -377 | -225 |
| STORAGE | 14768. | 14928 | 15002 | 15098 | 15374 | 15693 | 16654 | 16713 | 16236 | 15932 | 15769 | 15755 | 15748 | 15716 | 15369 | 14992 | 14767 |
| ELEV FTMSL | 2233.9 | 2234.7 | 2235.0 | 2235.5 | 2236.7 | 2238.2 | 2242.4 | 2242.7 | 2240.6 | 2239.3 | 2238.5 | 2238.5 | 2238.4 | 2238.3 | 2236.7 | 2235.0 | 2233.9 |
| DISCH KCFS | 13.500 | 7.5 | 7.5 | 7.5 | 9.5 | 12.5 | 13.5 | 13.5 | 13.5 | 12.0 | 10.5 | 10.5 | 10.5 | 12.0 | 12.5 | 13.0 | 13.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 102 | 102 | 103 | 130 | 170 | 184 | 186 | 185 | 165 | 145 | 145 | 145 | 164 | 170 | 175 | 174 |
| PEAK POW MW | | 188 | 189 | 189 | 190 | 191 | 194 | 194 | 192 | 191 | 191 | 191 | 191 | 191 | 190 | 189 | 188 |
| ENERGY GWH | 1411.9 | 36.8 | 17.2 | 22.1 | 93.6 | 126.4 | 132.4 | 138.1 | 137.6 | 118.8 | 107.8 | 52.1 | 24.3 | 31.6 | 126.4 | 130.0 | 116.8 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 14000 | 530 | 247 | 318 | 1355 | 1840 | 3460 | 2715 | 835 | 570 | 645 | 248 | 116 | 132 | 260 | 315 | 415 |
| DEPLETION | 1192 | -9 | -4 | -6 | -189 | 112 | 1266 | 767 | 127 | -169 | -62 | -158 | -74 | -84 | -144 | -108 | -73 |
| CHAN STOR | 5 | 60 | | 0 | -20 | -29 | -10 | | | 15 | 14 | | | -15 | -5 | -5 | 0 |
| EVAPORATION | 370 | | | | | | | 25 | 80 | 99 | 84 | 20 | 9 | 10 | 42 | | |
| REG INFLOW | 20999 | 822 | 356 | 457 | 2090 | 2467 | 2988 | 2753 | 1458 | 1368 | 1283 | 698 | 326 | 382 | 1125 | 1217 | 1210 |
| RELEASE | 21017 | 565 | 264 | 339 | 1428 | 1906 | 2142 | 2214 | 2214 | 1994 | 1906 | 922 | 430 | 476 | 1291 | 1537 | 1388 |
| STOR CHANGE | -18 | 257 | 92 | 118 | 661 | 561 | 845 | 539 | -756 | -625 | -623 | -224 | -105 | -94 | -166 | -320 | -178 |
| STORAGE | 17740. | 17997 | 18088 | 18206 | 18868 | 19429 | 20275 | 20814 | 20058 | 19433 | 18809 | 18585 | 18481 | 18386 | 18220 | 17900 | 17722 |
| ELEV FTMSL | 1837.5 | 1838.3 | 1838.6 | 1839.0 | 1841.0 | 1842.7 | 1845.2 | 1846.8 | 1844.6 | 1842.8 | 1840.9 | 1840.2 | 1839.8 | 1839.5 | 1839.0 | 1838.0 | 1837.4 |
| DISCH KCFS | 24.000 | 19.0 | 19.0 | 19.0 | 24.0 | 31.0 | 36.0 | 36.0 | 36.0 | 33.5 | 31.0 | 31.0 | 31.0 | 30.0 | 21.0 | 25.0 | 25.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 236 | 237 | 237 | 301 | 392 | 460 | 465 | 464 | 427 | 392 | 389 | 387 | 374 | 263 | 310 | 309 |
| PEAK POW MW | | 530 | 531 | 533 | 543 | 551 | 560 | 565 | 557 | 551 | 542 | 539 | 537 | 536 | 533 | 529 | 526 |
| ENERGY GWH | 3215.9 | 84.9 | 39.8 | 51.2 | 216.7 | 291.7 | 330.9 | 345.6 | 345.0 | 307.7 | 291.5 | 139.9 | 65.1 | 71.9 | 195.4 | 231.0 | 207.6 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 3900 | 569 | 265 | 341 | 510 | 390 | 710 | 310 | 125 | 185 | 145 | 118 | 55 | 63 | 15 | 10 | 90 |
| DEPLETION | 802 | 26 | 12 | 16 | 53 | 81 | 172 | 212 | 144 | 34 | -14 | 1 | 0 | 0 | 14 | 20 | 31 |
| CHAN STOR | 0 | 20 | | | -19 | -26 | -18 | | | 9 | 10 | | | 4 | 36 | -16 | |
| EVAPORATION | 367 | | | | | | | 26 | 80 | 98 | 83 | 19 | 9 | 10 | 42 | | |
| REG INFLOW | 23748 | 1128 | 517 | 665 | 1866 | 2189 | 2662 | 2285 | 2114 | 2056 | 1992 | 1020 | 476 | 532 | 1286 | 1511 | 1447 |
| RELEASE | 23745 | 487 | 282 | 338 | 1071 | 1693 | 2211 | 2937 | 2977 | 2735 | 2349 | 1155 | 574 | 757 | 1535 | 1460 | 1184 |
| STOR CHANGE | 3 | 640 | 235 | 327 | 795 | 496 | 451 | -652 | -862 | -679 | -358 | -135 | -98 | -225 | -248 | 51 | 264 |
| STORAGE | 18642. | 19282 | 19517 | 19844 | 20639 | 21136 | 21587 | 20935 | 20073 | 19394 | 19036 | 18901 | 18803 | 18579 | 18330 | 18381 | 18645 |
| ELEV FTMSL | 1607.4 | 1609.4 | 1610.2 | 1611.2 | 1613.5 | 1614.9 | 1616.2 | 1614.4 | 1611.8 | 1609.8 | 1608.7 | 1608.2 | 1607.9 | 1607.2 | 1606.4 | 1606.6 | 1607.4 |
| DISCH KCFS | 22.900 | 16.4 | 20.3 | 18.9 | 18.0 | 27.5 | 37.2 | 47.8 | 48.4 | 46.0 | 38.2 | 38.8 | 41.3 | 47.7 | 25.0 | 23.8 | 21.3 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 213 | 266 | 249 | 238 | 367 | 497 | 634 | 634 | 599 | 495 | 501 | 531 | 608 | 321 | 305 | 274 |
| PEAK POW MW | | 718 | 722 | 727 | 739 | 747 | 753 | 744 | 731 | 720 | 714 | 712 | 710 | 706 | 702 | 703 | 707 |
| ENERGY GWH | 3757.1 | 76.6 | 44.6 | 53.7 | 171.6 | 273.1 | 358.0 | 471.8 | 471.8 | 431.3 | 368.3 | 180.3 | 89.3 | 116.7 | 238.6 | 226.8 | 184.4 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 72 | | | | | | | 5 | 15 | 19 | 17 | 4 | 2 | 2 | 9 | | |
| REG INFLOW | 23673 | 487 | 282 | 338 | 1071 | 1693 | 2211 | 2933 | 2962 | 2716 | 2333 | 1151 | 572 | 755 | 1526 | 1460 | 1184 |
| RELEASE | 23715 | 530 | 282 | 338 | 1071 | 1693 | 2211 | 2933 | 2962 | 2716 | 2333 | 1151 | 572 | 755 | 1526 | 1460 | 1184 |
| STORAGE | 1674. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1632 | 1632 | 1632 | 1632 | 1632 | 1632 | 1632 |
| ELEV FTMSL | 1420.7 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 22.700 | 17.8 | 20.3 | 18.9 | 18.0 | 27.5 | 37.2 | 47.7 | 48.2 | 45.6 | 37.9 | 38.7 | 41.2 | 47.6 | 24.8 | 23.8 | 21.3 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 84 | 95 | 89 | 84 | 129 | 174 | 223 | 225 | 216 | 184 | 192 | 204 | 235 | 124 | 116 | 102 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 1369.1 | 30.3 | 16.0 | 19.1 | 60.7 | 95.9 | 125.2 | 165.9 | 167.5 | 155.4 | 137.2 | 69.0 | 34.2 | 45.0 | 92.4 | 86.5 | 68.7 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1500 | 150 | 70 | 90 | 440 | 230 | 155 | 80 | 70 | 100 | 40 | | | | 15 | | 60 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 80 | | | | | | | 6 | 19 | 24 | 18 | 4 | 2 | 2 | 7 | | |
| REG INFLOW | 25057 | 679 | 351 | 427 | 1507 | 1914 | 2354 | 2989 | 2998 | 2786 | 2353 | 1146 | 570 | 752 | 1534 | 1457 | 1241 |
| RELEASE | 25040 | 382 | 207 | 427 | 1507 | 1914 | 2354 | 2989 | 2998 | 2930 | 2992 | 1459 | 681 | 778 | 1424 | 1116 | 882 |
| STOR CHANGE | 17 | 297 | 144 | 0 | | | 0 | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 109 | 341 | 359 |
| STORAGE | 2984. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1349.8 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 18.100 | 12.8 | 14.9 | 23.9 | 25.3 | 31.1 | 39.6 | 48.6 | 48.8 | 49.2 | 48.7 | 49.1 | 49.0 | 49.0 | 23.2 | 18.2 | 15.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 106 | 126 | 202 | 214 | 262 | 326 | 356 | 356 | 353 | 336 | 307 | 291 | 286 | 169 | 138 | 126 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 284 | 294 | 320 | 339 |
| ENERGY GWH | 2248.4 | 38.2 | 21.2 | 43.6 | 153.9 | 194.8 | 234.8 | 264.8 | 264.8 | 254.2 | 250.1 | 110.7 | 48.9 | 54.8 | 126.0 | 102.5 | 84.9 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2250 | 111 | 52 | 67 | 280 | 330 | 245 | 205 | 165 | 130 | 150 | 65 | 30 | 35 | 90 | 105 | 190 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | 2 | 10 | -4 | -17 | -3 | -11 | -16 | -17 | 0 | -1 | 1 | -1 | 0 | 0 | 48 | 9 | 4 |
| EVAPORATION | 23 | | | | | | | 1 | 5 | 6 | 5 | 1 | 1 | 1 | 3 | | |
| REG INFLOW | 27155 | 504 | 256 | 477 | 1779 | 2214 | 2559 | 3136 | 3148 | 3058 | 3136 | 1517 | 708 | 809 | 1550 | 1230 | 1076 |
| RELEASE | 27157 | 506 | 256 | 477 | 1779 | 2214 | 2559 | 3136 | 3136 | 3035 | 3136 | 1517 | 708 | 809 | 1550 | 1230 | 1111 |
| STOR CHANGE | -2 | -2 | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 329. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.1 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 22.000 | 17.0 | 18.4 | 26.7 | 29.9 | 36.0 | 43.0 | 51.0 | 51.0 | 51.0 | 51.0 | 51.0 | 51.0 | 51.0 | 25.2 | 20.0 | 20.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 59 | 64 | 91 | 101 | 114 | 113 | 112 | 113 | 115 | 115 | 115 | 115 | 115 | 79 | 70 | 69 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 113 | 112 | 113 | 115 | 115 | 115 | 115 | 115 | 78 | 78 | 76 |
| ENERGY GWH | 865.8 | 21.3 | 10.7 | 19.7 | 72.5 | 84.8 | 81.6 | 83.1 | 83.7 | 82.5 | 85.8 | 41.5 | 19.4 | 22.1 | 58.6 | 52.0 | 46.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 3400 | 189 | 88 | 113 | 470 | 890 | 550 | 290 | 225 | 165 | 85 | 50 | 23 | 27 | 60 | 35 | 140 |
| DEPLETION | 293 | 8 | 4 | 5 | 25 | 37 | 33 | 41 | 40 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 16 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 30264 | 687 | 340 | 585 | 2224 | 3067 | 3076 | 3385 | 3321 | 3173 | 3208 | 1560 | 728 | 832 | 1595 | 1249 | 1235 |
| KCFS | | 23.1 | 24.5 | 32.8 | 37.4 | 49.9 | 51.7 | 55.0 | 54.0 | 53.3 | 52.2 | 52.4 | 52.4 | 52.4 | 25.9 | 20.3 | 22.2 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 34500 | 1890 | 882 | 1133 | 3880 | 5080 | 7475 | 4805 | 1860 | 1535 | 1545 | 768 | 358 | 409 | 790 | 775 | 1315 |
| DEPLETION | 3049 | -16 | -7 | -10 | -118 | 570 | 2098 | 1370 | 353 | -216 | -138 | -173 | -81 | -92 | -212 | -180 | -100 |
| CHAN STOR | 9 | 89 | -4 | -17 | -41 | -66 | -44 | -17 | 0 | 23 | 25 | -1 | 0 | -11 | 81 | -12 | 4 |
| EVAPORATION | 1239 | | | | | | | 86 | 269 | 331 | 282 | 66 | 30 | 34 | 141 | | |
| STORAGE | 56137. | 57446 | 57991 | 58531 | 60264 | 61641 | 63898 | 63845 | 61762 | 60032 | 58251 | 57564 | 57244 | 56867 | 56215 | 55909 | 56094 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 800 | 889 | 970 | 1068 | 1434 | 1754 | 1975 | 1976 | 1875 | 1668 | 1649 | 1674 | 1782 | 1126 | 1114 | 1055 |
| PEAK POW MW | | 2418 | 2422 | 2429 | 2451 | 2468 | 2485 | 2479 | 2459 | 2445 | 2419 | 2390 | 2378 | 2371 | 2335 | 2356 | 2365 |
| ENERGY GWH | 12868.2 | 288.1 | 149.4 | 209.5 | 769.0 | 1066.6 | 1262.7 | 1469.3 | 1470.4 | 1349.9 | 1240.8 | 593.6 | 281.3 | 342.1 | 837.5 | 828.8 | 709.0 |
| DAILY GWH | | 19.2 | 21.3 | 23.3 | 25.6 | 34.4 | 42.1 | 47.4 | 47.4 | 45.0 | 40.0 | 39.6 | 40.2 | 42.8 | 27.0 | 26.7 | 25.3 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:22:29 STUDY NO 5

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 29FEB20 | 2020 | | | | | | | | | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 8650 | 310 | 144 | 186 | 755 | 1285 | 2155 | 1105 | 405 | 350 | 440 | 263 | 123 | 140 | 320 | 285 | 385 |
| DEPLETION | 552 | -13 | -6 | -8 | 14 | 317 | 555 | 291 | 3 | -125 | -99 | -33 | -15 | -18 | -116 | -119 | -76 |
| EVAPORATION | 323 | | | | | | | 22 | 69 | 85 | 74 | 18 | 8 | 9 | 38 | | |
| MOD INFLOW | 7775 | 323 | 151 | 194 | 741 | 968 | 1600 | 792 | 333 | 390 | 465 | 278 | 130 | 148 | 398 | 404 | 461 |
| RELEASE | 7774 | 208 | 97 | 125 | 536 | 646 | 774 | 799 | 799 | 622 | 492 | 238 | 111 | 127 | 738 | 769 | 694 |
| STOR CHANGE | 1 | 115 | 53 | 69 | 205 | 322 | 826 | -7 | -466 | -232 | -27 | 40 | 19 | 21 | -340 | -365 | -233 |
| STORAGE | 14768. | 14883 | 14936 | 15005 | 15210 | 15532 | 16359 | 16352 | 15886 | 15654 | 15627 | 15667 | 15686 | 15707 | 15367 | 15002 | 14769 |
| ELEV FTMSL | 2233.9 | 2234.4 | 2234.7 | 2235.0 | 2236.0 | 2237.5 | 2241.2 | 2241.1 | 2239.1 | 2238.0 | 2237.9 | 2238.1 | 2238.2 | 2238.3 | 2236.7 | 2235.0 | 2233.9 |
| DISCH KCFS | 13.500 | 7.0 | 7.0 | 7.0 | 9.0 | 10.5 | 13.0 | 13.0 | 13.0 | 10.4 | 8.0 | 8.0 | 8.0 | 8.0 | 12.0 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 95 | 96 | 96 | 123 | 144 | 177 | 178 | 178 | 144 | 110 | 110 | 110 | 110 | 164 | 169 | 168 |
| PEAK POW MW | | 188 | 188 | 189 | 189 | 190 | 193 | 193 | 191 | 191 | 191 | 191 | 191 | 191 | 190 | 189 | 188 |
| ENERGY GWH | 1284.6 | 34.3 | 16.0 | 20.6 | 88.6 | 107.1 | 127.5 | 132.7 | 132.1 | 103.7 | 82.0 | 39.7 | 18.5 | 21.2 | 121.9 | 125.7 | 112.9 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 12750 | 482 | 225 | 289 | 1230 | 1675 | 3200 | 2475 | 760 | 520 | 555 | 215 | 100 | 115 | 235 | 295 | 380 |
| DEPLETION | 1176 | -9 | -4 | -6 | -133 | 125 | 1142 | 808 | 119 | -156 | -65 | -159 | -74 | -85 | -145 | -108 | -75 |
| CHAN STOR | 10 | 64 | | | -20 | -15 | -24 | | | 25 | 24 | | 0 | 0 | -39 | -5 | |
| EVAPORATION | 367 | | | | | | | 25 | 79 | 98 | 84 | 20 | 9 | 10 | 43 | | |
| REG INFLOW | 18991 | 764 | 326 | 419 | 1879 | 2181 | 2807 | 2441 | 1361 | 1225 | 1052 | 592 | 276 | 316 | 1036 | 1167 | 1149 |
| RELEASE | 19005 | 565 | 264 | 339 | 1369 | 1752 | 1964 | 1968 | 1968 | 1696 | 1537 | 744 | 347 | 365 | 1261 | 1506 | 1361 |
| STOR CHANGE | -14 | 198 | 62 | 80 | 510 | 429 | 844 | 474 | -606 | -471 | -485 | -152 | -71 | -49 | -225 | -340 | -211 |
| STORAGE | 17740. | 17938 | 18001 | 18081 | 18591 | 19019 | 19863 | 20337 | 19730 | 19259 | 18774 | 18622 | 18551 | 18502 | 18277 | 17937 | 17726 |
| ELEV FTMSL | 1837.5 | 1838.1 | 1838.3 | 1838.6 | 1840.2 | 1841.5 | 1844.0 | 1845.4 | 1843.7 | 1842.2 | 1840.8 | 1840.3 | 1840.1 | 1839.9 | 1839.2 | 1838.1 | 1837.4 |
| DISCH KCFS | 24.000 | 19.0 | 19.0 | 19.0 | 23.0 | 28.5 | 33.0 | 32.0 | 32.0 | 28.5 | 25.0 | 25.0 | 25.0 | 23.0 | 20.5 | 24.5 | 24.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 236 | 236 | 237 | 287 | 359 | 419 | 411 | 410 | 363 | 316 | 314 | 314 | 289 | 257 | 305 | 303 |
| PEAK POW MW | | 529 | 530 | 531 | 539 | 545 | 555 | 560 | 554 | 548 | 541 | 539 | 538 | 537 | 534 | 529 | 526 |
| ENERGY GWH | 2901.1 | 84.8 | 39.7 | 51.1 | 207.0 | 266.7 | 301.7 | 305.6 | 305.3 | 261.3 | 235.3 | 113.2 | 52.7 | 55.4 | 191.1 | 226.7 | 203.6 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 3200 | 457 | 213 | 274 | 430 | 310 | 640 | 250 | 95 | 150 | 120 | 95 | 44 | 51 | -10 | | 80 |
| DEPLETION | 803 | 27 | 12 | 16 | 53 | 81 | 172 | 212 | 144 | 34 | -14 | 1 | 0 | 0 | 14 | 20 | 31 |
| CHAN STOR | -1 | 20 | | | -15 | -21 | -17 | 4 | | 13 | 13 | | | 8 | 10 | -16 | 0 |
| EVAPORATION | 369 | | | | | | | 26 | 80 | 98 | 84 | 20 | 9 | 10 | 42 | | |
| REG INFLOW | 21032 | 1016 | 465 | 598 | 1730 | 1961 | 2415 | 1983 | 1838 | 1727 | 1601 | 819 | 382 | 413 | 1204 | 1470 | 1410 |
| RELEASE | 21025 | 519 | 297 | 357 | 1005 | 1397 | 1781 | 2539 | 2571 | 2359 | 1964 | 954 | 480 | 650 | 1456 | 1479 | 1219 |
| STOR CHANGE | 7 | 497 | 168 | 241 | 725 | 564 | 634 | -556 | -733 | -632 | -363 | -135 | -98 | -237 | -251 | -8 | 191 |
| STORAGE | 18642. | 19139 | 19307 | 19548 | 20273 | 20837 | 21471 | 20915 | 20182 | 19550 | 19187 | 19052 | 18954 | 18717 | 18466 | 18458 | 18649 |
| ELEV FTMSL | 1607.4 | 1609.0 | 1609.5 | 1610.3 | 1612.4 | 1614.1 | 1615.9 | 1614.3 | 1612.2 | 1610.3 | 1609.1 | 1608.7 | 1608.4 | 1607.7 | 1606.9 | 1606.8 | 1607.4 |
| DISCH KCFS | 22.900 | 17.4 | 21.4 | 20.0 | 16.9 | 22.7 | 29.9 | 41.3 | 41.8 | 39.6 | 31.9 | 32.1 | 34.6 | 40.9 | 23.7 | 24.0 | 21.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 226 | 279 | 261 | 223 | 302 | 400 | 550 | 552 | 519 | 416 | 416 | 447 | 527 | 305 | 309 | 283 |
| PEAK POW MW | | 716 | 719 | 722 | 734 | 742 | 751 | 743 | 732 | 723 | 717 | 714 | 713 | 709 | 704 | 704 | 707 |
| ENERGY GWH | 3334.1 | 81.5 | 46.8 | 56.5 | 160.4 | 224.7 | 288.2 | 409.6 | 410.9 | 373.4 | 309.3 | 149.7 | 75.1 | 101.1 | 227.0 | 230.0 | 190.1 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 72 | | | | | | | 5 | 15 | 19 | 17 | 4 | 2 | 2 | 9 | | |
| REG INFLOW | 20953 | 519 | 297 | 357 | 1005 | 1397 | 1781 | 2534 | 2556 | 2340 | 1947 | 950 | 478 | 648 | 1447 | 1479 | 1219 |
| RELEASE | 20996 | 562 | 297 | 357 | 1005 | 1397 | 1781 | 2534 | 2556 | 2340 | 1947 | 950 | 478 | 648 | 1447 | 1479 | 1219 |
| STORAGE | 1674. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1632 | 1632 | 1632 | 1632 | 1632 | 1632 | 1632 |
| ELEV FTMSL | 1420.7 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 22.700 | 18.9 | 21.4 | 20.0 | 16.9 | 22.7 | 29.9 | 41.2 | 41.6 | 39.3 | 31.7 | 31.9 | 34.4 | 40.8 | 23.5 | 24.0 | 21.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 89 | 100 | 94 | 79 | 106 | 140 | 193 | 194 | 186 | 154 | 159 | 171 | 202 | 118 | 118 | 105 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 1213.9 | 32.1 | 16.8 | 20.2 | 56.9 | 79.1 | 100.9 | 143.4 | 144.7 | 134.0 | 114.9 | 57.3 | 28.8 | 38.8 | 87.7 | 87.6 | 70.7 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1200 | 123 | 58 | 74 | 350 | 185 | 140 | 75 | 65 | 75 | 10 | -3 | -1 | -1 | 5 | -5 | 50 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 80 | | | | | | | 6 | 19 | 24 | 18 | 4 | 2 | 2 | 7 | | |
| REG INFLOW | 22037 | 684 | 354 | 430 | 1351 | 1573 | 1909 | 2585 | 2587 | 2384 | 1938 | 943 | 475 | 644 | 1444 | 1471 | 1266 |
| RELEASE | 22020 | 387 | 210 | 430 | 1351 | 1573 | 1909 | 2585 | 2587 | 2528 | 2577 | 1256 | 586 | 670 | 1335 | 1130 | 907 |
| STOR CHANGE | 17 | 297 | 144 | | 0 | | | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 109 | 341 | 359 |
| STORAGE | 2984. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1349.8 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 18.100 | 13.0 | 15.1 | 24.1 | 22.7 | 25.6 | 32.1 | 42.0 | 42.1 | 42.5 | 41.9 | 42.2 | 42.2 | 42.2 | 21.7 | 18.4 | 16.3 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 108 | 127 | 203 | 192 | 216 | 270 | 337 | 337 | 336 | 319 | 297 | 284 | 280 | 159 | 139 | 130 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 288 | 285 | 294 | 320 | 339 |
| ENERGY GWH | 2094.6 | 38.7 | 21.4 | 43.9 | 138.2 | 160.6 | 194.3 | 250.4 | 250.5 | 241.8 | 237.0 | 106.9 | 47.8 | 53.7 | 118.2 | 103.7 | 87.4 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2000 | 106 | 50 | 64 | 240 | 290 | 210 | 180 | 145 | 115 | 135 | 60 | 28 | 32 | 85 | 95 | 165 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | 2 | 10 | -4 | -17 | 3 | -6 | -12 | -19 | 0 | -1 | 1 | -1 | 0 | 0 | 38 | 6 | 4 |
| EVAPORATION | 23 | | | | | | | 1 | 5 | 6 | 5 | 1 | 1 | 1 | 3 | | |
| REG INFLOW | 23884 | 504 | 256 | 477 | 1589 | 1839 | 2083 | 2705 | 2717 | 2641 | 2705 | 1309 | 611 | 698 | 1445 | 1230 | 1076 |
| RELEASE | 23886 | 506 | 256 | 477 | 1589 | 1839 | 2083 | 2705 | 2705 | 2618 | 2705 | 1309 | 611 | 698 | 1445 | 1230 | 1111 |
| STOR CHANGE | -2 | -2 | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 329. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.1 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 22.000 | 17.0 | 18.4 | 26.7 | 26.7 | 29.9 | 35.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 23.5 | 20.0 | 20.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 59 | 64 | 91 | 91 | 101 | 112 | 113 | 114 | 115 | 116 | 116 | 116 | 116 | 78 | 70 | 69 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 113 | 114 | 116 | 116 | 116 | 116 | 116 | 78 | 78 | 76 |
| ENERGY GWH | 851.4 | 21.3 | 10.7 | 19.7 | 65.6 | 74.9 | 80.6 | 84.1 | 84.8 | 82.9 | 86.3 | 41.8 | 19.5 | 22.3 | 58.4 | 52.0 | 46.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2800 | 165 | 77 | 99 | 390 | 730 | 435 | 240 | 180 | 135 | 70 | 43 | 20 | 23 | 50 | 30 | 115 |
| DEPLETION | 293 | 8 | 4 | 5 | 25 | 37 | 33 | 41 | 40 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 16 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 26393 | 663 | 329 | 571 | 1954 | 2532 | 2485 | 2904 | 2845 | 2726 | 2762 | 1345 | 627 | 717 | 1480 | 1244 | 1210 |
| KCFS | | 22.3 | 23.7 | 32.0 | 32.8 | 41.2 | 41.8 | 47.2 | 46.3 | 45.8 | 44.9 | 45.2 | 45.2 | 45.2 | 24.1 | 20.2 | 21.8 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 30600 | 1643 | 766 | 985 | 3395 | 4475 | 6780 | 4325 | 1650 | 1345 | 1330 | 673 | 314 | 359 | 685 | 700 | 1175 |
| DEPLETION | 3018 | 13 | 6 | 8 | -32 | 588 | 1938 | 1409 | 331 | -218 | -162 | -178 | -83 | -95 | -219 | -187 | -101 |
| CHAN STOR | 12 | 94 | -4 | -17 | -32 | -41 | -53 | -15 | 0 | 37 | 38 | -1 | 0 | 7 | 10 | -15 | 4 |
| EVAPORATION | 1235 | | | | | | | 85 | 266 | 329 | 282 | 66 | 30 | 35 | 142 | | |
| STORAGE | 56137. | 57199 | 57626 | 58016 | 59457 | 60771 | 63075 | 62986 | 61193 | 59738 | 58224 | 57664 | 57403 | 57112 | 56405 | 56033 | 56103 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 813 | 901 | 982 | 995 | 1227 | 1518 | 1782 | 1785 | 1663 | 1431 | 1412 | 1442 | 1524 | 1081 | 1110 | 1058 |
| PEAK POW MW | | 2415 | 2417 | 2422 | 2441 | 2457 | 2479 | 2475 | 2457 | 2445 | 2422 | 2395 | 2383 | 2376 | 2339 | 2358 | 2365 |
| ENERGY GWH | 11679.7 | 292.8 | 151.4 | 212.0 | 716.6 | 913.2 | 1093.1 | 1325.8 | 1328.3 | 1197.1 | 1064.9 | 508.4 | 242.3 | 292.5 | 804.3 | 825.7 | 711.3 |
| DAILY GWH | | 19.5 | 21.6 | 23.6 | 23.9 | 29.5 | 36.4 | 42.8 | 42.8 | 39.9 | 34.4 | 33.9 | 34.6 | 36.6 | 25.9 | 26.6 | 25.4 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:33 STUDY NO 6

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 29FEB20 | 2020 | | | | | | | | | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 7200 | 227 | 106 | 136 | 560 | 1145 | 1830 | 840 | 365 | 290 | 385 | 205 | 96 | 109 | 295 | 260 | 350 |
| DEPLETION | 575 | -15 | -7 | -9 | 42 | 270 | 577 | 298 | 43 | -90 | -112 | -31 | -14 | -16 | -127 | -142 | -92 |
| EVAPORATION | 458 | | | | | | | 28 | 88 | 109 | 95 | 43 | 20 | 23 | 50 | | |
| MOD INFLOW | 6167 | 242 | 113 | 145 | 518 | 875 | 1253 | 514 | 234 | 271 | 402 | 192 | 90 | 103 | 372 | 402 | 442 |
| RELEASE | 6399 | 193 | 90 | 116 | 476 | 553 | 655 | 676 | 676 | 505 | 369 | 179 | 83 | 103 | 553 | 615 | 555 |
| STOR CHANGE | -232 | 49 | 23 | 29 | 42 | 322 | 598 | -163 | -443 | -235 | 33 | 14 | 6 | -1 | -181 | -213 | -113 |
| STORAGE | 14785. | 14834 | 14857 | 14886 | 14928 | 15250 | 15848 | 15686 | 15243 | 15009 | 15041 | 15055 | 15061 | 15061 | 14880 | 14667 | 14553 |
| ELEV FTMSL | 2234.0 | 2234.2 | 2234.3 | 2234.5 | 2234.7 | 2236.2 | 2238.9 | 2238.2 | 2236.1 | 2235.0 | 2235.2 | 2235.3 | 2235.3 | 2235.3 | 2234.4 | 2233.4 | 2232.9 |
| DISCH KCFS | 12.000 | 6.5 | 6.5 | 6.5 | 8.0 | 9.0 | 11.0 | 11.0 | 11.0 | 8.5 | 6.0 | 6.0 | 6.0 | 6.5 | 9.0 | 10.0 | 10.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 89 | 89 | 89 | 109 | 123 | 151 | 152 | 151 | 116 | 82 | 82 | 82 | 89 | 123 | 136 | 136 |
| PEAK POW MW | | 188 | 188 | 188 | 188 | 189 | 191 | 191 | 189 | 189 | 189 | 189 | 189 | 189 | 188 | 188 | 187 |
| ENERGY GWH | 1058.6 | 31.9 | 14.9 | 19.2 | 78.5 | 91.5 | 108.8 | 112.8 | 112.3 | 83.6 | 61.0 | 29.5 | 13.8 | 17.1 | 91.4 | 101.2 | 91.2 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10900 | 479 | 223 | 287 | 780 | 1300 | 3120 | 2100 | 580 | 480 | 445 | 180 | 84 | 96 | 180 | 255 | 310 |
| DEPLETION | 1156 | -2 | -1 | -1 | -58 | 148 | 959 | 826 | 152 | -159 | -62 | -159 | -74 | -85 | -145 | -107 | -76 |
| CHAN STOR | 20 | 55 | 0 | 0 | -15 | -10 | -20 | | | 24 | 24 | | | -5 | -25 | -10 | 0 |
| EVAPORATION | 526 | | | | | | | 33 | 102 | 127 | 110 | 49 | 23 | 26 | 56 | | |
| REG INFLOW | 15637 | 730 | 315 | 405 | 1299 | 1696 | 2796 | 1918 | 1002 | 1042 | 791 | 468 | 218 | 253 | 797 | 967 | 941 |
| RELEASE | 15921 | 536 | 250 | 321 | 1250 | 1476 | 1666 | 1660 | 1660 | 1311 | 1045 | 506 | 236 | 262 | 1168 | 1353 | 1222 |
| STOR CHANGE | -285 | 194 | 65 | 84 | 50 | 220 | 1130 | 258 | -658 | -269 | -255 | -38 | -18 | -9 | -371 | -386 | -280 |
| STORAGE | 17745. | 17939 | 18004 | 18087 | 18137 | 18357 | 19487 | 19744 | 19086 | 18817 | 18562 | 18524 | 18507 | 18497 | 18127 | 17741 | 17460 |
| ELEV FTMSL | 1837.5 | 1838.1 | 1838.3 | 1838.6 | 1838.8 | 1839.5 | 1842.9 | 1843.7 | 1841.7 | 1840.9 | 1840.1 | 1840.0 | 1839.9 | 1839.9 | 1838.7 | 1837.5 | 1836.6 |
| DISCH KCFS | 24.000 | 18.0 | 18.0 | 18.0 | 21.0 | 24.0 | 28.0 | 27.0 | 27.0 | 22.0 | 17.0 | 17.0 | 17.0 | 16.5 | 19.0 | 22.0 | 22.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 223 | 224 | 224 | 262 | 299 | 353 | 345 | 344 | 279 | 215 | 214 | 214 | 208 | 238 | 273 | 271 |
| PEAK POW MW | | 529 | 530 | 531 | 532 | 535 | 551 | 554 | 546 | 542 | 538 | 538 | 537 | 537 | 532 | 526 | 522 |
| ENERGY GWH | 2419.3 | 80.4 | 37.6 | 48.5 | 188.4 | 222.7 | 254.2 | 256.4 | 255.6 | 200.7 | 159.7 | 77.1 | 35.9 | 39.9 | 177.0 | 203.1 | 182.2 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2300 | 259 | 121 | 155 | 405 | 220 | 625 | 170 | 70 | 95 | 45 | 45 | 21 | 24 | -15 | -10 | 70 |
| DEPLETION | 801 | 26 | 12 | 16 | 53 | 81 | 172 | 212 | 144 | 33 | -14 | 1 | 0 | 0 | 14 | 20 | 31 |
| CHAN STOR | 8 | 24 | | | -12 | -12 | -15 | 4 | | 19 | 20 | | | 2 | -10 | -12 | |
| EVAPORATION | 511 | | | | | | | 32 | 100 | 123 | 106 | 47 | 22 | 25 | 55 | | |
| REG INFLOW | 16917 | 792 | 359 | 461 | 1590 | 1603 | 2104 | 1590 | 1486 | 1269 | 1019 | 503 | 235 | 262 | 1075 | 1311 | 1261 |
| RELEASE | 17158 | 531 | 321 | 358 | 1293 | 1543 | 1609 | 1849 | 1983 | 1754 | 1263 | 586 | 309 | 227 | 1113 | 1315 | 1103 |
| STOR CHANGE | -241 | 261 | 38 | 103 | 297 | 60 | 494 | -260 | -497 | -485 | -245 | -83 | -74 | 35 | -39 | -4 | 157 |
| STORAGE | 18614. | 18875 | 18913 | 19016 | 19313 | 19373 | 19868 | 19608 | 19111 | 18626 | 18381 | 18298 | 18223 | 18259 | 18220 | 18216 | 18373 |
| ELEV FTMSL | 1607.3 | 1608.2 | 1608.3 | 1608.6 | 1609.5 | 1609.7 | 1611.2 | 1610.4 | 1608.9 | 1607.4 | 1606.6 | 1606.3 | 1606.1 | 1606.2 | 1606.0 | 1606.0 | 1606.5 |
| DISCH KCFS | 22.400 | 17.8 | 23.1 | 20.1 | 21.7 | 25.1 | 27.0 | 30.1 | 32.2 | 29.5 | 20.5 | 19.7 | 22.3 | 14.3 | 18.1 | 21.4 | 19.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 231 | 299 | 260 | 283 | 327 | 354 | 394 | 420 | 381 | 265 | 253 | 286 | 184 | 232 | 274 | 255 |
| PEAK POW MW | | 711 | 712 | 714 | 719 | 720 | 727 | 723 | 715 | 707 | 703 | 701 | 700 | 701 | 700 | 700 | 703 |
| ENERGY GWH | 2690.5 | 83.2 | 50.3 | 56.2 | 203.7 | 243.4 | 254.8 | 293.1 | 312.2 | 274.3 | 196.9 | 91.1 | 48.0 | 35.3 | 172.8 | 203.8 | 171.4 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 105 | | | | | | | 6 | 20 | 25 | 22 | 10 | 5 | 5 | 12 | | |
| REG INFLOW | 17053 | 531 | 321 | 358 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 576 | 305 | 222 | 1102 | 1315 | 1103 |
| RELEASE | 17096 | 574 | 321 | 358 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 1101 | 1315 | 1103 |
| STORAGE | 1674. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1632 | 1632 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.7 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 22.100 | 19.3 | 23.1 | 20.1 | 21.7 | 25.1 | 27.0 | 30.0 | 31.9 | 29.1 | 20.2 | 19.4 | 21.9 | 14.0 | 17.9 | 21.4 | 19.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 91 | 108 | 94 | 102 | 117 | 127 | 140 | 149 | 138 | 99 | 97 | 110 | 70 | 90 | 105 | 95 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 987.5 | 32.8 | 18.2 | 20.3 | 73.2 | 87.4 | 91.1 | 104.4 | 111.1 | 99.1 | 73.7 | 35.1 | 18.5 | 13.5 | 67.0 | 78.0 | 64.0 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 900 | 121 | 56 | 73 | 160 | 165 | 135 | 70 | 60 | 35 | | -5 | -2 | -3 | | -10 | 45 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 116 | | | | | | | 8 | 25 | 31 | 24 | 9 | 4 | 4 | 9 | | |
| REG INFLOW | 17800 | 693 | 376 | 430 | 1449 | 1699 | 1732 | 1887 | 1982 | 1725 | 1216 | 562 | 298 | 215 | 1089 | 1302 | 1145 |
| RELEASE | 17784 | 396 | 232 | 430 | 1449 | 1699 | 1732 | 1887 | 1982 | 1869 | 1855 | 875 | 409 | 241 | 980 | 961 | 786 |
| STOR CHANGE | 16 | 297 | 144 | | | | | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 108 | 341 | 359 |
| STORAGE | 2984. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2300 | 2641 | 3000 |
| ELEV FTMSL | 1349.8 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 17.100 | 13.3 | 16.7 | 24.1 | 24.4 | 27.6 | 29.1 | 30.7 | 32.2 | 31.4 | 30.2 | 29.4 | 29.5 | 15.2 | 15.9 | 15.6 | 14.2 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 110 | 141 | 203 | 206 | 233 | 245 | 258 | 271 | 262 | 242 | 222 | 215 | 111 | 117 | 119 | 113 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 285 | 294 | 320 | 339 |
| ENERGY GWH | 1756.5 | 39.6 | 23.7 | 43.9 | 148.1 | 173.3 | 176.5 | 192.1 | 201.7 | 188.9 | 179.7 | 79.9 | 36.2 | 21.3 | 87.2 | 88.4 | 75.9 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1500 | 102 | 47 | 61 | 145 | 165 | 175 | 100 | 90 | 95 | 120 | 58 | 27 | 31 | 80 | 85 | 120 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | 4 | 7 | -7 | -14 | -1 | -6 | -3 | -3 | -3 | 2 | 2 | 1 | 0 | 26 | -1 | 1 | 3 |
| EVAPORATION | 34 | | | | | | | 2 | 6 | 8 | 7 | 3 | 2 | 2 | 4 | | |
| REG INFLOW | 19141 | 506 | 274 | 477 | 1588 | 1839 | 1880 | 1943 | 2053 | 1963 | 1968 | 925 | 432 | 294 | 1045 | 1045 | 909 |
| RELEASE | 19141 | 506 | 274 | 477 | 1588 | 1839 | 1880 | 1943 | 2041 | 1940 | 1968 | 925 | 432 | 294 | 1045 | 1045 | 944 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 20.000 | 17.0 | 19.7 | 26.7 | 26.7 | 29.9 | 31.6 | 31.6 | 33.2 | 32.6 | 32.0 | 31.1 | 31.1 | 18.5 | 17.0 | 17.0 | 17.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 59 | 68 | 91 | 91 | 101 | 105 | 105 | 109 | 109 | 108 | 106 | 106 | 65 | 60 | 60 | 60 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 784.0 | 21.2 | 11.4 | 19.7 | 65.6 | 74.9 | 75.3 | 77.8 | 80.9 | 78.3 | 80.6 | 38.3 | 17.9 | 12.5 | 44.7 | 44.7 | 40.1 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1800 | 162 | 76 | 97 | 280 | 345 | 190 | 165 | 130 | 110 | 60 | 30 | 14 | 16 | 25 | 25 | 75 |
| DEPLETION | 293 | 8 | 4 | 5 | 25 | 37 | 33 | 41 | 40 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 16 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 20648 | 660 | 346 | 570 | 1843 | 2147 | 2037 | 2067 | 2131 | 2023 | 2015 | 948 | 443 | 306 | 1055 | 1054 | 1003 |
| KCFS | | 22.2 | 24.9 | 31.9 | 31.0 | 34.9 | 34.2 | 33.6 | 34.7 | 34.0 | 32.8 | 31.9 | 31.9 | 19.3 | 17.2 | 17.1 | 18.1 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 24600 | 1350 | 630 | 810 | 2330 | 3340 | 6075 | 3445 | 1295 | 1105 | 1055 | 513 | 239 | 273 | 565 | 605 | 970 |
| DEPLETION | 3019 | 17 | 8 | 10 | 71 | 564 | 1777 | 1434 | 404 | -187 | -172 | -176 | -82 | -94 | -230 | -209 | -118 |
| CHAN STOR | 32 | 86 | -7 | -14 | -27 | -28 | -38 | 1 | -3 | 45 | 47 | 1 | 0 | 24 | -36 | -21 | 3 |
| EVAPORATION | 1749 | | | | | | | 109 | 342 | 424 | 364 | 162 | 75 | 86 | 185 | | |
| STORAGE | 56129. | 56887 | 57157 | 57373 | 57761 | 58363 | 60586 | 60421 | 58836 | 57726 | 56620 | 56199 | 56002 | 56002 | 55520 | 55258 | 55346 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 803 | 929 | 962 | 1052 | 1201 | 1335 | 1393 | 1443 | 1285 | 1010 | 975 | 1013 | 727 | 860 | 967 | 930 |
| PEAK POW MW | | 2410 | 2410 | 2413 | 2419 | 2424 | 2450 | 2448 | 2431 | 2422 | 2404 | 2379 | 2369 | 2367 | 2331 | 2349 | 2356 |
| ENERGY GWH | 9696.4 | 289.2 | 156.1 | 207.7 | 757.5 | 893.2 | 960.9 | 1036.6 | 1073.8 | 925.0 | 751.7 | 351.0 | 170.2 | 139.6 | 640.1 | 719.2 | 624.7 |
| DAILY GWH | | 19.3 | 22.3 | 23.1 | 25.2 | 28.8 | 32.0 | 33.4 | 34.6 | 30.8 | 24.2 | 23.4 | 24.3 | 17.5 | 20.6 | 23.2 | 22.3 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:58 STUDY NO 7

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 29FEB20 | 2020 | | | | | | | | | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 5950 | 201 | 94 | 120 | 460 | 945 | 1510 | 645 | 290 | 240 | 320 | 168 | 78 | 89 | 240 | 240 | 310 |
| DEPLETION | 571 | 0 | 0 | 0 | 18 | 272 | 589 | 284 | 13 | -127 | -116 | -33 | -15 | -18 | -106 | -115 | -74 |
| EVAPORATION | 544 | | | | | | | 34 | 106 | 131 | 113 | 51 | 24 | 27 | 58 | | |
| MOD INFLOW | 4835 | 201 | 94 | 121 | 442 | 673 | 921 | 327 | 171 | 236 | 323 | 149 | 70 | 80 | 288 | 355 | 384 |
| RELEASE | 6530 | 179 | 83 | 107 | 417 | 553 | 655 | 676 | 676 | 506 | 369 | 179 | 83 | 114 | 646 | 676 | 611 |
| STOR CHANGE | -1695 | 23 | 11 | 14 | 25 | 120 | 266 | -349 | -505 | -270 | -46 | -29 | -14 | -34 | -358 | -321 | -227 |
| STORAGE | 14776. | 14799 | 14809 | 14823 | 14849 | 14968 | 15235 | 14885 | 14380 | 14111 | 14065 | 14035 | 14022 | 13987 | 13630 | 13308 | 13081 |
| ELEV FTMSL | 2233.9 | 2234.1 | 2234.1 | 2234.2 | 2234.3 | 2234.8 | 2236.1 | 2234.5 | 2232.0 | 2230.7 | 2230.5 | 2230.3 | 2230.3 | 2230.1 | 2228.3 | 2226.7 | 2225.5 |
| DISCH KCFS | 10.500 | 6.0 | 6.0 | 6.0 | 7.0 | 9.0 | 11.0 | 11.0 | 11.0 | 8.5 | 6.0 | 6.0 | 6.0 | 7.2 | 10.5 | 11.0 | 11.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 82 | 82 | 82 | 95 | 123 | 150 | 150 | 149 | 115 | 81 | 81 | 81 | 97 | 141 | 146 | 146 |
| PEAK POW MW | | 188 | 188 | 188 | 188 | 189 | 189 | 188 | 187 | 186 | 186 | 186 | 186 | 186 | 184 | 183 | 182 |
| ENERGY GWH | 1067.4 | 29.4 | 13.7 | 17.7 | 68.7 | 91.3 | 108.2 | 111.7 | 111.0 | 82.7 | 60.2 | 29.1 | 13.6 | 18.6 | 104.6 | 109.0 | 98.0 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 9150 | 404 | 189 | 242 | 640 | 1150 | 2600 | 1700 | 475 | 395 | 395 | 160 | 75 | 85 | 150 | 210 | 280 |
| DEPLETION | 1270 | 21 | 10 | 12 | 39 | 181 | 777 | 777 | 158 | -135 | -44 | -145 | -67 | -77 | -113 | -75 | -49 |
| CHAN STOR | -5 | 45 | | | -10 | -20 | -20 | | | 25 | 25 | | | -12 | -33 | -5 | |
| EVAPORATION | 619 | | | | | | | 39 | 121 | 149 | 128 | 58 | 27 | 31 | 66 | | |
| REG INFLOW | 13786 | 606 | 262 | 337 | 1008 | 1503 | 2458 | 1560 | 872 | 911 | 704 | 425 | 199 | 234 | 810 | 956 | 940 |
| RELEASE | 15845 | 506 | 236 | 303 | 1250 | 1506 | 1607 | 1599 | 1599 | 1277 | 1045 | 506 | 236 | 254 | 1230 | 1414 | 1277 |
| STOR CHANGE | -2060 | 101 | 26 | 34 | -242 | -4 | 851 | -38 | -727 | -366 | -341 | -80 | -37 | -20 | -420 | -458 | -337 |
| STORAGE | 17739. | 17840 | 17866 | 17899 | 17657 | 17653 | 18504 | 18466 | 17739 | 17373 | 17032 | 16952 | 16915 | 16895 | 16475 | 16017 | 15679 |
| ELEV FTMSL | 1837.5 | 1837.8 | 1837.9 | 1838.0 | 1837.2 | 1837.2 | 1839.9 | 1839.8 | 1837.5 | 1836.3 | 1835.1 | 1834.9 | 1834.7 | 1834.7 | 1833.2 | 1831.7 | 1830.5 |
| DISCH KCFS | 22.000 | 17.0 | 17.0 | 17.0 | 21.0 | 24.5 | 27.0 | 26.0 | 26.0 | 21.5 | 17.0 | 17.0 | 17.0 | 16.0 | 20.0 | 23.0 | 23.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 211 | 211 | 211 | 260 | 302 | 335 | 325 | 323 | 264 | 208 | 207 | 207 | 195 | 242 | 275 | 273 |
| PEAK POW MW | | 528 | 528 | 529 | 525 | 525 | 538 | 537 | 526 | 520 | 515 | 514 | 513 | 513 | 506 | 499 | 493 |
| ENERGY GWH | 2352.9 | 75.9 | 35.5 | 45.6 | 187.1 | 224.6 | 241.3 | 242.2 | 240.3 | 190.4 | 155.0 | 74.7 | 34.8 | 37.4 | 180.0 | 204.7 | 183.3 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1350 | 177 | 82 | 106 | 285 | 130 | 315 | 110 | 50 | 55 | 15 | 13 | 6 | 7 | -35 | -15 | 50 |
| DEPLETION | 802 | 26 | 12 | 16 | 53 | 81 | 172 | 212 | 144 | 34 | -14 | 1 | 0 | 0 | 14 | 20 | 31 |
| CHAN STOR | -4 | 20 | | | -16 | -14 | -10 | 4 | | 19 | 19 | | | 4 | -18 | -13 | 0 |
| EVAPORATION | 569 | | | | | | | 37 | 113 | 138 | 117 | 52 | 24 | 28 | 60 | | |
| REG INFLOW | 15821 | 676 | 306 | 394 | 1466 | 1542 | 1740 | 1464 | 1392 | 1180 | 976 | 466 | 218 | 237 | 1103 | 1366 | 1296 |
| RELEASE | 17901 | 488 | 365 | 449 | 1577 | 1846 | 1820 | 2069 | 2096 | 1874 | 1379 | 663 | 259 | 235 | 849 | 1058 | 874 |
| STOR CHANGE | -2081 | 188 | -59 | -56 | -111 | -304 | -80 | -605 | -704 | -695 | -402 | -197 | -42 | 2 | 254 | 308 | 423 |
| STORAGE | 18619. | 18807 | 18748 | 18692 | 18581 | 18277 | 18197 | 17592 | 16887 | 16193 | 15791 | 15594 | 15552 | 15554 | 15808 | 16116 | 16538 |
| ELEV FTMSL | 1607.3 | 1607.9 | 1607.8 | 1607.6 | 1607.2 | 1606.2 | 1606.0 | 1603.9 | 1601.5 | 1599.0 | 1597.5 | 1596.8 | 1596.7 | 1596.7 | 1597.6 | 1598.7 | 1600.3 |
| DISCH KCFS | 23.300 | 16.4 | 26.3 | 25.2 | 26.5 | 30.0 | 30.6 | 33.6 | 34.1 | 31.5 | 22.4 | 22.3 | 18.7 | 14.8 | 13.8 | 17.2 | 15.7 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 212 | 340 | 325 | 341 | 385 | 391 | 427 | 427 | 390 | 275 | 272 | 227 | 181 | 169 | 212 | 195 |
| PEAK POW MW | | 710 | 709 | 708 | 706 | 701 | 700 | 689 | 676 | 663 | 656 | 652 | 651 | 651 | 656 | 662 | 670 |
| ENERGY GWH | 2722.4 | 76.5 | 57.1 | 70.2 | 245.8 | 286.4 | 281.3 | 317.5 | 317.8 | 280.5 | 204.7 | 97.8 | 38.2 | 34.7 | 125.6 | 157.4 | 130.9 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 17770 | 488 | 365 | 449 | 1577 | 1846 | 1820 | 2061 | 2071 | 1843 | 1351 | 650 | 253 | 229 | 834 | 1058 | 874 |
| RELEASE | 17812 | 530 | 365 | 449 | 1577 | 1846 | 1820 | 2061 | 2071 | 1842 | 1352 | 650 | 253 | 229 | 834 | 1058 | 874 |
| STORAGE | 1673. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1632 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.7 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 23.000 | 17.8 | 26.3 | 25.2 | 26.5 | 30.0 | 30.6 | 33.5 | 33.7 | 31.0 | 22.0 | 21.9 | 18.2 | 14.4 | 13.6 | 17.2 | 15.7 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 84 | 123 | 118 | 124 | 140 | 143 | 157 | 158 | 147 | 108 | 109 | 92 | 73 | 68 | 85 | 75 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 1026.3 | 30.3 | 20.7 | 25.4 | 89.3 | 104.5 | 103.0 | 116.7 | 117.3 | 105.6 | 80.2 | 39.3 | 15.4 | 14.0 | 51.0 | 62.9 | 50.7 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 450 | 77 | 36 | 46 | 80 | 65 | 110 | 35 | 25 | | -20 | -8 | -4 | -4 | -10 | -20 | 40 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 145 | | | | | | | 10 | 32 | 39 | 31 | 12 | 5 | 5 | 12 | | |
| REG INFLOW | 18037 | 606 | 401 | 495 | 1653 | 1902 | 1918 | 2068 | 2050 | 1796 | 1300 | 630 | 244 | 219 | 810 | 1035 | 911 |
| RELEASE | 18023 | 311 | 257 | 495 | 1653 | 1902 | 1918 | 2068 | 2050 | 1940 | 1939 | 884 | 414 | 245 | 701 | 694 | 552 |
| STOR CHANGE | 15 | 295 | 144 | 0 | | | | 0 | 0 | -144 | -639 | -254 | -170 | -26 | 109 | 341 | 359 |
| STORAGE | 2986. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2388 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1349.8 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1341.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 17.700 | 10.5 | 18.5 | 27.7 | 27.8 | 30.9 | 32.2 | 33.6 | 33.3 | 32.6 | 31.5 | 29.7 | 29.8 | 15.4 | 11.4 | 11.3 | 9.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 87 | 156 | 234 | 234 | 260 | 271 | 283 | 280 | 272 | 252 | 225 | 219 | 113 | 84 | 86 | 79 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 301 | 287 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1787.2 | 31.2 | 26.1 | 50.5 | 168.6 | 193.6 | 195.1 | 210.3 | 208.4 | 196.0 | 187.8 | 81.1 | 36.8 | 21.7 | 62.5 | 64.1 | 53.4 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1300 | 92 | 43 | 55 | 125 | 140 | 150 | 85 | 70 | 80 | 105 | 50 | 23 | 27 | 75 | 75 | 105 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | 13 | 14 | -15 | -18 | 0 | -6 | -2 | -3 | 1 | 1 | 2 | 3 | 0 | 27 | 8 | 0 | 3 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 19180 | 418 | 284 | 533 | 1773 | 2017 | 2041 | 2109 | 2103 | 2016 | 2035 | 928 | 433 | 294 | 769 | 769 | 659 |
| RELEASE | 19179 | 417 | 284 | 533 | 1773 | 2017 | 2041 | 2109 | 2091 | 1993 | 2035 | 928 | 433 | 294 | 769 | 769 | 694 |
| STOR CHANGE | 1 | 1 | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 326. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 20.000 | 14.0 | 20.5 | 29.8 | 29.8 | 32.8 | 34.3 | 34.3 | 34.0 | 33.5 | 33.1 | 31.2 | 31.2 | 18.5 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 49 | 71 | 100 | 100 | 107 | 111 | 111 | 110 | 111 | 111 | 107 | 107 | 65 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 773.9 | 17.6 | 11.9 | 21.7 | 72.3 | 79.8 | 79.6 | 82.2 | 82.1 | 79.8 | 82.5 | 38.3 | 17.9 | 12.5 | 33.0 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1100 | 121 | 56 | 73 | 145 | 185 | 115 | 100 | 80 | 65 | 35 | 23 | 11 | 12 | 10 | 20 | 50 |
| DEPLETION | 293 | 8 | 4 | 5 | 25 | 37 | 33 | 41 | 40 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 16 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 19986 | 530 | 337 | 600 | 1893 | 2165 | 2123 | 2168 | 2131 | 2031 | 2057 | 944 | 440 | 302 | 764 | 773 | 728 |
| KCFS | | 17.8 | 24.3 | 33.6 | 31.8 | 35.2 | 35.7 | 35.3 | 34.7 | 34.1 | 33.5 | 31.7 | 31.7 | 19.0 | 12.4 | 12.6 | 13.1 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 19300 | 1072 | 500 | 643 | 1735 | 2615 | 4800 | 2675 | 990 | 835 | 850 | 405 | 189 | 216 | 430 | 510 | 835 |
| DEPLETION | 3130 | 55 | 26 | 33 | 144 | 599 | 1607 | 1371 | 380 | -199 | -158 | -164 | -77 | -87 | -177 | -150 | -73 |
| CHAN STOR | 4 | 78 | -15 | -18 | -26 | -40 | -32 | 1 | 1 | 45 | 46 | 3 | 0 | 19 | -43 | -18 | 3 |
| EVAPORATION | 2049 | | | | | | | 130 | 404 | 499 | 426 | 189 | 87 | 99 | 215 | | |
| STORAGE | 56119. | 56685 | 56806 | 56798 | 56470 | 56281 | 57319 | 56326 | 54402 | 52951 | 51523 | 50962 | 50700 | 50621 | 50207 | 50076 | 50258 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 725 | 982 | 1070 | 1155 | 1318 | 1401 | 1452 | 1447 | 1298 | 1035 | 1001 | 933 | 724 | 748 | 848 | 812 |
| PEAK POW MW | | 2407 | 2405 | 2404 | 2399 | 2394 | 2406 | 2394 | 2369 | 2354 | 2331 | 2308 | 2293 | 2290 | 2257 | 2280 | 2290 |
| ENERGY GWH | 9730.1 | 260.9 | 165.0 | 231.1 | 831.8 | 980.2 | 1008.4 | 1080.5 | 1076.9 | 934.9 | 770.4 | 360.3 | 156.7 | 138.9 | 556.8 | 631.2 | 546.0 |
| DAILY GWH | | 17.4 | 23.6 | 25.7 | 27.7 | 31.6 | 33.6 | 34.9 | 34.7 | 31.2 | 24.9 | 24.0 | 22.4 | 17.4 | 18.0 | 20.4 | 19.5 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:13:18 STUDY NO 8

VALUES IN 1000 AF EXCEPT AS INDICATED

| 29FEB20 | 2020 | | | | | | | | | | | 2021 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | |
| NAT INFLOW 5300 | 194 | 90 | 116 | 440 | 850 | 1180 | 595 | 260 | 230 | 310 | 145 | 68 | 77 | 220 | 230 | 295 |
| DEPLETION 606 | -12 | -5 | -7 | 33 | 288 | 583 | 296 | 39 | -118 | -110 | -32 | -15 | -17 | -114 | -120 | -84 |
| EVAPORATION 521 | | | | | | | 33 | 102 | 125 | 108 | 49 | 23 | 26 | 56 | | |
| MOD INFLOW 4173 | 205 | 96 | 123 | 407 | 562 | 597 | 266 | 119 | 223 | 312 | 128 | 60 | 68 | 278 | 350 | 379 |
| RELEASE 6580 | 179 | 83 | 107 | 506 | 553 | 655 | 676 | 676 | 506 | 369 | 179 | 83 | 106 | 615 | 676 | 611 |
| STOR CHANGE -2408 | 27 | 12 | 16 | -99 | 9 | -58 | -410 | -557 | -283 | -57 | -51 | -24 | -38 | -337 | -326 | -232 |
| STORAGE 14776. | 14803 | 14815 | 14831 | 14732 | 14741 | 14683 | 14273 | 13716 | 13433 | 13376 | 13325 | 13301 | 13263 | 12927 | 12600 | 12368 |
| ELEV FTMSL 2233.9 | 2234.1 | 2234.1 | 2234.2 | 2233.7 | 2233.8 | 2233.5 | 2231.5 | 2228.7 | 2227.3 | 2227.0 | 2226.7 | 2226.6 | 2226.4 | 2224.7 | 2222.9 | 2221.6 |
| DISCH KCFS 10.500 | 6.0 | 6.0 | 6.0 | 8.5 | 9.0 | 11.0 | 11.0 | 11.0 | 8.5 | 6.0 | 6.0 | 6.0 | 6.7 | 10.0 | 11.0 | 11.0 |
| POWER | | | | | | | | | | | | | | | | |
| AVE POWER MW | 82 | 82 | 82 | 116 | 122 | 149 | 149 | 148 | 113 | 80 | 80 | 80 | 89 | 132 | 144 | 143 |
| PEAK POW MW | 188 | 188 | 188 | 188 | 188 | 188 | 186 | 185 | 184 | 183 | 183 | 183 | 183 | 182 | 180 | 179 |
| ENERGY GWH 1066.3 | 29.4 | 13.7 | 17.7 | 83.3 | 91.0 | 107.5 | 110.7 | 109.9 | 81.7 | 59.5 | 28.8 | 13.4 | 17.1 | 98.5 | 107.4 | 96.4 |
| --GARRISON-- | | | | | | | | | | | | | | | | |
| NAT INFLOW 7400 | 382 | 178 | 229 | 580 | 1100 | 2165 | 935 | 325 | 215 | 385 | 150 | 70 | 80 | 140 | 195 | 270 |
| DEPLETION 1141 | 22 | 10 | 13 | 27 | 110 | 631 | 735 | 134 | -156 | -44 | -123 | -57 | -65 | -64 | -26 | -7 |
| CHAN STOR -6 | 45 | | | -25 | -5 | -20 | | | 25 | 25 | | | -7 | -33 | -10 | |
| EVAPORATION 603 | | | | | | | 39 | 118 | 145 | 125 | 56 | 26 | 30 | 64 | | |
| REG INFLOW 12231 | 583 | 251 | 323 | 1034 | 1538 | 2169 | 838 | 749 | 756 | 698 | 395 | 184 | 215 | 722 | 887 | 888 |
| RELEASE 15152 | 506 | 236 | 303 | 1190 | 1414 | 1458 | 1445 | 1445 | 1206 | 1045 | 506 | 222 | 254 | 1230 | 1414 | 1277 |
| STOR CHANGE -2922 | 77 | 15 | 20 | -156 | 124 | 711 | -607 | -696 | -450 | -347 | -111 | -38 | -39 | -508 | -527 | -389 |
| STORAGE 17739. | 17816 | 17832 | 17851 | 17695 | 17819 | 18530 | 17923 | 17227 | 16777 | 16430 | 16319 | 16281 | 16242 | 15734 | 15207 | 14817 |
| ELEV FTMSL 1837.5 | 1837.7 | 1837.8 | 1837.8 | 1837.3 | 1837.7 | 1840.0 | 1838.1 | 1835.8 | 1834.3 | 1833.1 | 1832.7 | 1832.6 | 1832.4 | 1830.7 | 1828.8 | 1827.3 |
| DISCH KCFS 22.000 | 17.0 | 17.0 | 17.0 | 20.0 | 23.0 | 24.5 | 23.5 | 23.5 | 20.3 | 17.0 | 17.0 | 16.0 | 16.0 | 20.0 | 23.0 | 23.0 |
| POWER | | | | | | | | | | | | | | | | |
| AVE POWER MW | 211 | 211 | 211 | 248 | 284 | 305 | 293 | 289 | 247 | 206 | 205 | 192 | 192 | 238 | 270 | 267 |
| PEAK POW MW | 527 | 527 | 528 | 525 | 527 | 538 | 529 | 518 | 511 | 506 | 504 | 503 | 503 | 494 | 486 | 479 |
| ENERGY GWH 2231.4 | 75.9 | 35.5 | 45.6 | 178.3 | 211.4 | 219.6 | 218.0 | 215.2 | 177.8 | 153.0 | 73.7 | 32.3 | 36.9 | 177.3 | 201.1 | 179.7 |
| --OAHE-- | | | | | | | | | | | | | | | | |
| NAT INFLOW 1150 | 169 | 79 | 102 | 200 | 110 | 305 | 105 | 40 | 45 | 5 | 8 | 4 | 4 | -45 | -20 | 40 |
| DEPLETION 802 | 26 | 12 | 16 | 53 | 81 | 172 | 212 | 144 | 34 | -14 | 1 | 0 | 0 | 14 | 20 | 31 |
| CHAN STOR -5 | 20 | | | -12 | -12 | -6 | 4 | | 14 | 15 | | 5 | 0 | -18 | -14 | 0 |
| EVAPORATION 545 | | | | | | | 36 | 109 | 132 | 111 | 50 | 23 | 26 | 57 | | |
| REG INFLOW 14951 | 669 | 303 | 389 | 1325 | 1431 | 1585 | 1306 | 1232 | 1100 | 968 | 463 | 207 | 231 | 1095 | 1361 | 1286 |
| RELEASE 17921 | 511 | 375 | 462 | 1576 | 1871 | 1850 | 2046 | 2080 | 1848 | 1352 | 591 | 312 | 230 | 865 | 1068 | 884 |
| STOR CHANGE -2970 | 158 | -73 | -73 | -251 | -440 | -265 | -739 | -848 | -749 | -384 | -128 | -105 | 1 | 230 | 292 | 403 |
| STORAGE 18619. | 18777 | 18705 | 18632 | 18381 | 17941 | 17676 | 16937 | 16089 | 15340 | 14956 | 14828 | 14723 | 14724 | 14954 | 15247 | 15649 |
| ELEV FTMSL 1607.3 | 1607.9 | 1607.6 | 1607.4 | 1606.6 | 1605.1 | 1604.2 | 1601.7 | 1598.6 | 1595.9 | 1594.4 | 1593.9 | 1593.5 | 1593.5 | 1594.4 | 1595.5 | 1597.0 |
| DISCH KCFS 23.300 | 17.2 | 27.0 | 25.9 | 26.5 | 30.4 | 31.1 | 33.3 | 33.8 | 31.1 | 22.0 | 19.9 | 22.5 | 14.5 | 14.1 | 17.4 | 15.9 |
| POWER | | | | | | | | | | | | | | | | |
| AVE POWER MW | 222 | 349 | 334 | 341 | 388 | 394 | 417 | 418 | 378 | 265 | 238 | 269 | 174 | 169 | 210 | 194 |
| PEAK POW MW | 710 | 708 | 707 | 703 | 695 | 691 | 677 | 661 | 647 | 640 | 638 | 636 | 636 | 640 | 646 | 653 |
| ENERGY GWH 2695.2 | 80.0 | 58.6 | 72.1 | 245.2 | 288.9 | 283.7 | 310.6 | 310.8 | 272.0 | 197.3 | 85.9 | 45.2 | 33.3 | 125.7 | 156.0 | 130.0 |
| --BIG BEND-- | | | | | | | | | | | | | | | | |
| EVAPORATION 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW 17790 | 511 | 375 | 462 | 1576 | 1871 | 1850 | 2038 | 2055 | 1817 | 1324 | 579 | 306 | 223 | 850 | 1068 | 884 |
| RELEASE 17831 | 553 | 375 | 462 | 1576 | 1871 | 1850 | 2038 | 2054 | 1817 | 1325 | 579 | 306 | 223 | 850 | 1068 | 884 |
| STORAGE 1673. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1632 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL 1420.7 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS 23.000 | 18.6 | 27.0 | 25.9 | 26.5 | 30.4 | 31.1 | 33.1 | 33.4 | 30.5 | 21.5 | 19.4 | 22.0 | 14.1 | 13.8 | 17.4 | 15.9 |
| POWER | | | | | | | | | | | | | | | | |
| AVE POWER MW | 88 | 127 | 121 | 124 | 142 | 145 | 155 | 156 | 145 | 106 | 98 | 111 | 71 | 70 | 85 | 76 |
| PEAK POW MW | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH 1027.5 | 31.6 | 21.3 | 26.2 | 89.3 | 106.0 | 104.7 | 115.4 | 116.3 | 104.1 | 78.6 | 35.2 | 18.6 | 13.6 | 51.9 | 63.5 | 51.3 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | |
| NAT INFLOW 350 | 68 | 32 | 41 | 85 | 50 | 95 | 25 | 15 | -5 | -25 | -10 | -5 | -5 | -20 | -25 | 35 |
| DEPLETION 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION 145 | | | | | | | 10 | 32 | 39 | 31 | 12 | 5 | 5 | 12 | | |
| REG INFLOW 17957 | 619 | 406 | 502 | 1657 | 1912 | 1933 | 2035 | 2023 | 1765 | 1268 | 556 | 296 | 213 | 816 | 1040 | 916 |
| RELEASE 17942 | 324 | 262 | 502 | 1657 | 1912 | 1933 | 2035 | 2023 | 1909 | 1907 | 869 | 407 | 239 | 707 | 699 | 557 |
| STOR CHANGE 15 | 295 | 144 | | | 0 | 0 | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 109 | 341 | 359 |
| STORAGE 2986. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL 1349.8 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS 17.700 | 10.9 | 18.9 | 28.1 | 27.9 | 31.1 | 32.5 | 33.1 | 32.9 | 32.1 | 31.0 | 29.2 | 29.3 | 15.0 | 11.5 | 11.4 | 10.0 |
| POWER | | | | | | | | | | | | | | | | |
| AVE POWER MW | 90 | 159 | 237 | 235 | 262 | 273 | 278 | 277 | 268 | 248 | 220 | 215 | 110 | 85 | 87 | 80 |
| PEAK POW MW | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 285 | 294 | 319 | 339 |
| ENERGY GWH 1779.0 | 32.5 | 26.7 | 51.2 | 169.0 | 194.7 | 196.6 | 206.9 | 205.7 | 192.9 | 184.7 | 79.4 | 36.0 | 21.1 | 63.1 | 64.6 | 53.9 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | |
| NAT INFLOW 1200 | 80 | 37 | 48 | 120 | 130 | 135 | 80 | 60 | 75 | 100 | 48 | 22 | 25 | 70 | 70 | 100 |
| DEPLETION 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR 13 | 13 | -15 | -18 | 1 | -6 | -3 | -1 | 0 | 2 | 2 | 3 | 0 | 26 | 7 | 0 | 2 |
| EVAPORATION 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW 19000 | 418 | 284 | 533 | 1773 | 2017 | 2041 | 2072 | 2066 | 1981 | 1998 | 910 | 425 | 286 | 769 | 769 | 659 |
| RELEASE 18999 | 417 | 284 | 533 | 1773 | 2017 | 2041 | 2072 | 2054 | 1958 | 1998 | 910 | 425 | 286 | 769 | 769 | 694 |
| STOR CHANGE 1 | 1 | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE 326. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS 20.000 | 14.0 | 20.5 | 29.8 | 29.8 | 32.8 | 34.3 | 33.7 | 33.4 | 32.9 | 32.5 | 30.6 | 30.6 | 18.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | |
| AVE POWER MW | 49 | 71 | 100 | 100 | 107 | 111 | 109 | 109 | 109 | 110 | 105 | 105 | 64 | 44 | 44 | 44 |
| PEAK POW MW | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH 769.0 | 17.6 | 11.9 | 21.7 | 72.3 | 79.8 | 79.6 | 81.3 | 81.2 | 78.8 | 81.5 | 37.8 | 17.7 | 12.2 | 33.0 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | |
| NAT INFLOW 700 | 87 | 41 | 52 | 90 | 120 | 65 | 70 | 40 | 30 | 30 | 18 | 8 | 9 | 5 | 15 | 20 |
| DEPLETION 293 | 8 | 4 | 5 | 25 | 37 | 33 | 41 | 40 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 16 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | |
| KAF 19406 | 496 | 321 | 580 | 1838 | 2100 | 2073 | 2101 | 2054 | 1961 | 2015 | 921 | 430 | 291 | 759 | 768 | 698 |
| KCFS | 16.7 | 23.2 | 32.5 | 30.9 | 34.2 | 34.8 | 34.2 | 33.4 | 33.0 | 32.8 | 31.0 | 31.0 | 18.4 | 12.3 | 12.5 | 12.6 |
| --TOTAL-- | | | | | | | | | | | | | | | | |
| NAT INFLOW 16100 | 980 | 457 | 588 | 1515 | 2360 | 3945 | 1810 | 740 | 590 | 805 | 358 | 167 | 191 | 370 | 465 | 760 |
| DEPLETION 3036 | 45 | 21 | 27 | 147 | 544 | 1455 | 1341 | 382 | -211 | -152 | -141 | -66 | -75 | -136 | -106 | -41 |
| CHAN STOR 3 | 78 | -15 | -18 | -36 | -23 | -29 | 3 | 0 | 41 | 42 | 3 | 4 | 20 | -45 | -24 | 2 |
| EVAPORATION 1987 | | | | | | | 128 | 393 | 483 | 412 | 183 | 84 | 96 | 208 | | |
| STORAGE 56119. | 56635 | 56734 | 56697 | 56191 | 55884 | 56272 | 54516 | 52427 | 50825 | 49396 | 48793 | 48516 | 48414 | 47909 | 47689 | 47794 |
| SYSTEM POWER | | | | | | | | | | | | | | | | |
| AVE POWER MW | 742 | 998 | 1086 | 1163 | 1306 | 1377 | 1402 | 1397 | 1260 | 1014 | 946 | 971 | 700 | 739 | 841 | 805 |
| PEAK POW MW | 2406 | 2404 | 2403 | 2396 | 2390 | 2396 | 2372 | 2345 | 2327 | 2303 | 2276 | 2265 | 2262 | 2226 | 2247 | 2255 |
| ENERGY GWH 9568.4 | 267.0 | 167.7 | 234.5 | 837.3 | 971.8 | 991.8 | 1042.9 | 1039.2 | 907.4 | 754.7 | 340.7 | 163.2 | 134.3 | 549.5 | 625.7 | 541.0 |
| DAILY GWH | 17.8 | 24.0 | 26.1 | 27.9 | 31.3 | 33.1 | 33.6 | 33.5 | 30.2 | 24.3 | 22.7 | 23.3 | 16.8 | 17.7 | 20.2 | 19.3 |
| INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:33 STUDY NO 9

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 28FEB21 | 2021 | | | | | | | | | | | | 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 7200 | 227 | 106 | 136 | 560 | 1145 | 1830 | 840 | 365 | 290 | 385 | 205 | 96 | 109 | 295 | 260 | 350 |
| DEPLETION | 563 | -26 | -12 | -16 | 13 | 280 | 602 | 305 | 46 | -92 | -113 | -31 | -14 | -17 | -127 | -142 | -93 |
| EVAPORATION | 455 | | | | | | | 28 | 88 | 109 | 95 | 43 | 20 | 23 | 50 | | |
| MOD INFLOW | 6182 | 254 | 118 | 152 | 547 | 865 | 1228 | 507 | 231 | 273 | 403 | 193 | 90 | 103 | 372 | 402 | 443 |
| RELEASE | 6386 | 179 | 83 | 107 | 446 | 492 | 655 | 676 | 676 | 503 | 369 | 179 | 97 | 111 | 584 | 646 | 583 |
| STOR CHANGE | -204 | 75 | 35 | 45 | 101 | 373 | 573 | -170 | -445 | -230 | 34 | 14 | -7 | -8 | -212 | -244 | -140 |
| STORAGE | 14553. | 14628 | 14663 | 14708 | 14809 | 15182 | 15756 | 15586 | 15141 | 14911 | 14945 | 14960 | 14953 | 14944 | 14733 | 14489 | 14349 |
| ELEV FTMSL | 2232.9 | 2233.2 | 2233.4 | 2233.6 | 2234.1 | 2235.9 | 2238.5 | 2237.7 | 2235.7 | 2234.6 | 2234.7 | 2234.8 | 2234.8 | 2234.7 | 2233.7 | 2232.6 | 2231.9 |
| DISCH KCFS | 10.000 | 6.0 | 6.0 | 6.0 | 7.5 | 8.0 | 11.0 | 11.0 | 11.0 | 8.5 | 6.0 | 6.0 | 7.0 | 7.0 | 9.5 | 10.5 | 10.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 82 | 82 | 82 | 102 | 109 | 151 | 151 | 151 | 115 | 82 | 82 | 96 | 96 | 129 | 142 | 142 |
| PEAK POW MW | | 188 | 188 | 188 | 188 | 189 | 191 | 190 | 189 | 188 | 189 | 189 | 189 | 189 | 188 | 187 | 187 |
| ENERGY GWH | 1054.6 | 29.4 | 13.7 | 17.6 | 73.5 | 81.3 | 108.7 | 112.6 | 112.2 | 83.1 | 61.0 | 29.5 | 16.1 | 18.3 | 96.2 | 105.9 | 95.4 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10900 | 479 | 223 | 287 | 780 | 1300 | 3120 | 2100 | 580 | 480 | 445 | 180 | 84 | 96 | 180 | 255 | 310 |
| DEPLETION | 1158 | -7 | -3 | -4 | -68 | 146 | 995 | 827 | 143 | -162 | -67 | -161 | -75 | -86 | -143 | -105 | -73 |
| CHAN STOR | -5 | 40 | | | -15 | -5 | -30 | | | 25 | 24 | | -10 | | -25 | -10 | |
| EVAPORATION | 524 | | | | | | | 32 | 102 | 127 | 109 | 49 | 23 | 26 | 56 | | |
| REG INFLOW | 15599 | 704 | 310 | 399 | 1279 | 1641 | 2750 | 1917 | 1011 | 1043 | 795 | 470 | 223 | 267 | 827 | 996 | 966 |
| RELEASE | 15846 | 506 | 236 | 303 | 1190 | 1506 | 1547 | 1537 | 1537 | 1309 | 1168 | 565 | 264 | 286 | 1199 | 1414 | 1277 |
| STOR CHANGE | -247 | 198 | 74 | 95 | 89 | 134 | 1203 | 380 | -526 | -266 | -373 | -95 | -40 | -19 | -372 | -418 | -311 |
| STORAGE | 17460. | 17659 | 17733 | 17828 | 17917 | 18052 | 19254 | 19634 | 19108 | 18842 | 18470 | 18374 | 18334 | 18315 | 17943 | 17524 | 17213 |
| ELEV FTMSL | 1836.6 | 1837.2 | 1837.5 | 1837.8 | 1838.1 | 1838.5 | 1842.2 | 1843.4 | 1841.8 | 1841.0 | 1839.8 | 1839.5 | 1839.4 | 1839.3 | 1838.1 | 1836.8 | 1835.7 |
| DISCH KCFS | 22.000 | 17.0 | 17.0 | 17.0 | 20.0 | 24.5 | 26.0 | 25.0 | 25.0 | 22.0 | 19.0 | 19.0 | 19.0 | 18.0 | 19.5 | 23.0 | 23.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 210 | 210 | 211 | 248 | 304 | 326 | 318 | 318 | 278 | 239 | 238 | 238 | 226 | 243 | 284 | 282 |
| PEAK POW MW | | 525 | 526 | 527 | 529 | 531 | 548 | 553 | 546 | 542 | 537 | 536 | 535 | 535 | 529 | 523 | 518 |
| ENERGY GWH | 2399.4 | 75.6 | 35.4 | 45.5 | 178.6 | 226.1 | 235.1 | 237.0 | 236.7 | 200.5 | 178.2 | 85.8 | 40.0 | 43.3 | 180.9 | 211.3 | 189.5 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2300 | 259 | 121 | 155 | 405 | 220 | 625 | 170 | 70 | 95 | 45 | 45 | 21 | 24 | -15 | -10 | 70 |
| DEPLETION | 817 | 26 | 12 | 16 | 54 | 82 | 175 | 217 | 147 | 35 | -15 | 1 | 0 | 0 | 14 | 21 | 32 |
| CHAN STOR | -4 | 20 | | | -12 | -18 | -6 | 4 | | 12 | 12 | | | 4 | -6 | -14 | 0 |
| EVAPORATION | 496 | | | | | | | 32 | 97 | 119 | 102 | 46 | 22 | 25 | 53 | | |
| REG INFLOW | 16829 | 759 | 345 | 443 | 1529 | 1627 | 1991 | 1462 | 1363 | 1262 | 1138 | 564 | 263 | 289 | 1110 | 1369 | 1315 |
| RELEASE | 17083 | 468 | 306 | 360 | 1293 | 1543 | 1609 | 1849 | 1983 | 1754 | 1263 | 587 | 309 | 227 | 1113 | 1315 | 1103 |
| STOR CHANGE | -253 | 290 | 38 | 83 | 236 | 84 | 382 | -387 | -620 | -492 | -125 | -23 | -46 | 62 | -3 | 54 | 212 |
| STORAGE | 18373. | 18664 | 18702 | 18785 | 19021 | 19105 | 19487 | 19101 | 18481 | 17989 | 17864 | 17841 | 17795 | 17856 | 17854 | 17908 | 18120 |
| ELEV FTMSL | 1606.5 | 1607.5 | 1607.6 | 1607.9 | 1608.6 | 1608.9 | 1610.1 | 1608.9 | 1606.9 | 1605.3 | 1604.9 | 1604.8 | 1604.6 | 1604.8 | 1604.8 | 1605.0 | 1605.7 |
| DISCH KCFS | 19.868 | 15.7 | 22.1 | 20.2 | 21.7 | 25.1 | 27.0 | 30.1 | 32.2 | 29.5 | 20.5 | 19.7 | 22.3 | 14.3 | 18.1 | 21.4 | 19.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 203 | 285 | 261 | 282 | 326 | 352 | 391 | 416 | 377 | 262 | 251 | 283 | 182 | 231 | 272 | 254 |
| PEAK POW MW | | 708 | 708 | 710 | 714 | 715 | 722 | 715 | 705 | 696 | 694 | 693 | 693 | 694 | 694 | 695 | 698 |
| ENERGY GWH | 2660.2 | 73.1 | 47.9 | 56.4 | 202.8 | 242.4 | 253.6 | 291.1 | 309.3 | 271.2 | 194.8 | 90.4 | 47.6 | 35.0 | 171.6 | 202.6 | 170.5 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 105 | | | | | | | 6 | 20 | 25 | 22 | 10 | 5 | 5 | 12 | | |
| REG INFLOW | 16978 | 468 | 306 | 360 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 1101 | 1315 | 1103 |
| RELEASE | 16978 | 468 | 306 | 360 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 1101 | 1315 | 1103 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 19.868 | 15.7 | 22.1 | 20.2 | 21.7 | 25.1 | 27.0 | 30.0 | 31.9 | 29.1 | 20.2 | 19.4 | 21.9 | 14.0 | 17.9 | 21.4 | 19.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 103 | 95 | 102 | 117 | 127 | 140 | 149 | 138 | 99 | 97 | 110 | 71 | 90 | 105 | 95 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 980.8 | 26.8 | 17.4 | 20.4 | 73.2 | 87.4 | 91.1 | 104.4 | 111.1 | 99.1 | 73.7 | 35.1 | 18.5 | 13.5 | 67.0 | 78.0 | 64.0 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 900 | 121 | 56 | 73 | 160 | 165 | 135 | 70 | 60 | 35 | | -5 | -2 | -3 | | -10 | 45 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 116 | | | | | | | 8 | 25 | 31 | 24 | 9 | 4 | 4 | 9 | | |
| REG INFLOW | 17682 | 588 | 362 | 432 | 1449 | 1699 | 1732 | 1887 | 1982 | 1725 | 1216 | 562 | 298 | 215 | 1089 | 1302 | 1145 |
| RELEASE | 17682 | 307 | 218 | 432 | 1449 | 1699 | 1732 | 1887 | 1982 | 1869 | 1855 | 875 | 409 | 241 | 980 | 961 | 786 |
| STOR CHANGE | 0 | 281 | 144 | | | | | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 108 | 341 | 359 |
| STORAGE | 3000. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2300 | 2641 | 3000 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 14.160 | 10.3 | 15.7 | 24.2 | 24.3 | 27.6 | 29.1 | 30.7 | 32.2 | 31.4 | 30.2 | 29.4 | 29.5 | 15.2 | 15.9 | 15.6 | 14.2 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 86 | 132 | 204 | 206 | 233 | 245 | 258 | 271 | 262 | 242 | 222 | 215 | 111 | 117 | 119 | 113 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 285 | 294 | 320 | 339 |
| ENERGY GWH | 1746.4 | 30.8 | 22.3 | 44.2 | 148.1 | 173.3 | 176.5 | 192.1 | 201.7 | 188.9 | 179.7 | 79.9 | 36.2 | 21.3 | 87.2 | 88.4 | 75.9 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1500 | 102 | 47 | 61 | 145 | 165 | 175 | 100 | 90 | 95 | 120 | 58 | 27 | 31 | 80 | 85 | 120 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 7 | -10 | -16 | 0 | -6 | -3 | -3 | -3 | 2 | 2 | 1 | 0 | 26 | -1 | 1 | 3 |
| EVAPORATION | 34 | | | | | | | 2 | 6 | 8 | 7 | 3 | 2 | 2 | 4 | | |
| REG INFLOW | 19034 | 417 | 255 | 477 | 1588 | 1839 | 1880 | 1943 | 2053 | 1963 | 1968 | 925 | 432 | 294 | 1045 | 1045 | 909 |
| RELEASE | 19034 | 417 | 255 | 477 | 1588 | 1839 | 1880 | 1943 | 2041 | 1940 | 1968 | 925 | 432 | 294 | 1045 | 1045 | 944 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 17.000 | 14.0 | 18.4 | 26.7 | 26.7 | 29.9 | 31.6 | 31.6 | 33.2 | 32.6 | 32.0 | 31.1 | 31.1 | 18.5 | 17.0 | 17.0 | 17.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 49 | 64 | 91 | 91 | 101 | 105 | 105 | 109 | 109 | 108 | 106 | 106 | 65 | 60 | 60 | 60 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 779.7 | 17.6 | 10.7 | 19.7 | 65.6 | 74.9 | 75.3 | 77.8 | 80.9 | 78.3 | 80.6 | 38.3 | 17.9 | 12.5 | 44.7 | 44.7 | 40.1 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1800 | 162 | 76 | 97 | 280 | 345 | 190 | 165 | 130 | 110 | 60 | 30 | 14 | 16 | 25 | 25 | 75 |
| DEPLETION | 295 | 8 | 4 | 5 | 25 | 38 | 33 | 42 | 40 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 16 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 20539 | 571 | 327 | 570 | 1843 | 2146 | 2037 | 2066 | 2131 | 2023 | 2015 | 948 | 443 | 306 | 1055 | 1054 | 1003 |
| KCFS | | 19.2 | 23.6 | 31.9 | 31.0 | 34.9 | 34.2 | 33.6 | 34.7 | 34.0 | 32.8 | 31.9 | 31.9 | 19.3 | 17.2 | 17.1 | 18.1 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 24600 | 1350 | 630 | 810 | 2330 | 3340 | 6075 | 3445 | 1295 | 1105 | 1055 | 513 | 239 | 273 | 565 | 605 | 970 |
| DEPLETION | 3027 | 2 | 1 | 1 | 33 | 574 | 1841 | 1448 | 401 | -190 | -179 | -178 | -83 | -95 | -228 | -206 | -115 |
| CHAN STOR | -10 | 67 | -10 | -16 | -27 | -29 | -38 | 1 | -3 | 38 | 38 | 1 | -10 | 31 | -33 | -24 | 3 |
| EVAPORATION | 1730 | | | | | | | 108 | 338 | 420 | 361 | 161 | 74 | 85 | 183 | | |
| STORAGE | 55346. | 56190 | 56482 | 56704 | 57131 | 57723 | 59881 | 59705 | 58126 | 57017 | 55914 | 55497 | 55292 | 55301 | 54823 | 54556 | 54640 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 704 | 876 | 944 | 1030 | 1190 | 1306 | 1364 | 1414 | 1279 | 1032 | 997 | 1049 | 750 | 871 | 983 | 946 |
| PEAK POW MW | | 2402 | 2402 | 2405 | 2410 | 2415 | 2440 | 2438 | 2420 | 2411 | 2393 | 2369 | 2358 | 2357 | 2321 | 2340 | 2347 |
| ENERGY GWH | 9621.1 | 253.3 | 147.2 | 203.9 | 741.8 | 885.3 | 940.3 | 1015.0 | 1051.8 | 921.2 | 768.0 | 359.0 | 176.2 | 144.1 | 647.7 | 731.0 | 635.4 |
| DAILY GWH | | 16.9 | 21.0 | 22.7 | 24.7 | 28.6 | 31.3 | 32.7 | 33.9 | 30.7 | 24.8 | 23.9 | 25.2 | 18.0 | 20.9 | 23.6 | 22.7 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:33 STUDY NO 10

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 28FEB22 | 2022 | | | | | | | | | | | | 2023 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 7200 | 227 | 106 | 136 | 560 | 1145 | 1830 | 840 | 365 | 290 | 385 | 205 | 96 | 109 | 295 | 260 | 350 |
| DEPLETION | 575 | -26 | -12 | -16 | 13 | 281 | 606 | 312 | 51 | -92 | -115 | -32 | -15 | -17 | -128 | -143 | -93 |
| EVAPORATION | 451 | | | | | | | 28 | 87 | 108 | 94 | 43 | 20 | 23 | 49 | | |
| MOD INFLOW | 6174 | 254 | 118 | 152 | 547 | 864 | 1224 | 500 | 227 | 274 | 406 | 194 | 90 | 103 | 374 | 403 | 443 |
| RELEASE | 6331 | 179 | 83 | 107 | 417 | 492 | 655 | 676 | 676 | 507 | 369 | 179 | 83 | 95 | 584 | 646 | 583 |
| STOR CHANGE | -157 | 75 | 35 | 45 | 130 | 372 | 569 | -176 | -449 | -233 | 37 | 15 | 7 | 8 | -210 | -243 | -140 |
| STORAGE | 14349. | 14424 | 14459 | 14504 | 14634 | 15007 | 15576 | 15400 | 14950 | 14717 | 14754 | 14770 | 14777 | 14785 | 14575 | 14332 | 14192 |
| ELEV FTMSL | 2231.9 | 2232.3 | 2232.4 | 2232.6 | 2233.3 | 2235.0 | 2237.7 | 2236.9 | 2234.8 | 2233.7 | 2233.8 | 2233.9 | 2233.9 | 2234.0 | 2233.0 | 2231.8 | 2231.1 |
| DISCH KCFS | 10.500 | 6.0 | 6.0 | 6.0 | 7.0 | 8.0 | 11.0 | 11.0 | 11.0 | 8.5 | 6.0 | 6.0 | 6.0 | 6.0 | 9.5 | 10.5 | 10.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 81 | 81 | 81 | 95 | 109 | 151 | 151 | 150 | 116 | 82 | 82 | 82 | 82 | 129 | 142 | 142 |
| PEAK POW MW | | 187 | 187 | 187 | 188 | 189 | 190 | 190 | 189 | 188 | 188 | 188 | 188 | 188 | 187 | 187 | 186 |
| ENERGY GWH | 1042.8 | 29.3 | 13.7 | 17.6 | 68.4 | 81.1 | 108.4 | 112.4 | 111.9 | 83.6 | 60.8 | 29.4 | 13.7 | 15.7 | 96.0 | 105.7 | 95.2 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10900 | 479 | 223 | 287 | 780 | 1300 | 3120 | 2100 | 580 | 480 | 445 | 180 | 84 | 96 | 180 | 255 | 310 |
| DEPLETION | 1176 | -5 | -2 | -3 | -67 | 146 | 1005 | 843 | 148 | -165 | -71 | -164 | -77 | -87 | -145 | -106 | -74 |
| CHAN STOR | 0 | 45 | | | -10 | -10 | -30 | | | 24 | 25 | | | | -35 | -10 | |
| EVAPORATION | 519 | | | | | | | 32 | 101 | 126 | 108 | 49 | 23 | 26 | 55 | | |
| REG INFLOW | 15535 | 707 | 309 | 397 | 1254 | 1636 | 2740 | 1901 | 1007 | 1051 | 801 | 474 | 221 | 253 | 819 | 997 | 967 |
| RELEASE | 15724 | 506 | 236 | 303 | 1131 | 1506 | 1547 | 1537 | 1537 | 1296 | 1138 | 550 | 257 | 289 | 1199 | 1414 | 1277 |
| STOR CHANGE | -189 | 202 | 73 | 94 | 123 | 130 | 1193 | 364 | -530 | -245 | -336 | -76 | -36 | -36 | -380 | -418 | -310 |
| STORAGE | 17213. | 17415 | 17488 | 17582 | 17705 | 17834 | 19027 | 19391 | 18861 | 18616 | 18279 | 18203 | 18167 | 18131 | 17752 | 17334 | 17024 |
| ELEV FTMSL | 1835.7 | 1836.4 | 1836.7 | 1837.0 | 1837.4 | 1837.8 | 1841.5 | 1842.6 | 1841.0 | 1840.3 | 1839.2 | 1839.0 | 1838.9 | 1838.7 | 1837.5 | 1836.2 | 1835.1 |
| DISCH KCFS | 23.000 | 17.0 | 17.0 | 17.0 | 19.0 | 24.5 | 26.0 | 25.0 | 25.0 | 21.8 | 18.5 | 18.5 | 18.5 | 18.2 | 19.5 | 23.0 | 23.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 209 | 209 | 210 | 235 | 303 | 325 | 317 | 317 | 275 | 232 | 231 | 231 | 227 | 242 | 283 | 281 |
| PEAK POW MW | | 521 | 522 | 524 | 526 | 528 | 545 | 550 | 543 | 539 | 534 | 533 | 532 | 532 | 526 | 520 | 515 |
| ENERGY GWH | 2371.4 | 75.2 | 35.2 | 45.3 | 169.0 | 225.1 | 234.1 | 236.0 | 235.7 | 197.7 | 172.8 | 83.3 | 38.8 | 43.6 | 180.3 | 210.5 | 188.7 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2300 | 259 | 121 | 155 | 405 | 220 | 625 | 170 | 70 | 95 | 45 | 45 | 21 | 24 | -15 | -10 | 70 |
| DEPLETION | 830 | 27 | 12 | 16 | 54 | 83 | 178 | 221 | 150 | 35 | -15 | 1 | 0 | 0 | 15 | 21 | 32 |
| CHAN STOR | 0 | 24 | | | -8 | -22 | -6 | 4 | | 13 | 13 | | | 1 | -5 | -14 | 0 |
| EVAPORATION | 487 | | | | | | | 31 | 95 | 117 | 101 | 45 | 21 | 24 | 53 | | |
| REG INFLOW | 16707 | 762 | 344 | 443 | 1474 | 1622 | 1988 | 1459 | 1362 | 1252 | 1110 | 550 | 257 | 290 | 1111 | 1369 | 1315 |
| RELEASE | 16902 | 468 | 306 | 360 | 1293 | 1543 | 1609 | 1849 | 1983 | 1754 | 1263 | 587 | 309 | 227 | 1050 | 1253 | 1048 |
| STOR CHANGE | -195 | 294 | 38 | 82 | 181 | 79 | 379 | -390 | -621 | -502 | -153 | -37 | -53 | 63 | 62 | 115 | 267 |
| STORAGE | 18120. | 18414 | 18452 | 18535 | 18716 | 18794 | 19173 | 18783 | 18162 | 17660 | 17508 | 17471 | 17418 | 17480 | 17542 | 17657 | 17925 |
| ELEV FTMSL | 1605.7 | 1606.7 | 1606.8 | 1607.1 | 1607.7 | 1607.9 | 1609.1 | 1607.9 | 1605.9 | 1604.2 | 1603.7 | 1603.5 | 1603.3 | 1603.6 | 1603.8 | 1604.2 | 1605.1 |
| DISCH KCFS | 19.868 | 15.7 | 22.1 | 20.2 | 21.7 | 25.1 | 27.0 | 30.1 | 32.2 | 29.5 | 20.5 | 19.7 | 22.3 | 14.3 | 17.1 | 20.4 | 18.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 202 | 284 | 260 | 280 | 324 | 350 | 389 | 413 | 375 | 260 | 250 | 281 | 181 | 216 | 258 | 240 |
| PEAK POW MW | | 703 | 704 | 706 | 709 | 710 | 716 | 710 | 699 | 690 | 687 | 687 | 686 | 687 | 688 | 690 | 695 |
| ENERGY GWH | 2618.6 | 72.8 | 47.7 | 56.2 | 201.8 | 241.1 | 252.3 | 289.6 | 307.6 | 269.6 | 193.6 | 89.8 | 47.2 | 34.8 | 160.9 | 192.2 | 161.3 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 105 | | | | | | | 6 | 20 | 25 | 22 | 10 | 5 | 5 | 12 | | |
| REG INFLOW | 16797 | 468 | 306 | 360 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 1038 | 1253 | 1048 |
| RELEASE | 16797 | 468 | 306 | 360 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 1038 | 1253 | 1048 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 19.868 | 15.7 | 22.1 | 20.2 | 21.7 | 25.1 | 27.0 | 30.0 | 31.9 | 29.1 | 20.2 | 19.4 | 21.9 | 14.0 | 16.9 | 20.4 | 18.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 103 | 95 | 102 | 117 | 127 | 140 | 149 | 138 | 99 | 97 | 110 | 71 | 85 | 100 | 90 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 970.2 | 26.8 | 17.4 | 20.4 | 73.2 | 87.4 | 91.1 | 104.4 | 111.1 | 99.1 | 73.7 | 35.1 | 18.5 | 13.5 | 63.2 | 74.4 | 60.8 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 900 | 121 | 56 | 73 | 160 | 165 | 135 | 70 | 60 | 35 | | -5 | -2 | -3 | | -10 | 45 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 116 | | | | | | | 8 | 25 | 31 | 24 | 9 | 4 | 4 | 9 | | |
| REG INFLOW | 17502 | 588 | 362 | 432 | 1449 | 1699 | 1732 | 1887 | 1982 | 1725 | 1216 | 562 | 298 | 215 | 1025 | 1240 | 1090 |
| RELEASE | 17502 | 307 | 218 | 432 | 1449 | 1699 | 1732 | 1887 | 1982 | 1869 | 1855 | 875 | 409 | 241 | 917 | 899 | 731 |
| STOR CHANGE | 0 | 281 | 144 | | | | | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 108 | 341 | 359 |
| STORAGE | 3000. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2300 | 2641 | 3000 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 14.160 | 10.3 | 15.7 | 24.2 | 24.3 | 27.6 | 29.1 | 30.7 | 32.2 | 31.4 | 30.2 | 29.4 | 29.5 | 15.2 | 14.9 | 14.6 | 13.2 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 86 | 132 | 204 | 206 | 233 | 245 | 258 | 271 | 262 | 242 | 222 | 215 | 111 | 110 | 111 | 105 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 285 | 294 | 320 | 339 |
| ENERGY GWH | 1729.9 | 30.8 | 22.3 | 44.2 | 148.1 | 173.3 | 176.5 | 192.1 | 201.7 | 188.9 | 179.7 | 79.9 | 36.2 | 21.3 | 81.6 | 82.8 | 70.6 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1500 | 102 | 47 | 61 | 145 | 165 | 175 | 100 | 90 | 95 | 120 | 58 | 27 | 31 | 80 | 85 | 120 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | 1 | 7 | -10 | -16 | 0 | -6 | -3 | -3 | -3 | 2 | 2 | 1 | 0 | 26 | 0 | 1 | 3 |
| EVAPORATION | 34 | | | | | | | 2 | 6 | 8 | 7 | 3 | 2 | 2 | 4 | | |
| REG INFLOW | 18855 | 417 | 255 | 477 | 1588 | 1839 | 1880 | 1943 | 2053 | 1963 | 1968 | 925 | 432 | 294 | 984 | 984 | 854 |
| RELEASE | 18855 | 417 | 255 | 477 | 1588 | 1839 | 1880 | 1943 | 2041 | 1940 | 1968 | 925 | 432 | 294 | 984 | 984 | 889 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 17.000 | 14.0 | 18.4 | 26.7 | 26.7 | 29.9 | 31.6 | 31.6 | 33.2 | 32.6 | 32.0 | 31.1 | 31.1 | 18.5 | 16.0 | 16.0 | 16.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 49 | 64 | 91 | 91 | 101 | 105 | 105 | 109 | 109 | 108 | 106 | 106 | 65 | 57 | 57 | 56 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 772.2 | 17.6 | 10.7 | 19.7 | 65.6 | 74.9 | 75.3 | 77.8 | 80.9 | 78.3 | 80.6 | 38.3 | 17.9 | 12.5 | 42.1 | 42.2 | 37.8 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1800 | 162 | 76 | 97 | 280 | 345 | 190 | 165 | 130 | 110 | 60 | 30 | 14 | 16 | 25 | 25 | 75 |
| DEPLETION | 297 | 8 | 4 | 5 | 25 | 38 | 33 | 42 | 41 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 20358 | 571 | 327 | 570 | 1843 | 2146 | 2037 | 2066 | 2130 | 2023 | 2015 | 948 | 443 | 306 | 994 | 993 | 947 |
| KCFS | | 19.2 | 23.6 | 31.9 | 31.0 | 34.9 | 34.2 | 33.6 | 34.6 | 34.0 | 32.8 | 31.9 | 31.9 | 19.3 | 16.2 | 16.1 | 17.0 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 24600 | 1350 | 630 | 810 | 2330 | 3340 | 6075 | 3445 | 1295 | 1105 | 1055 | 513 | 239 | 273 | 565 | 605 | 970 |
| DEPLETION | 3072 | 4 | 2 | 3 | 34 | 576 | 1858 | 1475 | 415 | -193 | -185 | -182 | -85 | -97 | -230 | -208 | -115 |
| CHAN STOR | 1 | 77 | -10 | -16 | -18 | -38 | -38 | 1 | -3 | 39 | 41 | 1 | 0 | 28 | -40 | -24 | 3 |
| EVAPORATION | 1712 | | | | | | | 107 | 335 | 415 | 357 | 159 | 74 | 84 | 182 | | |
| STORAGE | 54640. | 55492 | 55782 | 56003 | 56438 | 57018 | 59159 | 58957 | 57369 | 56268 | 55177 | 54765 | 54573 | 54582 | 54162 | 53958 | 54100 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 701 | 874 | 941 | 1009 | 1187 | 1302 | 1361 | 1410 | 1274 | 1023 | 988 | 1026 | 737 | 839 | 951 | 914 |
| PEAK POW MW | | 2394 | 2393 | 2396 | 2401 | 2406 | 2432 | 2429 | 2411 | 2402 | 2383 | 2359 | 2349 | 2347 | 2312 | 2332 | 2340 |
| ENERGY GWH | 9505.0 | 252.5 | 146.8 | 203.3 | 726.1 | 882.9 | 937.8 | 1012.3 | 1048.9 | 917.3 | 761.2 | 355.8 | 172.3 | 141.5 | 624.1 | 707.7 | 614.4 |
| DAILY GWH | | 16.8 | 21.0 | 22.6 | 24.2 | 28.5 | 31.3 | 32.7 | 33.8 | 30.6 | 24.6 | 23.7 | 24.6 | 17.7 | 20.1 | 22.8 | 21.9 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:33 STUDY NO 11

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 28FEB23 | 2023 | | | | | | | | | | | | 2024 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 29FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 7200 | 227 | 106 | 136 | 560 | 1145 | 1830 | 840 | 365 | 290 | 385 | 205 | 96 | 109 | 295 | 260 | 350 |
| DEPLETION | 586 | -26 | -12 | -16 | 13 | 282 | 610 | 319 | 56 | -91 | -115 | -32 | -15 | -17 | -127 | -141 | -103 |
| EVAPORATION | 448 | | | | | | | 28 | 86 | 107 | 93 | 42 | 20 | 23 | 49 | | |
| MOD INFLOW | 6166 | 254 | 118 | 152 | 547 | 863 | 1220 | 493 | 223 | 274 | 407 | 194 | 91 | 104 | 373 | 401 | 453 |
| RELEASE | 6285 | 179 | 83 | 107 | 417 | 553 | 625 | 646 | 646 | 492 | 369 | 179 | 83 | 103 | 615 | 615 | 575 |
| STOR CHANGE | -119 | 75 | 35 | 45 | 130 | 310 | 595 | -152 | -423 | -218 | 38 | 16 | 7 | 0 | -242 | -214 | -122 |
| STORAGE | 14192. | 14267 | 14302 | 14347 | 14478 | 14787 | 15382 | 15230 | 14807 | 14589 | 14627 | 14643 | 14650 | 14650 | 14409 | 14195 | 14073 |
| ELEV FTMSL | 2231.1 | 2231.5 | 2231.7 | 2231.9 | 2232.5 | 2234.0 | 2236.8 | 2236.1 | 2234.1 | 2233.0 | 2233.2 | 2233.3 | 2233.3 | 2233.3 | 2232.2 | 2231.1 | 2230.5 |
| DISCH KCFS | 10.500 | 6.0 | 6.0 | 6.0 | 7.0 | 9.0 | 10.5 | 10.5 | 10.5 | 8.3 | 6.0 | 6.0 | 6.0 | 6.5 | 10.0 | 10.0 | 10.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 81 | 81 | 81 | 95 | 122 | 143 | 144 | 143 | 112 | 82 | 82 | 82 | 88 | 135 | 135 | 135 |
| PEAK POW MW | | 186 | 187 | 187 | 187 | 188 | 190 | 189 | 188 | 187 | 188 | 188 | 188 | 188 | 187 | 186 | 186 |
| ENERGY GWH | 1032.9 | 29.2 | 13.6 | 17.5 | 68.3 | 90.9 | 103.2 | 107.0 | 106.6 | 80.8 | 60.7 | 29.4 | 13.7 | 17.0 | 100.8 | 100.5 | 93.7 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10900 | 479 | 223 | 287 | 780 | 1300 | 3120 | 2100 | 580 | 480 | 445 | 180 | 84 | 96 | 180 | 255 | 310 |
| DEPLETION | 1188 | -4 | -2 | -3 | -67 | 146 | 1015 | 859 | 154 | -168 | -76 | -168 | -78 | -89 | -145 | -106 | -80 |
| CHAN STOR | 5 | 45 | | | -10 | -20 | -15 | | | 22 | 22 | | | -5 | -35 | | |
| EVAPORATION | 517 | | | | | | | 32 | 101 | 125 | 108 | 48 | 23 | 26 | 55 | | |
| REG INFLOW | 15485 | 707 | 309 | 397 | 1254 | 1687 | 2715 | 1855 | 971 | 1037 | 804 | 478 | 223 | 258 | 850 | 976 | 965 |
| RELEASE | 15631 | 506 | 236 | 303 | 1131 | 1476 | 1517 | 1506 | 1506 | 1275 | 1107 | 536 | 250 | 286 | 1199 | 1445 | 1352 |
| STOR CHANGE | -145 | 201 | 73 | 94 | 123 | 212 | 1198 | 348 | -535 | -238 | -303 | -58 | -27 | -28 | -349 | -469 | -387 |
| STORAGE | 17024. | 17225 | 17298 | 17392 | 17515 | 17726 | 18924 | 19272 | 18737 | 18498 | 18196 | 18138 | 18111 | 18083 | 17734 | 17265 | 16879 |
| ELEV FTMSL | 1835.1 | 1835.8 | 1836.0 | 1836.3 | 1836.7 | 1837.4 | 1841.2 | 1842.3 | 1840.6 | 1839.9 | 1838.9 | 1838.8 | 1838.7 | 1838.6 | 1837.5 | 1835.9 | 1834.6 |
| DISCH KCFS | 23.000 | 17.0 | 17.0 | 17.0 | 19.0 | 24.0 | 25.5 | 24.5 | 24.5 | 21.4 | 18.0 | 18.0 | 18.0 | 18.0 | 19.5 | 23.5 | 23.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 208 | 209 | 209 | 234 | 296 | 318 | 310 | 310 | 270 | 226 | 225 | 225 | 225 | 242 | 289 | 286 |
| PEAK POW MW | | 518 | 519 | 521 | 523 | 526 | 544 | 549 | 541 | 537 | 533 | 532 | 532 | 531 | 526 | 519 | 513 |
| ENERGY GWH | 2352.0 | 74.9 | 35.0 | 45.1 | 168.3 | 219.9 | 229.1 | 231.0 | 230.6 | 194.1 | 167.9 | 81.0 | 37.7 | 43.1 | 180.1 | 214.9 | 199.2 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2300 | 259 | 121 | 155 | 405 | 220 | 625 | 170 | 70 | 95 | 45 | 45 | 21 | 24 | -15 | -10 | 70 |
| DEPLETION | 845 | 27 | 12 | 16 | 55 | 84 | 181 | 226 | 153 | 36 | -15 | 1 | 0 | 0 | 15 | 21 | 33 |
| CHAN STOR | -2 | 24 | | | -8 | -20 | -6 | 4 | | 13 | 14 | | | | -6 | -17 | |
| EVAPORATION | 479 | | | | | | | 31 | 94 | 115 | 99 | 45 | 21 | 24 | 52 | | |
| REG INFLOW | 16605 | 763 | 344 | 443 | 1473 | 1592 | 1955 | 1424 | 1330 | 1232 | 1082 | 535 | 250 | 286 | 1111 | 1397 | 1389 |
| RELEASE | 16754 | 470 | 306 | 360 | 1293 | 1543 | 1609 | 1849 | 1983 | 1754 | 1263 | 587 | 309 | 227 | 986 | 1192 | 1022 |
| STOR CHANGE | -149 | 292 | 38 | 82 | 180 | 49 | 346 | -425 | -653 | -522 | -181 | -52 | -59 | 59 | 125 | 205 | 366 |
| STORAGE | 17925. | 18217 | 18256 | 18338 | 18518 | 18567 | 18913 | 18488 | 17835 | 17312 | 17131 | 17080 | 17020 | 17079 | 17204 | 17409 | 17776 |
| ELEV FTMSL | 1605.1 | 1606.0 | 1606.2 | 1606.4 | 1607.0 | 1607.2 | 1608.3 | 1606.9 | 1604.8 | 1603.0 | 1602.4 | 1602.2 | 1602.0 | 1602.2 | 1602.6 | 1603.3 | 1604.6 |
| DISCH KCFS | 18.868 | 15.8 | 22.0 | 20.2 | 21.7 | 25.1 | 27.0 | 30.1 | 32.2 | 29.5 | 20.5 | 19.7 | 22.3 | 14.3 | 16.0 | 19.4 | 17.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 202 | 283 | 259 | 279 | 323 | 349 | 387 | 411 | 372 | 258 | 248 | 279 | 180 | 202 | 244 | 225 |
| PEAK POW MW | | 700 | 701 | 702 | 705 | 706 | 712 | 705 | 693 | 684 | 681 | 680 | 679 | 680 | 682 | 686 | 692 |
| ENERGY GWH | 2582.8 | 72.8 | 47.5 | 56.0 | 201.1 | 240.3 | 251.3 | 288.2 | 305.9 | 268.0 | 192.3 | 89.2 | 46.9 | 34.5 | 150.2 | 181.8 | 156.9 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 105 | | | | | | | 6 | 20 | 25 | 22 | 10 | 5 | 5 | 12 | | |
| REG INFLOW | 16649 | 470 | 306 | 360 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 975 | 1192 | 1022 |
| RELEASE | 16649 | 470 | 306 | 360 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 975 | 1192 | 1022 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 18.868 | 15.8 | 22.0 | 20.2 | 21.7 | 25.1 | 27.0 | 30.0 | 31.9 | 29.1 | 20.2 | 19.4 | 21.9 | 14.0 | 15.9 | 19.4 | 17.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 103 | 95 | 102 | 117 | 127 | 140 | 149 | 138 | 99 | 97 | 110 | 71 | 80 | 95 | 85 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 961.4 | 27.0 | 17.3 | 20.4 | 73.2 | 87.4 | 91.1 | 104.4 | 111.1 | 99.1 | 73.7 | 35.1 | 18.5 | 13.5 | 59.4 | 70.8 | 59.3 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 900 | 121 | 56 | 73 | 160 | 165 | 135 | 70 | 60 | 35 | | -5 | -2 | -3 | | -10 | 45 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 116 | | | | | | | 8 | 25 | 31 | 24 | 9 | 4 | 4 | 9 | | |
| REG INFLOW | 17354 | 590 | 362 | 432 | 1449 | 1699 | 1732 | 1887 | 1982 | 1725 | 1216 | 562 | 298 | 215 | 962 | 1179 | 1064 |
| RELEASE | 17354 | 309 | 218 | 432 | 1449 | 1699 | 1732 | 1887 | 1982 | 1869 | 1855 | 875 | 409 | 241 | 854 | 838 | 705 |
| STOR CHANGE | 0 | 281 | 144 | | 0 | | | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 109 | 341 | 359 |
| STORAGE | 3000. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 13.160 | 10.4 | 15.7 | 24.2 | 24.3 | 27.6 | 29.1 | 30.7 | 32.2 | 31.4 | 30.2 | 29.4 | 29.5 | 15.2 | 13.9 | 13.6 | 12.3 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 86 | 132 | 204 | 206 | 233 | 245 | 258 | 271 | 262 | 242 | 222 | 215 | 111 | 102 | 104 | 98 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1716.5 | 31.0 | 22.2 | 44.2 | 148.1 | 173.3 | 176.5 | 192.1 | 201.7 | 188.9 | 179.7 | 79.9 | 36.2 | 21.3 | 76.0 | 77.2 | 68.1 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1500 | 102 | 47 | 61 | 145 | 165 | 175 | 100 | 90 | 95 | 120 | 58 | 27 | 31 | 80 | 85 | 120 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | 0 | 5 | -10 | -16 | 0 | -6 | -3 | -3 | -3 | 2 | 2 | 1 | 0 | 26 | 2 | 0 | 3 |
| EVAPORATION | 34 | | | | | | | 2 | 6 | 8 | 7 | 3 | 2 | 2 | 4 | | |
| REG INFLOW | 18706 | 417 | 255 | 477 | 1588 | 1839 | 1880 | 1943 | 2053 | 1963 | 1968 | 925 | 432 | 294 | 922 | 922 | 828 |
| RELEASE | 18706 | 417 | 255 | 477 | 1588 | 1839 | 1880 | 1943 | 2041 | 1940 | 1968 | 925 | 432 | 294 | 922 | 922 | 863 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 16.000 | 14.0 | 18.4 | 26.7 | 26.7 | 29.9 | 31.6 | 31.6 | 33.2 | 32.6 | 32.0 | 31.1 | 31.1 | 18.5 | 15.0 | 15.0 | 15.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 49 | 64 | 91 | 91 | 101 | 105 | 105 | 109 | 109 | 108 | 106 | 106 | 65 | 53 | 53 | 53 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 765.9 | 17.6 | 10.7 | 19.7 | 65.6 | 74.9 | 75.3 | 77.8 | 80.9 | 78.3 | 80.6 | 38.3 | 17.9 | 12.5 | 39.6 | 39.6 | 36.7 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1800 | 162 | 76 | 97 | 280 | 345 | 190 | 165 | 130 | 110 | 60 | 30 | 14 | 16 | 25 | 25 | 75 |
| DEPLETION | 301 | 8 | 4 | 5 | 26 | 38 | 33 | 42 | 41 | 28 | 13 | 8 | 4 | 4 | 16 | 16 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 20205 | 571 | 327 | 570 | 1842 | 2146 | 2037 | 2066 | 2130 | 2022 | 2015 | 948 | 442 | 306 | 931 | 931 | 921 |
| KCFS | | 19.2 | 23.6 | 31.9 | 31.0 | 34.9 | 34.2 | 33.6 | 34.6 | 34.0 | 32.8 | 31.9 | 31.9 | 19.3 | 15.1 | 15.1 | 16.0 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 24600 | 1350 | 630 | 810 | 2330 | 3340 | 6075 | 3445 | 1295 | 1105 | 1055 | 513 | 239 | 273 | 565 | 605 | 970 |
| DEPLETION | 3114 | 5 | 2 | 3 | 36 | 578 | 1875 | 1503 | 429 | -193 | -190 | -185 | -86 | -99 | -228 | -206 | -130 |
| CHAN STOR | 4 | 75 | -10 | -16 | -18 | -46 | -24 | 1 | -3 | 36 | 39 | 1 | 0 | 22 | -39 | -16 | 3 |
| EVAPORATION | 1698 | | | | | | | 106 | 332 | 412 | 354 | 158 | 73 | 83 | 180 | | |
| STORAGE | 54100. | 54949 | 55239 | 55460 | 55893 | 56464 | 58603 | 58373 | 56774 | 55674 | 54589 | 54182 | 53992 | 53998 | 53641 | 53504 | 53686 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 701 | 872 | 939 | 1006 | 1192 | 1287 | 1345 | 1393 | 1263 | 1015 | 980 | 1017 | 739 | 815 | 920 | 882 |
| PEAK POW MW | | 2387 | 2386 | 2389 | 2395 | 2400 | 2425 | 2422 | 2403 | 2393 | 2375 | 2351 | 2340 | 2339 | 2305 | 2326 | 2335 |
| ENERGY GWH | 9411.5 | 252.5 | 146.4 | 202.9 | 724.6 | 886.6 | 926.6 | 1000.5 | 1036.7 | 909.3 | 754.9 | 352.8 | 170.9 | 142.0 | 606.1 | 684.7 | 614.0 |
| DAILY GWH | | 16.8 | 20.9 | 22.5 | 24.2 | 28.6 | 30.9 | 32.3 | 33.4 | 30.3 | 24.4 | 23.5 | 24.4 | 17.7 | 19.6 | 22.1 | 21.2 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 29FEB |

TIME OF STUDY: 09:12:33 STUDY NO 12

VALUES IN 1000 AF EXCEPT AS INDICATED

| 29FEB24 | | 2024 | | | | | | | | | | | 2025 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 7200 | 227 | 106 | 136 | 560 | 1145 | 1830 | 840 | 365 | 290 | 385 | 205 | 96 | 109 | 295 | 260 | 350 |
| DEPLETION | 597 | -26 | -12 | -15 | 13 | 283 | 614 | 326 | 59 | -92 | -119 | -33 | -15 | -18 | -130 | -144 | -94 |
| EVAPORATION | 446 | | | | | | | 28 | 86 | 107 | 93 | 42 | 20 | 23 | 49 | | |
| MOD INFLOW | 6157 | 253 | 118 | 152 | 547 | 862 | 1216 | 486 | 220 | 275 | 411 | 196 | 91 | 104 | 376 | 404 | 444 |
| RELEASE | 6239 | 179 | 83 | 107 | 417 | 492 | 625 | 646 | 646 | 491 | 369 | 179 | 83 | 111 | 584 | 646 | 583 |
| STOR CHANGE | -83 | 75 | 35 | 45 | 130 | 370 | 591 | -159 | -426 | -216 | 42 | 17 | 8 | -7 | -208 | -242 | -139 |
| STORAGE | 14073. | 14147 | 14182 | 14227 | 14357 | 14727 | 15318 | 15159 | 14734 | 14518 | 14560 | 14577 | 14585 | 14578 | 14371 | 14129 | 13990 |
| ELEV FTMSL | 2230.5 | 2230.9 | 2231.1 | 2231.3 | 2231.9 | 2233.7 | 2236.5 | 2235.7 | 2233.7 | 2232.7 | 2232.9 | 2233.0 | 2233.0 | 2233.0 | 2232.0 | 2230.8 | 2230.1 |
| DISCH KCFS | 10.000 | 6.0 | 6.0 | 6.0 | 7.0 | 8.0 | 10.5 | 10.5 | 10.5 | 8.3 | 6.0 | 6.0 | 6.0 | 7.0 | 9.5 | 10.5 | 10.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 81 | 81 | 81 | 95 | 109 | 143 | 144 | 143 | 112 | 81 | 82 | 82 | 95 | 129 | 142 | 141 |
| PEAK POW MW | | 186 | 186 | 186 | 187 | 188 | 190 | 189 | 188 | 187 | 187 | 187 | 187 | 187 | 187 | 186 | 186 |
| ENERGY GWH | 1024.3 | 29.1 | 13.6 | 17.5 | 68.1 | 80.7 | 103.1 | 106.9 | 106.5 | 80.7 | 60.6 | 29.3 | 13.7 | 18.3 | 95.7 | 105.4 | 94.9 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10900 | 479 | 223 | 287 | 780 | 1300 | 3120 | 2100 | 580 | 480 | 445 | 180 | 84 | 96 | 180 | 255 | 310 |
| DEPLETION | 1210 | -4 | -2 | -2 | -66 | 147 | 1026 | 876 | 159 | -171 | -80 | -172 | -80 | -91 | -148 | -107 | -75 |
| CHAN STOR | -5 | 40 | | | -10 | -10 | -25 | | | 22 | 22 | | | -10 | -25 | -10 | |
| EVAPORATION | 511 | | | | | | | 32 | 99 | 123 | 107 | 48 | 22 | 25 | 55 | | |
| REG INFLOW | 15413 | 702 | 309 | 397 | 1253 | 1635 | 2694 | 1838 | 967 | 1041 | 810 | 482 | 225 | 263 | 833 | 998 | 968 |
| RELEASE | 15513 | 506 | 236 | 303 | 1131 | 1476 | 1517 | 1506 | 1506 | 1266 | 1107 | 536 | 250 | 254 | 1168 | 1445 | 1305 |
| STOR CHANGE | -100 | 196 | 73 | 93 | 122 | 159 | 1177 | 332 | -539 | -225 | -297 | -53 | -25 | 9 | -336 | -447 | -337 |
| STORAGE | 16879. | 17075 | 17147 | 17240 | 17362 | 17522 | 18698 | 19030 | 18490 | 18265 | 17968 | 17914 | 17890 | 17899 | 17563 | 17116 | 16779 |
| ELEV FTMSL | 1834.6 | 1835.3 | 1835.5 | 1835.8 | 1836.2 | 1836.8 | 1840.5 | 1841.5 | 1839.9 | 1839.2 | 1838.2 | 1838.1 | 1838.0 | 1838.0 | 1836.9 | 1835.4 | 1834.3 |
| DISCH KCFS | 23.500 | 17.0 | 17.0 | 17.0 | 19.0 | 24.0 | 25.5 | 24.5 | 24.5 | 21.3 | 18.0 | 18.0 | 18.0 | 16.0 | 19.0 | 23.5 | 23.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 207 | 208 | 208 | 233 | 295 | 317 | 309 | 309 | 266 | 225 | 224 | 224 | 199 | 235 | 288 | 285 |
| PEAK POW MW | | 516 | 517 | 518 | 520 | 523 | 540 | 545 | 537 | 534 | 529 | 529 | 528 | 528 | 523 | 516 | 511 |
| ENERGY GWH | 2325.5 | 74.7 | 34.9 | 45.0 | 167.8 | 219.1 | 228.2 | 230.0 | 229.6 | 191.8 | 167.1 | 80.6 | 37.6 | 38.2 | 174.9 | 214.1 | 191.8 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2300 | 259 | 121 | 155 | 405 | 220 | 625 | 170 | 70 | 95 | 45 | 45 | 21 | 24 | -15 | -10 | 70 |
| DEPLETION | 860 | 27 | 13 | 16 | 55 | 85 | 185 | 230 | 157 | 37 | -16 | 1 | 0 | 0 | 15 | 22 | 33 |
| CHAN STOR | 0 | 27 | | | -8 | -20 | -6 | 4 | | 13 | 14 | | | 8 | -13 | -19 | |
| EVAPORATION | 476 | | | | | | | 30 | 93 | 114 | 98 | 44 | 21 | 24 | 51 | | |
| REG INFLOW | 16478 | 764 | 344 | 443 | 1473 | 1591 | 1951 | 1420 | 1326 | 1223 | 1083 | 536 | 250 | 263 | 1074 | 1394 | 1342 |
| RELEASE | 16581 | 472 | 306 | 360 | 1293 | 1543 | 1609 | 1849 | 1983 | 1754 | 1263 | 587 | 309 | 227 | 936 | 1143 | 948 |
| STOR CHANGE | -104 | 292 | 38 | 82 | 180 | 48 | 342 | -429 | -656 | -531 | -180 | -51 | -59 | 36 | 139 | 251 | 394 |
| STORAGE | 17776. | 18068 | 18106 | 18188 | 18368 | 18416 | 18758 | 18329 | 17673 | 17142 | 16962 | 16911 | 16852 | 16888 | 17026 | 17278 | 17672 |
| ELEV FTMSL | 1604.6 | 1605.5 | 1605.7 | 1605.9 | 1606.5 | 1606.7 | 1607.8 | 1606.4 | 1604.2 | 1602.4 | 1601.8 | 1601.6 | 1601.4 | 1601.5 | 1602.0 | 1602.9 | 1604.2 |
| DISCH KCFS | 17.772 | 15.9 | 22.0 | 20.2 | 21.7 | 25.1 | 27.0 | 30.1 | 32.2 | 29.5 | 20.5 | 19.7 | 22.3 | 14.3 | 15.2 | 18.6 | 17.1 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 203 | 282 | 258 | 279 | 322 | 348 | 386 | 410 | 371 | 258 | 247 | 278 | 179 | 191 | 234 | 216 |
| PEAK POW MW | | 697 | 698 | 700 | 703 | 704 | 709 | 702 | 690 | 681 | 678 | 677 | 676 | 676 | 679 | 683 | 690 |
| ENERGY GWH | 2549.2 | 72.9 | 47.3 | 55.8 | 200.6 | 239.6 | 250.6 | 287.5 | 305.0 | 267.1 | 191.7 | 88.9 | 46.7 | 34.4 | 142.0 | 173.9 | 145.2 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 105 | | | | | | | 6 | 20 | 25 | 22 | 10 | 5 | 5 | 12 | | |
| REG INFLOW | 16476 | 472 | 306 | 360 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 924 | 1143 | 948 |
| RELEASE | 16476 | 472 | 306 | 360 | 1293 | 1543 | 1609 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 924 | 1143 | 948 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 17.772 | 15.9 | 22.0 | 20.2 | 21.7 | 25.1 | 27.0 | 30.0 | 31.9 | 29.1 | 20.2 | 19.4 | 21.9 | 14.0 | 15.0 | 18.6 | 17.1 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 103 | 95 | 102 | 117 | 127 | 140 | 149 | 138 | 99 | 97 | 110 | 71 | 76 | 91 | 82 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 951.2 | 27.0 | 17.3 | 20.4 | 73.2 | 87.4 | 91.1 | 104.4 | 111.1 | 99.1 | 73.7 | 35.1 | 18.5 | 13.5 | 56.4 | 67.9 | 55.0 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 900 | 121 | 56 | 73 | 160 | 165 | 135 | 70 | 60 | 35 | | -5 | -2 | -3 | | -10 | 45 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 116 | | | | | | | 8 | 25 | 31 | 24 | 9 | 4 | 4 | 9 | | |
| REG INFLOW | 17181 | 591 | 362 | 432 | 1449 | 1699 | 1732 | 1887 | 1982 | 1725 | 1216 | 562 | 298 | 215 | 912 | 1130 | 990 |
| RELEASE | 17181 | 311 | 218 | 432 | 1449 | 1699 | 1732 | 1887 | 1982 | 1869 | 1855 | 875 | 409 | 241 | 803 | 789 | 631 |
| STOR CHANGE | 0 | 280 | 144 | 0 | | | | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 12.261 | 10.5 | 15.7 | 24.2 | 24.3 | 27.6 | 29.1 | 30.7 | 32.2 | 31.4 | 30.2 | 29.4 | 29.5 | 15.2 | 13.1 | 12.8 | 11.4 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 87 | 132 | 204 | 206 | 233 | 245 | 258 | 271 | 262 | 242 | 222 | 215 | 111 | 96 | 98 | 91 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1700.6 | 31.2 | 22.2 | 44.2 | 148.1 | 173.3 | 176.5 | 192.1 | 201.7 | 188.9 | 179.7 | 79.9 | 36.2 | 21.3 | 71.6 | 72.7 | 61.0 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1500 | 102 | 47 | 61 | 145 | 165 | 175 | 100 | 90 | 95 | 120 | 58 | 27 | 31 | 80 | 85 | 120 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | 0 | 3 | -10 | -16 | 0 | -6 | -3 | -3 | -3 | 2 | 2 | 1 | 0 | 26 | 4 | 0 | 3 |
| EVAPORATION | 34 | | | | | | | 2 | 6 | 8 | 7 | 3 | 2 | 2 | 4 | | |
| REG INFLOW | 18534 | 417 | 255 | 477 | 1588 | 1839 | 1880 | 1943 | 2053 | 1963 | 1968 | 925 | 432 | 294 | 873 | 873 | 754 |
| RELEASE | 18534 | 417 | 255 | 477 | 1588 | 1839 | 1880 | 1943 | 2041 | 1940 | 1968 | 925 | 432 | 294 | 873 | 873 | 789 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 15.000 | 14.0 | 18.4 | 26.7 | 26.7 | 29.9 | 31.6 | 31.6 | 33.2 | 32.6 | 32.0 | 31.1 | 31.1 | 18.5 | 14.2 | 14.2 | 14.2 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 49 | 64 | 91 | 91 | 101 | 105 | 105 | 109 | 109 | 108 | 106 | 106 | 65 | 50 | 50 | 50 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 758.6 | 17.6 | 10.7 | 19.7 | 65.6 | 74.9 | 75.3 | 77.8 | 80.9 | 78.3 | 80.6 | 38.3 | 17.9 | 12.5 | 37.5 | 37.5 | 33.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1800 | 162 | 76 | 97 | 280 | 345 | 190 | 165 | 130 | 110 | 60 | 30 | 14 | 16 | 25 | 25 | 75 |
| DEPLETION | 305 | 8 | 4 | 5 | 26 | 38 | 34 | 42 | 42 | 28 | 13 | 8 | 4 | 4 | 16 | 17 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 20029 | 570 | 327 | 569 | 1842 | 2146 | 2036 | 2066 | 2129 | 2022 | 2015 | 948 | 442 | 306 | 882 | 881 | 847 |
| KCFS | | 19.2 | 23.6 | 31.9 | 31.0 | 34.9 | 34.2 | 33.6 | 34.6 | 34.0 | 32.8 | 31.9 | 31.9 | 19.3 | 14.3 | 14.3 | 15.2 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 24600 | 1350 | 630 | 810 | 2330 | 3340 | 6075 | 3445 | 1295 | 1105 | 1055 | 513 | 239 | 273 | 565 | 605 | 970 |
| DEPLETION | 3166 | 7 | 3 | 4 | 37 | 581 | 1895 | 1531 | 442 | -196 | -199 | -191 | -89 | -102 | -234 | -208 | -116 |
| CHAN STOR | -4 | 70 | -10 | -16 | -18 | -36 | -34 | 1 | -3 | 37 | 38 | 1 | 0 | 26 | -34 | -28 | 3 |
| EVAPORATION | 1687 | | | | | | | 105 | 330 | 409 | 352 | 157 | 73 | 83 | 179 | | |
| STORAGE | 53686. | 54529 | 54819 | 55039 | 55471 | 56048 | 58158 | 57901 | 56292 | 55199 | 54125 | 53725 | 53538 | 53550 | 53254 | 53158 | 53400 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 701 | 870 | 938 | 1005 | 1176 | 1285 | 1342 | 1391 | 1258 | 1013 | 978 | 1015 | 720 | 777 | 902 | 865 |
| PEAK POW MW | | 2381 | 2381 | 2384 | 2389 | 2394 | 2419 | 2416 | 2396 | 2387 | 2368 | 2344 | 2334 | 2332 | 2299 | 2321 | 2331 |
| ENERGY GWH | 9309.5 | 252.5 | 146.1 | 202.6 | 723.4 | 875.0 | 924.9 | 998.7 | 1034.7 | 906.1 | 753.4 | 352.1 | 170.6 | 138.2 | 578.1 | 671.5 | 581.5 |
| DAILY GWH | | 16.8 | 20.9 | 22.5 | 24.1 | 28.2 | 30.8 | 32.2 | 33.4 | 30.2 | 24.3 | 23.5 | 24.4 | 17.3 | 18.6 | 21.7 | 20.8 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:33 STUDY NO 13

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 28FEB25 | 2025 | | | | | | | | | | | | 2026 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 7200 | 227 | 106 | 136 | 560 | 1145 | 1830 | 840 | 365 | 290 | 385 | 205 | 96 | 109 | 295 | 260 | 350 |
| DEPLETION | 597 | -26 | -12 | -15 | 13 | 283 | 614 | 326 | 59 | -92 | -119 | -33 | -15 | -18 | -130 | -144 | -94 |
| EVAPORATION | 444 | | | | | | | 27 | 85 | 106 | 92 | 42 | 20 | 22 | 48 | | |
| MOD INFLOW | 6159 | 253 | 118 | 152 | 547 | 862 | 1216 | 487 | 221 | 276 | 412 | 196 | 92 | 105 | 377 | 404 | 444 |
| RELEASE | 6204 | 179 | 83 | 107 | 417 | 523 | 625 | 646 | 646 | 492 | 369 | 179 | 83 | 103 | 584 | 615 | 555 |
| STOR CHANGE | -45 | 75 | 35 | 45 | 130 | 339 | 591 | -159 | -425 | -216 | 43 | 18 | 8 | 1 | -207 | -211 | -111 |
| STORAGE | 13990. | 14064 | 14099 | 14144 | 14274 | 14614 | 15205 | 15046 | 14621 | 14405 | 14447 | 14465 | 14473 | 14475 | 14267 | 14056 | 13945 |
| ELEV FTMSL | 2230.1 | 2230.5 | 2230.7 | 2230.9 | 2231.5 | 2233.2 | 2236.0 | 2235.2 | 2233.2 | 2232.2 | 2232.4 | 2232.4 | 2232.5 | 2232.5 | 2231.5 | 2230.4 | 2229.9 |
| DISCH KCFS | 10.500 | 6.0 | 6.0 | 6.0 | 7.0 | 8.5 | 10.5 | 10.5 | 10.5 | 8.3 | 6.0 | 6.0 | 6.0 | 6.5 | 9.5 | 10.0 | 10.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 81 | 81 | 81 | 95 | 115 | 143 | 143 | 143 | 112 | 81 | 81 | 81 | 88 | 128 | 135 | 134 |
| PEAK POW MW | | 186 | 186 | 186 | 186 | 187 | 189 | 189 | 188 | 187 | 187 | 187 | 187 | 187 | 186 | 186 | 185 |
| ENERGY GWH | 1017.1 | 29.1 | 13.6 | 17.5 | 68.1 | 85.6 | 103.0 | 106.7 | 106.3 | 80.7 | 60.5 | 29.3 | 13.7 | 16.9 | 95.6 | 100.2 | 90.3 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10900 | 479 | 223 | 287 | 780 | 1300 | 3120 | 2100 | 580 | 480 | 445 | 180 | 84 | 96 | 180 | 255 | 310 |
| DEPLETION | 1210 | -4 | -2 | -2 | -66 | 147 | 1026 | 876 | 159 | -171 | -80 | -172 | -80 | -91 | -148 | -107 | -75 |
| CHAN STOR | 5 | 45 | | | -10 | -15 | -20 | | | 22 | 22 | | | -5 | -30 | -5 | 0 |
| EVAPORATION | 513 | | | | | | | 32 | 100 | 124 | 107 | 48 | 22 | 25 | 55 | | |
| REG INFLOW | 15387 | 707 | 309 | 397 | 1253 | 1661 | 2699 | 1838 | 967 | 1041 | 809 | 482 | 225 | 260 | 828 | 972 | 940 |
| RELEASE | 15440 | 476 | 222 | 286 | 1071 | 1476 | 1517 | 1506 | 1506 | 1268 | 1107 | 536 | 250 | 270 | 1199 | 1445 | 1305 |
| STOR CHANGE | -54 | 231 | 86 | 111 | 181 | 185 | 1182 | 332 | -540 | -227 | -298 | -53 | -25 | -10 | -371 | -473 | -365 |
| STORAGE | 16779. | 17010 | 17096 | 17207 | 17389 | 17574 | 18755 | 19087 | 18547 | 18320 | 18022 | 17969 | 17944 | 17934 | 17563 | 17090 | 16725 |
| ELEV FTMSL | 1834.3 | 1835.1 | 1835.4 | 1835.7 | 1836.3 | 1836.9 | 1840.7 | 1841.7 | 1840.1 | 1839.3 | 1838.4 | 1838.2 | 1838.1 | 1838.1 | 1836.9 | 1835.3 | 1834.1 |
| DISCH KCFS | 23.500 | 16.0 | 16.0 | 16.0 | 18.0 | 24.0 | 25.5 | 24.5 | 24.5 | 21.3 | 18.0 | 18.0 | 18.0 | 17.0 | 19.5 | 23.5 | 23.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 195 | 196 | 196 | 221 | 295 | 317 | 309 | 309 | 267 | 225 | 224 | 224 | 212 | 241 | 288 | 285 |
| PEAK POW MW | | 515 | 516 | 518 | 521 | 524 | 541 | 546 | 538 | 535 | 530 | 530 | 529 | 529 | 523 | 516 | 510 |
| ENERGY GWH | 2316.1 | 70.2 | 32.9 | 42.3 | 159.1 | 219.3 | 228.4 | 230.3 | 229.8 | 192.4 | 167.3 | 80.7 | 37.6 | 40.6 | 179.6 | 214.1 | 191.7 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2300 | 259 | 121 | 155 | 405 | 220 | 625 | 170 | 70 | 95 | 45 | 45 | 21 | 24 | -15 | -10 | 70 |
| DEPLETION | 860 | 27 | 13 | 16 | 55 | 85 | 185 | 230 | 157 | 37 | -16 | 1 | 0 | 0 | 15 | 22 | 33 |
| CHAN STOR | 0 | 31 | 0 | 0 | -8 | -24 | -6 | 4 | | 13 | 14 | | | 4 | -11 | -17 | |
| EVAPORATION | 472 | | | | | | | 30 | 92 | 113 | 98 | 44 | 20 | 23 | 51 | | |
| REG INFLOW | 16409 | 739 | 330 | 425 | 1413 | 1586 | 1951 | 1420 | 1327 | 1226 | 1084 | 536 | 250 | 274 | 1107 | 1396 | 1342 |
| RELEASE | 16465 | 474 | 306 | 356 | 1281 | 1524 | 1598 | 1850 | 1983 | 1754 | 1263 | 587 | 309 | 227 | 910 | 1118 | 926 |
| STOR CHANGE | -56 | 265 | 24 | 68 | 132 | 62 | 354 | -429 | -655 | -528 | -179 | -51 | -59 | 47 | 197 | 278 | 416 |
| STORAGE | 17672. | 17937 | 17961 | 18030 | 18162 | 18224 | 18578 | 18149 | 17493 | 16966 | 16787 | 16736 | 16677 | 16724 | 16922 | 17200 | 17616 |
| ELEV FTMSL | 1604.2 | 1605.1 | 1605.2 | 1605.4 | 1605.9 | 1606.1 | 1607.2 | 1605.8 | 1603.6 | 1601.8 | 1601.1 | 1601.0 | 1600.8 | 1600.9 | 1601.6 | 1602.6 | 1604.0 |
| DISCH KCFS | 17.068 | 15.9 | 22.0 | 20.0 | 21.5 | 24.8 | 26.8 | 30.1 | 32.2 | 29.5 | 20.5 | 19.7 | 22.3 | 14.3 | 14.8 | 18.2 | 16.7 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 203 | 281 | 255 | 275 | 317 | 344 | 385 | 409 | 370 | 257 | 246 | 277 | 179 | 185 | 228 | 211 |
| PEAK POW MW | | 695 | 696 | 697 | 699 | 700 | 706 | 699 | 687 | 678 | 674 | 673 | 672 | 673 | 677 | 682 | 690 |
| ENERGY GWH | 2523.9 | 73.0 | 47.2 | 55.1 | 198.1 | 235.9 | 248.0 | 286.6 | 304.0 | 266.2 | 191.0 | 88.6 | 46.6 | 34.3 | 137.8 | 169.9 | 141.6 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 105 | | | | | | | 6 | 20 | 25 | 22 | 10 | 5 | 5 | 12 | | |
| REG INFLOW | 16360 | 474 | 306 | 356 | 1281 | 1524 | 1598 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 899 | 1118 | 926 |
| RELEASE | 16360 | 474 | 306 | 356 | 1281 | 1524 | 1598 | 1843 | 1963 | 1729 | 1241 | 577 | 305 | 222 | 899 | 1118 | 926 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 17.068 | 15.9 | 22.0 | 20.0 | 21.5 | 24.8 | 26.8 | 30.0 | 31.9 | 29.1 | 20.2 | 19.4 | 21.9 | 14.0 | 14.6 | 18.2 | 16.7 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 103 | 93 | 101 | 116 | 126 | 140 | 149 | 138 | 99 | 97 | 110 | 71 | 74 | 89 | 80 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 944.5 | 27.1 | 17.3 | 20.2 | 72.6 | 86.3 | 90.5 | 104.4 | 111.1 | 99.1 | 73.7 | 35.1 | 18.5 | 13.5 | 54.8 | 66.4 | 53.7 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 900 | 121 | 56 | 73 | 160 | 165 | 135 | 70 | 60 | 35 | | -5 | -2 | -3 | | -10 | 45 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 116 | | | | | | | 8 | 25 | 31 | 24 | 9 | 4 | 4 | 9 | | |
| REG INFLOW | 17065 | 593 | 362 | 428 | 1437 | 1680 | 1721 | 1887 | 1982 | 1725 | 1216 | 562 | 298 | 215 | 886 | 1105 | 968 |
| RELEASE | 17065 | 313 | 218 | 428 | 1437 | 1680 | 1721 | 1887 | 1982 | 1869 | 1855 | 875 | 409 | 241 | 778 | 764 | 609 |
| STOR CHANGE | 0 | 280 | 144 | 0 | | | 0 | 0 | 0 | -144 | -639 | -313 | -111 | -26 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2329 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 11.360 | 10.5 | 15.7 | 24.0 | 24.1 | 27.3 | 28.9 | 30.7 | 32.2 | 31.4 | 30.2 | 29.4 | 29.5 | 15.2 | 12.6 | 12.4 | 11.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 87 | 132 | 203 | 204 | 230 | 244 | 258 | 271 | 262 | 242 | 222 | 215 | 111 | 93 | 95 | 88 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1689.6 | 31.4 | 22.2 | 43.8 | 146.9 | 171.4 | 175.4 | 192.2 | 201.7 | 188.9 | 179.7 | 79.9 | 36.2 | 21.3 | 69.3 | 70.5 | 58.9 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1500 | 102 | 47 | 61 | 145 | 165 | 175 | 100 | 90 | 95 | 120 | 58 | 27 | 31 | 80 | 85 | 120 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 2 | -10 | -16 | 0 | -6 | -3 | -3 | -3 | 2 | 2 | 1 | 0 | 26 | 5 | 0 | 3 |
| EVAPORATION | 34 | | | | | | | 2 | 6 | 8 | 7 | 3 | 2 | 2 | 4 | | |
| REG INFLOW | 18417 | 417 | 255 | 473 | 1577 | 1820 | 1868 | 1943 | 2053 | 1963 | 1968 | 925 | 432 | 294 | 848 | 849 | 731 |
| RELEASE | 18417 | 417 | 255 | 473 | 1577 | 1820 | 1868 | 1943 | 2041 | 1940 | 1968 | 925 | 432 | 294 | 848 | 849 | 766 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 14.200 | 14.0 | 18.4 | 26.5 | 26.5 | 29.6 | 31.4 | 31.6 | 33.2 | 32.6 | 32.0 | 31.1 | 31.1 | 18.5 | 13.8 | 13.8 | 13.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 49 | 64 | 91 | 90 | 100 | 104 | 105 | 109 | 109 | 108 | 106 | 106 | 65 | 49 | 49 | 49 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 754.1 | 17.6 | 10.7 | 19.5 | 65.1 | 74.4 | 75.0 | 77.8 | 80.9 | 78.3 | 80.6 | 38.3 | 17.9 | 12.5 | 36.4 | 36.4 | 32.7 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1800 | 162 | 76 | 97 | 280 | 345 | 190 | 165 | 130 | 110 | 60 | 30 | 14 | 16 | 25 | 25 | 75 |
| DEPLETION | 305 | 8 | 4 | 5 | 26 | 38 | 34 | 42 | 42 | 28 | 13 | 8 | 4 | 4 | 16 | 17 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 19912 | 570 | 327 | 566 | 1831 | 2127 | 2024 | 2066 | 2129 | 2022 | 2015 | 948 | 442 | 306 | 857 | 857 | 824 |
| KCFS | | 19.2 | 23.6 | 31.7 | 30.8 | 34.6 | 34.0 | 33.6 | 34.6 | 34.0 | 32.8 | 31.9 | 31.9 | 19.3 | 13.9 | 13.9 | 14.8 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 24600 | 1350 | 630 | 810 | 2330 | 3340 | 6075 | 3445 | 1295 | 1105 | 1055 | 513 | 239 | 273 | 565 | 605 | 970 |
| DEPLETION | 3166 | 7 | 3 | 4 | 37 | 581 | 1895 | 1531 | 442 | -196 | -199 | -191 | -89 | -102 | -234 | -208 | -116 |
| CHAN STOR | 5 | 78 | -10 | -16 | -18 | -45 | -29 | 1 | -3 | 37 | 39 | 1 | 0 | 26 | -36 | -21 | 3 |
| EVAPORATION | 1682 | | | | | | | 105 | 329 | 408 | 351 | 156 | 72 | 82 | 179 | | |
| STORAGE | 53400. | 54250 | 54540 | 54764 | 55208 | 55795 | 57921 | 57665 | 56057 | 54965 | 53892 | 53492 | 53305 | 53319 | 53046 | 52981 | 53245 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 690 | 856 | 919 | 986 | 1173 | 1278 | 1341 | 1389 | 1258 | 1012 | 977 | 1014 | 725 | 771 | 884 | 847 |
| PEAK POW MW | | 2378 | 2377 | 2380 | 2386 | 2391 | 2417 | 2413 | 2393 | 2384 | 2366 | 2341 | 2331 | 2329 | 2297 | 2319 | 2329 |
| ENERGY GWH | 9245.2 | 248.4 | 143.9 | 198.4 | 709.8 | 872.9 | 920.2 | 998.0 | 1033.8 | 905.7 | 752.8 | 351.8 | 170.4 | 139.2 | 573.5 | 657.5 | 568.9 |
| DAILY GWH | | 16.6 | 20.6 | 22.0 | 23.7 | 28.2 | 30.7 | 32.2 | 33.3 | 30.2 | 24.3 | 23.5 | 24.3 | 17.4 | 18.5 | 21.2 | 20.3 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:58 STUDY NO 14

VALUES IN 1000 AF EXCEPT AS INDICATED

| 28FEB21 | | 2021 | | | | | | | | | | | 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 6100 | 206 | 96 | 123 | 472 | 969 | 1548 | 661 | 297 | 246 | 329 | 172 | 80 | 91 | 246 | 246 | 318 |
| DEPLETION | 562 | -17 | -8 | -10 | 27 | 279 | 594 | 291 | 17 | -127 | -118 | -34 | -16 | -18 | -107 | -116 | -75 |
| EVAPORATION | 504 | | | | | | | 31 | 97 | 121 | 105 | 47 | 22 | 25 | 54 | | |
| MOD INFLOW | 5034 | 223 | 104 | 134 | 445 | 690 | 954 | 339 | 183 | 252 | 342 | 158 | 74 | 84 | 299 | 362 | 393 |
| RELEASE | 5910 | 179 | 83 | 107 | 417 | 523 | 565 | 584 | 584 | 461 | 369 | 179 | 83 | 111 | 553 | 584 | 528 |
| STOR CHANGE | -875 | 44 | 21 | 26 | 28 | 167 | 389 | -246 | -402 | -209 | -27 | -20 | -10 | -27 | -255 | -222 | -135 |
| STORAGE | 13081. | 13125 | 13146 | 13172 | 13201 | 13368 | 13757 | 13511 | 13110 | 12901 | 12874 | 12854 | 12844 | 12818 | 12563 | 12341 | 12206 |
| ELEV FTMSL | 2225.5 | 2225.7 | 2225.8 | 2226.0 | 2226.1 | 2227.0 | 2229.0 | 2227.7 | 2225.6 | 2224.5 | 2224.4 | 2224.3 | 2224.2 | 2224.1 | 2222.7 | 2221.5 | 2220.7 |
| DISCH KCFS | 11.000 | 6.0 | 6.0 | 6.0 | 7.0 | 8.5 | 9.5 | 9.5 | 9.5 | 7.7 | 6.0 | 6.0 | 6.0 | 7.0 | 9.0 | 9.5 | 9.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 80 | 80 | 80 | 93 | 113 | 127 | 127 | 126 | 102 | 79 | 79 | 79 | 92 | 118 | 124 | 123 |
| PEAK POW MW | | 182 | 183 | 183 | 183 | 183 | 185 | 184 | 182 | 181 | 181 | 181 | 181 | 181 | 180 | 179 | 178 |
| ENERGY GWH | 945.2 | 28.7 | 13.4 | 17.2 | 66.9 | 84.1 | 91.3 | 94.4 | 93.9 | 73.8 | 59.0 | 28.5 | 13.3 | 17.7 | 87.9 | 92.2 | 82.9 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 9365 | 414 | 193 | 248 | 655 | 1177 | 2661 | 1740 | 486 | 403 | 404 | 164 | 77 | 87 | 154 | 215 | 287 |
| DEPLETION | 1161 | 9 | 4 | 6 | -65 | 197 | 930 | 778 | 133 | -168 | -64 | -156 | -73 | -83 | -131 | -92 | -64 |
| CHAN STOR | 15 | 51 | | | -10 | -15 | -10 | | | 18 | 18 | | | -10 | -20 | -5 | |
| EVAPORATION | 586 | | | | | | | 36 | 114 | 141 | 122 | 55 | 26 | 29 | 63 | | |
| REG INFLOW | 13543 | 634 | 272 | 350 | 1126 | 1487 | 2286 | 1510 | 823 | 909 | 733 | 444 | 207 | 242 | 755 | 886 | 879 |
| RELEASE | 14602 | 476 | 222 | 286 | 1101 | 1414 | 1428 | 1414 | 1414 | 1168 | 984 | 476 | 222 | 254 | 1168 | 1353 | 1222 |
| STOR CHANGE | -1059 | 158 | 50 | 64 | 26 | 73 | 858 | 96 | -591 | -259 | -251 | -32 | -15 | -12 | -413 | -467 | -343 |
| STORAGE | 15679. | 15838 | 15887 | 15952 | 15977 | 16050 | 16908 | 17004 | 16413 | 16154 | 15903 | 15870 | 15855 | 15843 | 15430 | 14963 | 14620 |
| ELEV FTMSL | 1830.5 | 1831.0 | 1831.2 | 1831.4 | 1831.5 | 1831.8 | 1834.7 | 1835.0 | 1833.0 | 1832.1 | 1831.3 | 1831.1 | 1831.1 | 1831.0 | 1829.6 | 1827.9 | 1826.6 |
| DISCH KCFS | 23.000 | 16.0 | 16.0 | 16.0 | 18.5 | 23.0 | 24.0 | 23.0 | 23.0 | 19.6 | 16.0 | 16.0 | 16.0 | 16.0 | 19.0 | 22.0 | 22.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 190 | 191 | 191 | 220 | 274 | 288 | 279 | 278 | 235 | 191 | 191 | 191 | 191 | 225 | 257 | 255 |
| PEAK POW MW | | 496 | 497 | 498 | 498 | 500 | 513 | 515 | 505 | 501 | 497 | 497 | 496 | 496 | 489 | 482 | 476 |
| ENERGY GWH | 2105.2 | 68.4 | 32.0 | 41.2 | 158.8 | 203.7 | 207.7 | 207.9 | 206.8 | 169.5 | 142.3 | 68.6 | 32.0 | 36.6 | 167.2 | 191.3 | 171.1 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1445 | 189 | 88 | 113 | 305 | 139 | 337 | 118 | 54 | 58 | 15 | 14 | 6 | 7 | -37 | -16 | 54 |
| DEPLETION | 817 | 26 | 12 | 16 | 54 | 82 | 175 | 217 | 147 | 35 | -15 | 1 | 0 | 0 | 14 | 21 | 32 |
| CHAN STOR | 4 | 30 | 0 | 0 | -11 | -19 | -4 | 4 | | 15 | 17 | | 0 | 0 | -14 | -14 | |
| EVAPORATION | 532 | | | | | | | 34 | 105 | 128 | 110 | 49 | 23 | 26 | 57 | | |
| REG INFLOW | 14703 | 669 | 298 | 383 | 1341 | 1452 | 1586 | 1285 | 1217 | 1078 | 921 | 440 | 205 | 235 | 1046 | 1302 | 1244 |
| RELEASE | 15795 | 457 | 329 | 372 | 1340 | 1559 | 1581 | 1818 | 1847 | 1635 | 1133 | 484 | 263 | 198 | 852 | 1058 | 868 |
| STOR CHANGE | -1092 | 212 | -31 | 11 | 1 | -107 | 5 | -532 | -631 | -557 | -213 | -44 | -58 | 36 | 194 | 244 | 376 |
| STORAGE | 16538. | 16751 | 16720 | 16731 | 16732 | 16625 | 16630 | 16098 | 15467 | 14911 | 14698 | 14654 | 14596 | 14632 | 14826 | 15070 | 15446 |
| ELEV FTMSL | 1600.3 | 1601.0 | 1600.9 | 1601.0 | 1601.0 | 1600.6 | 1600.6 | 1598.7 | 1596.3 | 1594.2 | 1593.4 | 1593.2 | 1592.9 | 1593.1 | 1593.9 | 1594.8 | 1596.3 |
| DISCH KCFS | 15.732 | 15.4 | 23.7 | 20.9 | 22.5 | 25.4 | 26.6 | 29.6 | 30.0 | 27.5 | 18.4 | 16.3 | 19.0 | 12.5 | 13.9 | 17.2 | 15.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 191 | 295 | 260 | 281 | 315 | 330 | 365 | 366 | 331 | 221 | 195 | 226 | 149 | 166 | 207 | 189 |
| PEAK POW MW | | 674 | 673 | 673 | 673 | 671 | 671 | 661 | 650 | 639 | 635 | 634 | 633 | 634 | 638 | 642 | 650 |
| ENERGY GWH | 2336.5 | 68.9 | 49.6 | 56.1 | 202.0 | 234.5 | 237.4 | 271.3 | 272.3 | 238.3 | 164.4 | 70.1 | 38.0 | 28.7 | 123.6 | 154.0 | 127.2 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 15664 | 457 | 329 | 372 | 1340 | 1559 | 1581 | 1810 | 1822 | 1603 | 1106 | 472 | 257 | 192 | 838 | 1058 | 868 |
| RELEASE | 15664 | 457 | 329 | 372 | 1340 | 1559 | 1581 | 1810 | 1822 | 1603 | 1106 | 472 | 257 | 192 | 838 | 1058 | 868 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.732 | 15.4 | 23.7 | 20.9 | 22.5 | 25.4 | 26.6 | 29.4 | 29.6 | 26.9 | 18.0 | 15.9 | 18.5 | 12.1 | 13.6 | 17.2 | 15.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 73 | 111 | 98 | 105 | 119 | 124 | 138 | 139 | 128 | 88 | 80 | 93 | 61 | 69 | 85 | 75 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 903.7 | 26.2 | 18.6 | 21.1 | 75.9 | 88.3 | 89.5 | 102.5 | 103.2 | 92.0 | 65.7 | 28.8 | 15.7 | 11.7 | 51.2 | 62.9 | 50.4 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 494 | 85 | 40 | 51 | 88 | 71 | 121 | 38 | 27 | | -22 | -8 | -4 | -4 | -11 | -22 | 44 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 145 | | | | | | | 10 | 32 | 39 | 31 | 12 | 5 | 5 | 12 | | |
| REG INFLOW | 15933 | 541 | 368 | 423 | 1424 | 1621 | 1690 | 1820 | 1803 | 1557 | 1052 | 451 | 248 | 182 | 812 | 1033 | 909 |
| RELEASE | 15933 | 260 | 224 | 423 | 1424 | 1621 | 1690 | 1820 | 1803 | 1701 | 1692 | 764 | 358 | 208 | 703 | 692 | 550 |
| STOR CHANGE | 0 | 280 | 144 | | | | 0 | 0 | 0 | -144 | -640 | -313 | -110 | -26 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2641 | 2328 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1340.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.934 | 8.8 | 16.1 | 23.7 | 23.9 | 26.4 | 28.4 | 29.6 | 29.3 | 28.6 | 27.5 | 25.7 | 25.8 | 13.1 | 11.4 | 11.3 | 9.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 73 | 136 | 200 | 202 | 222 | 239 | 249 | 247 | 239 | 221 | 194 | 189 | 96 | 84 | 86 | 79 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 296 | 287 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1581.1 | 26.2 | 22.9 | 43.2 | 145.6 | 165.4 | 172.3 | 185.4 | 183.7 | 172.2 | 164.2 | 70.0 | 31.8 | 18.4 | 62.8 | 63.9 | 53.2 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1326 | 94 | 44 | 56 | 128 | 143 | 153 | 87 | 71 | 81 | 106 | 51 | 24 | 27 | 77 | 77 | 107 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 2 | -14 | -14 | -1 | -5 | -4 | -2 | 1 | 1 | 2 | 3 | 0 | 24 | 3 | 0 | 3 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 17102 | 357 | 254 | 465 | 1547 | 1740 | 1815 | 1863 | 1857 | 1778 | 1789 | 809 | 378 | 254 | 769 | 769 | 659 |
| RELEASE | 17102 | 357 | 254 | 465 | 1547 | 1740 | 1815 | 1863 | 1845 | 1755 | 1789 | 809 | 378 | 254 | 769 | 769 | 694 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 18.3 | 26.0 | 26.0 | 28.3 | 30.5 | 30.3 | 30.0 | 29.5 | 29.1 | 27.2 | 27.2 | 16.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 63 | 89 | 89 | 96 | 102 | 102 | 101 | 102 | 101 | 95 | 95 | 57 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 710.5 | 15.1 | 10.6 | 19.2 | 63.9 | 71.6 | 73.5 | 75.6 | 75.4 | 73.1 | 75.5 | 34.3 | 16.0 | 10.9 | 33.0 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1170 | 129 | 60 | 77 | 154 | 197 | 122 | 106 | 85 | 70 | 37 | 24 | 11 | 13 | 11 | 21 | 53 |
| DEPLETION | 295 | 8 | 4 | 5 | 25 | 38 | 33 | 42 | 40 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 16 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 17977 | 478 | 310 | 537 | 1676 | 1899 | 1904 | 1927 | 1890 | 1798 | 1813 | 826 | 386 | 263 | 765 | 774 | 731 |
| KCFS | | 16.1 | 22.3 | 30.1 | 28.2 | 30.9 | 32.0 | 31.3 | 30.7 | 30.2 | 29.5 | 27.8 | 27.8 | 16.6 | 12.4 | 12.6 | 13.2 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 19900 | 1117 | 521 | 670 | 1802 | 2696 | 4942 | 2750 | 1020 | 858 | 869 | 416 | 194 | 222 | 440 | 521 | 863 |
| DEPLETION | 3029 | 27 | 13 | 16 | 50 | 624 | 1768 | 1385 | 362 | -231 | -181 | -177 | -82 | -94 | -196 | -167 | -88 |
| CHAN STOR | 18 | 83 | -14 | -14 | -21 | -39 | -18 | 2 | 1 | 34 | 36 | 3 | 0 | 14 | -31 | -19 | 3 |
| EVAPORATION | 1939 | | | | | | | 122 | 380 | 470 | 404 | 180 | 83 | 95 | 205 | | |
| STORAGE | 50258. | 50953 | 51137 | 51238 | 51293 | 51427 | 52679 | 51997 | 50386 | 49240 | 48109 | 47699 | 47506 | 47478 | 47113 | 47009 | 47231 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 649 | 876 | 917 | 990 | 1139 | 1211 | 1260 | 1257 | 1137 | 902 | 834 | 874 | 646 | 706 | 803 | 765 |
| PEAK POW MW | | 2334 | 2332 | 2334 | 2334 | 2334 | 2349 | 2340 | 2318 | 2307 | 2288 | 2263 | 2253 | 2251 | 2217 | 2238 | 2247 |
| ENERGY GWH | 8582.1 | 233.5 | 147.1 | 198.1 | 713.1 | 847.6 | 871.7 | 937.1 | 935.4 | 818.9 | 671.1 | 300.3 | 146.8 | 124.0 | 525.6 | 597.4 | 514.4 |
| DAILY GWH | | 15.6 | 21.0 | 22.0 | 23.8 | 27.3 | 29.1 | 30.2 | 30.2 | 27.3 | 21.6 | 20.0 | 21.0 | 15.5 | 17.0 | 19.3 | 18.4 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:58 STUDY NO 15

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 28FEB22 | 2022 | | | | | | | | | | | | 2023 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 6174 | 209 | 97 | 125 | 477 | 981 | 1567 | 669 | 301 | 249 | 331 | 174 | 81 | 93 | 249 | 249 | 322 |
| DEPLETION | 574 | -17 | -8 | -10 | 26 | 280 | 598 | 298 | 21 | -127 | -120 | -35 | -16 | -18 | -107 | -116 | -75 |
| EVAPORATION | 486 | | | | | | | 30 | 93 | 116 | 102 | 46 | 21 | 25 | 53 | | |
| MOD INFLOW | 5114 | 226 | 105 | 135 | 451 | 701 | 969 | 341 | 187 | 260 | 349 | 163 | 76 | 87 | 303 | 365 | 397 |
| RELEASE | 5535 | 179 | 83 | 107 | 417 | 492 | 536 | 553 | 553 | 432 | 338 | 164 | 76 | 87 | 523 | 523 | 472 |
| STOR CHANGE | -421 | 47 | 22 | 28 | 34 | 209 | 433 | -212 | -367 | -173 | 11 | -1 | -1 | -1 | -220 | -158 | -75 |
| STORAGE | 12206. | 12253 | 12275 | 12303 | 12338 | 12547 | 12980 | 12768 | 12401 | 12228 | 12240 | 12238 | 12238 | 12237 | 12018 | 11860 | 11785 |
| ELEV FTMSL | 2220.7 | 2221.0 | 2221.1 | 2221.3 | 2221.5 | 2222.6 | 2224.9 | 2223.8 | 2221.8 | 2220.9 | 2220.9 | 2220.9 | 2220.9 | 2220.9 | 2219.7 | 2218.8 | 2218.4 |
| DISCH KCFS | 9.500 | 6.0 | 6.0 | 6.0 | 7.0 | 8.0 | 9.0 | 9.0 | 9.0 | 7.3 | 5.5 | 5.5 | 5.5 | 5.5 | 8.5 | 8.5 | 8.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 78 | 78 | 78 | 91 | 104 | 118 | 119 | 118 | 95 | 72 | 72 | 72 | 72 | 110 | 110 | 109 |
| PEAK POW MW | | 178 | 178 | 179 | 179 | 180 | 182 | 181 | 179 | 178 | 178 | 178 | 178 | 178 | 177 | 176 | 176 |
| ENERGY GWH | 872.2 | 28.1 | 13.1 | 16.9 | 65.6 | 77.7 | 85.2 | 88.2 | 87.6 | 68.1 | 53.3 | 25.8 | 12.0 | 13.7 | 81.9 | 81.5 | 73.4 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 9470 | 418 | 195 | 251 | 662 | 1190 | 2691 | 1760 | 492 | 409 | 409 | 166 | 77 | 88 | 155 | 217 | 290 |
| DEPLETION | 1175 | 1 | 1 | 1 | -53 | 198 | 940 | 794 | 138 | -171 | -68 | -160 | -74 | -85 | -131 | -92 | -64 |
| CHAN STOR | 10 | 36 | | | -10 | -10 | -10 | | | 18 | 18 | | | | -31 | | |
| EVAPORATION | 574 | | | | | | | 35 | 111 | 138 | 120 | 54 | 25 | 29 | 62 | | |
| REG INFLOW | 13266 | 632 | 278 | 357 | 1121 | 1474 | 2276 | 1484 | 796 | 892 | 713 | 435 | 203 | 232 | 716 | 832 | 826 |
| RELEASE | 13778 | 461 | 215 | 277 | 1012 | 1291 | 1309 | 1291 | 1291 | 1100 | 984 | 476 | 222 | 254 | 1138 | 1291 | 1166 |
| STOR CHANGE | -512 | 170 | 62 | 80 | 110 | 182 | 967 | 193 | -495 | -208 | -270 | -41 | -19 | -22 | -421 | -460 | -340 |
| STORAGE | 14620. | 14791 | 14853 | 14933 | 15043 | 15225 | 16192 | 16385 | 15890 | 15682 | 15412 | 15370 | 15351 | 15329 | 14908 | 14448 | 14108 |
| ELEV FTMSL | 1826.6 | 1827.2 | 1827.5 | 1827.8 | 1828.2 | 1828.8 | 1832.3 | 1832.9 | 1831.2 | 1830.5 | 1829.5 | 1829.4 | 1829.3 | 1829.2 | 1827.7 | 1826.0 | 1824.7 |
| DISCH KCFS | 22.000 | 15.5 | 15.5 | 15.5 | 17.0 | 21.0 | 22.0 | 21.0 | 21.0 | 18.5 | 16.0 | 16.0 | 16.0 | 16.0 | 18.5 | 21.0 | 21.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 180 | 180 | 181 | 198 | 245 | 260 | 252 | 251 | 219 | 189 | 189 | 188 | 188 | 216 | 242 | 240 |
| PEAK POW MW | | 479 | 480 | 481 | 483 | 486 | 502 | 505 | 497 | 494 | 489 | 488 | 488 | 488 | 481 | 473 | 467 |
| ENERGY GWH | 1957.3 | 64.7 | 30.3 | 39.0 | 142.7 | 182.4 | 187.3 | 187.3 | 186.7 | 158.0 | 140.8 | 67.9 | 31.6 | 36.1 | 160.9 | 180.4 | 161.3 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1494 | 196 | 91 | 117 | 315 | 144 | 349 | 122 | 55 | 61 | 17 | 14 | 7 | 7 | -39 | -17 | 55 |
| DEPLETION | 830 | 27 | 12 | 16 | 54 | 83 | 178 | 221 | 150 | 35 | -15 | 1 | 0 | 0 | 15 | 21 | 32 |
| CHAN STOR | 5 | 29 | | | -7 | -18 | -4 | 4 | | 12 | 12 | | 0 | 0 | -12 | -12 | |
| EVAPORATION | 513 | | | | | | | 32 | 99 | 123 | 107 | 48 | 22 | 26 | 56 | | |
| REG INFLOW | 13934 | 659 | 294 | 378 | 1266 | 1335 | 1476 | 1164 | 1097 | 1015 | 921 | 442 | 206 | 235 | 1016 | 1242 | 1189 |
| RELEASE | 14462 | 452 | 295 | 330 | 1205 | 1463 | 1442 | 1692 | 1721 | 1233 | 1096 | 473 | 138 | 134 | 864 | 1059 | 865 |
| STOR CHANGE | -528 | 207 | -1 | 48 | 61 | -128 | 33 | -528 | -624 | -218 | -175 | -32 | 68 | 102 | 152 | 183 | 325 |
| STORAGE | 15446. | 15653 | 15652 | 15700 | 15762 | 15633 | 15667 | 15139 | 14515 | 14296 | 14121 | 14090 | 14157 | 14259 | 14411 | 14593 | 14918 |
| ELEV FTMSL | 1596.3 | 1597.0 | 1597.0 | 1597.2 | 1597.4 | 1597.0 | 1597.1 | 1595.1 | 1592.6 | 1591.8 | 1591.0 | 1590.9 | 1591.2 | 1591.6 | 1592.2 | 1592.9 | 1594.2 |
| DISCH KCFS | 15.624 | 15.2 | 21.2 | 18.5 | 20.2 | 23.8 | 24.2 | 27.5 | 28.0 | 20.7 | 17.8 | 15.9 | 10.0 | 8.4 | 14.1 | 17.2 | 15.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 185 | 259 | 226 | 247 | 290 | 295 | 333 | 335 | 246 | 211 | 188 | 118 | 100 | 167 | 205 | 187 |
| PEAK POW MW | | 653 | 653 | 654 | 655 | 653 | 654 | 644 | 632 | 627 | 624 | 623 | 625 | 627 | 630 | 633 | 640 |
| ENERGY GWH | 2104.9 | 66.7 | 43.5 | 48.8 | 178.0 | 215.8 | 212.5 | 247.8 | 248.9 | 177.1 | 156.9 | 67.6 | 19.8 | 19.2 | 124.2 | 152.6 | 125.4 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 14331 | 452 | 295 | 330 | 1205 | 1463 | 1442 | 1684 | 1696 | 1202 | 1068 | 461 | 133 | 127 | 850 | 1059 | 865 |
| RELEASE | 14331 | 452 | 295 | 330 | 1205 | 1463 | 1442 | 1684 | 1696 | 1202 | 1068 | 461 | 133 | 127 | 850 | 1059 | 865 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.624 | 15.2 | 21.2 | 18.5 | 20.2 | 23.8 | 24.2 | 27.4 | 27.6 | 20.2 | 17.4 | 15.5 | 9.6 | 8.0 | 13.8 | 17.2 | 15.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 72 | 99 | 87 | 95 | 111 | 113 | 128 | 129 | 97 | 87 | 78 | 48 | 41 | 70 | 85 | 75 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 529 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 828.8 | 25.9 | 16.7 | 18.7 | 68.2 | 82.9 | 81.7 | 95.4 | 96.1 | 69.7 | 64.4 | 28.1 | 8.1 | 7.8 | 51.9 | 62.9 | 50.2 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 517 | 89 | 42 | 53 | 92 | 75 | 126 | 40 | 29 | | -24 | -9 | -4 | -5 | -11 | -23 | 46 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 139 | | | | | | | 10 | 32 | 38 | 28 | 11 | 4 | 5 | 12 | | |
| REG INFLOW | 14629 | 540 | 335 | 383 | 1293 | 1529 | 1556 | 1696 | 1679 | 1157 | 1015 | 441 | 124 | 117 | 823 | 1033 | 908 |
| RELEASE | 14629 | 259 | 191 | 383 | 1293 | 1529 | 1556 | 1696 | 1679 | 1581 | 1567 | 698 | 124 | 117 | 714 | 692 | 549 |
| STOR CHANGE | 0 | 280 | 144 | | | 0 | | 0 | 0 | -424 | -552 | -257 | 0 | 0 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3001 | 2449 | 2192 | 2192 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1350.0 | 1342.0 | 1337.5 | 1337.5 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.898 | 8.7 | 13.8 | 21.4 | 21.7 | 24.9 | 26.2 | 27.6 | 27.3 | 26.6 | 25.5 | 23.4 | 8.9 | 7.4 | 11.6 | 11.3 | 9.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 72 | 116 | 181 | 184 | 210 | 221 | 233 | 230 | 219 | 199 | 173 | 66 | 54 | 86 | 86 | 79 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 339 | 305 | 285 | 285 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1447.1 | 26.1 | 19.6 | 39.2 | 132.3 | 156.2 | 158.9 | 173.0 | 171.3 | 158.0 | 148.1 | 62.4 | 11.0 | 10.4 | 63.7 | 63.9 | 53.1 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1338 | 95 | 44 | 57 | 129 | 144 | 154 | 88 | 72 | 82 | 108 | 52 | 24 | 27 | 77 | 77 | 108 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 2 | -10 | -15 | -1 | -6 | -2 | -3 | 1 | 1 | 2 | 4 | 27 | 3 | -8 | 1 | 3 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 15810 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1734 | 1659 | 1666 | 744 | 171 | 143 | 769 | 769 | 659 |
| RELEASE | 15810 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1722 | 1636 | 1666 | 744 | 171 | 143 | 769 | 769 | 694 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 28.3 | 28.0 | 27.5 | 27.1 | 25.0 | 12.3 | 9.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 96 | 96 | 96 | 95 | 88 | 44 | 32 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 661.5 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 71.6 | 71.3 | 68.8 | 70.6 | 31.6 | 7.3 | 6.2 | 33.1 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1207 | 133 | 62 | 80 | 159 | 203 | 126 | 110 | 88 | 71 | 39 | 25 | 11 | 13 | 11 | 22 | 55 |
| DEPLETION | 297 | 8 | 4 | 5 | 25 | 38 | 33 | 42 | 41 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 16720 | 482 | 284 | 500 | 1550 | 1813 | 1777 | 1808 | 1769 | 1680 | 1692 | 761 | 179 | 152 | 765 | 775 | 732 |
| KCFS | | 16.2 | 20.5 | 28.0 | 26.0 | 29.5 | 29.9 | 29.4 | 28.8 | 28.2 | 27.5 | 25.6 | 12.9 | 9.6 | 12.4 | 12.6 | 13.2 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 20200 | 1139 | 531 | 683 | 1834 | 2737 | 5013 | 2789 | 1037 | 872 | 880 | 421 | 196 | 225 | 442 | 525 | 876 |
| DEPLETION | 3070 | 20 | 9 | 12 | 61 | 627 | 1785 | 1412 | 375 | -234 | -187 | -181 | -84 | -96 | -195 | -167 | -87 |
| CHAN STOR | 14 | 68 | -10 | -15 | -18 | -34 | -17 | 2 | 1 | 31 | 32 | 4 | 28 | 3 | -51 | -11 | 3 |
| EVAPORATION | 1885 | | | | | | | 118 | 368 | 457 | 393 | 175 | 81 | 93 | 201 | | |
| STORAGE | 47231. | 47936 | 48164 | 48320 | 48526 | 48789 | 50223 | 49675 | 48202 | 47201 | 46215 | 45884 | 45932 | 46011 | 45631 | 45537 | 45770 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 629 | 789 | 834 | 897 | 1052 | 1104 | 1160 | 1158 | 972 | 852 | 787 | 536 | 487 | 693 | 772 | 734 |
| PEAK POW MW | | 2292 | 2291 | 2293 | 2297 | 2298 | 2317 | 2309 | 2288 | 2284 | 2251 | 2230 | 2231 | 2232 | 2198 | 2218 | 2226 |
| ENERGY GWH | 7871.8 | 226.6 | 132.6 | 180.2 | 645.7 | 783.0 | 794.9 | 863.3 | 861.8 | 699.6 | 634.1 | 283.4 | 90.0 | 93.4 | 515.6 | 574.4 | 493.1 |
| DAILY GWH | | 15.1 | 18.9 | 20.0 | 21.5 | 25.3 | 26.5 | 27.8 | 27.8 | 23.3 | 20.5 | 18.9 | 12.9 | 11.7 | 16.6 | 18.5 | 17.6 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:58 STUDY NO 16

VALUES IN 1000 AF EXCEPT AS INDICATED

| 28FEB23 | | 2023 | | | | | | | | | | | | 2024 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 29FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 6560 | 222 | 103 | 133 | 507 | 1042 | 1665 | 711 | 320 | 264 | 353 | 184 | 86 | 98 | 265 | 265 | 342 |
| DEPLETION | 586 | -17 | -8 | -10 | 26 | 281 | 602 | 307 | 27 | -127 | -120 | -35 | -16 | -18 | -107 | -115 | -84 |
| EVAPORATION | 485 | | | | | | | 30 | 93 | 116 | 101 | 46 | 21 | 25 | 53 | | |
| MOD INFLOW | 5489 | 239 | 111 | 143 | 481 | 761 | 1063 | 374 | 200 | 275 | 372 | 173 | 81 | 92 | 319 | 380 | 426 |
| RELEASE | 5502 | 149 | 69 | 89 | 417 | 492 | 536 | 553 | 553 | 445 | 307 | 149 | 69 | 79 | 523 | 553 | 518 |
| STOR CHANGE | -13 | 90 | 42 | 54 | 64 | 269 | 527 | -179 | -353 | -170 | 64 | 24 | 11 | 13 | -204 | -173 | -92 |
| STORAGE | 11785. | 11875 | 11917 | 11971 | 12035 | 12304 | 12832 | 12652 | 12299 | 12129 | 12193 | 12217 | 12228 | 12241 | 12037 | 11864 | 11772 |
| ELEV FTMSL | 2218.4 | 2218.9 | 2219.1 | 2219.4 | 2219.8 | 2221.3 | 2224.1 | 2223.2 | 2221.3 | 2220.3 | 2220.7 | 2220.8 | 2220.9 | 2220.9 | 2219.8 | 2218.8 | 2218.3 |
| DISCH KCFS | 8.500 | 5.0 | 5.0 | 5.0 | 7.0 | 8.0 | 9.0 | 9.0 | 9.0 | 7.5 | 5.0 | 5.0 | 5.0 | 5.0 | 8.5 | 9.0 | 9.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 64 | 65 | 65 | 90 | 104 | 118 | 118 | 117 | 97 | 65 | 65 | 65 | 65 | 110 | 116 | 116 |
| PEAK POW MW | | 176 | 177 | 177 | 177 | 179 | 181 | 180 | 179 | 178 | 178 | 178 | 178 | 178 | 177 | 176 | 176 |
| ENERGY GWH | 864.3 | 23.2 | 10.8 | 14.0 | 65.1 | 77.2 | 84.8 | 88.0 | 87.4 | 69.9 | 48.3 | 23.4 | 10.9 | 12.5 | 81.9 | 86.3 | 80.5 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10016 | 442 | 206 | 265 | 701 | 1259 | 2846 | 1861 | 520 | 432 | 432 | 175 | 82 | 93 | 164 | 230 | 307 |
| DEPLETION | 1189 | 2 | 1 | 1 | -52 | 198 | 950 | 810 | 144 | -174 | -73 | -163 | -76 | -87 | -132 | -91 | -70 |
| CHAN STOR | -5 | 37 | 0 | 0 | -21 | -10 | -10 | | | 16 | 25 | | 0 | 0 | -36 | -5 | |
| EVAPORATION | 570 | | | | | | | 35 | 110 | 137 | 119 | 54 | 25 | 29 | 61 | | |
| REG INFLOW | 13754 | 626 | 275 | 353 | 1149 | 1543 | 2421 | 1569 | 819 | 929 | 719 | 433 | 202 | 231 | 721 | 869 | 895 |
| RELEASE | 13755 | 446 | 208 | 268 | 1012 | 1291 | 1339 | 1322 | 1322 | 1087 | 922 | 446 | 208 | 246 | 1138 | 1291 | 1208 |
| STOR CHANGE | -1 | 180 | 67 | 86 | 137 | 251 | 1082 | 247 | -503 | -158 | -204 | -14 | -6 | -15 | -416 | -422 | -313 |
| STORAGE | 14108. | 14288 | 14354 | 14440 | 14577 | 14828 | 15910 | 16158 | 15655 | 15497 | 15294 | 15280 | 15274 | 15259 | 14842 | 14420 | 14107 |
| ELEV FTMSL | 1824.7 | 1825.4 | 1825.6 | 1825.9 | 1826.5 | 1827.4 | 1831.3 | 1832.1 | 1830.4 | 1829.8 | 1829.1 | 1829.0 | 1829.0 | 1829.0 | 1827.4 | 1825.9 | 1824.7 |
| DISCH KCFS | 21.000 | 15.0 | 15.0 | 15.0 | 17.0 | 21.0 | 22.5 | 21.5 | 21.5 | 18.3 | 15.0 | 15.0 | 15.0 | 15.5 | 18.5 | 21.0 | 21.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 172 | 172 | 173 | 196 | 243 | 264 | 256 | 255 | 216 | 177 | 176 | 176 | 182 | 216 | 242 | 240 |
| PEAK POW MW | | 470 | 471 | 473 | 475 | 479 | 498 | 501 | 493 | 490 | 487 | 487 | 487 | 486 | 479 | 472 | 467 |
| ENERGY GWH | 1943.3 | 61.8 | 28.9 | 37.3 | 141.1 | 180.5 | 190.0 | 190.6 | 190.1 | 155.4 | 131.6 | 63.5 | 29.6 | 35.0 | 160.6 | 180.2 | 167.0 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1767 | 231 | 108 | 139 | 373 | 170 | 412 | 144 | 65 | 72 | 21 | 17 | 8 | 9 | -46 | -20 | 65 |
| DEPLETION | 845 | 27 | 12 | 16 | 55 | 84 | 181 | 226 | 153 | 36 | -15 | 1 | 0 | 0 | 15 | 21 | 33 |
| CHAN STOR | 0 | 27 | | 0 | -9 | -18 | -7 | 4 | | 15 | 15 | | | -2 | -14 | -12 | |
| EVAPORATION | 512 | | | | | | | 32 | 99 | 123 | 106 | 48 | 22 | 26 | 56 | | |
| REG INFLOW | 14166 | 678 | 304 | 391 | 1321 | 1359 | 1563 | 1212 | 1135 | 1016 | 867 | 414 | 193 | 226 | 1006 | 1239 | 1240 |
| RELEASE | 14165 | 426 | 282 | 315 | 1176 | 1438 | 1402 | 1678 | 1710 | 1229 | 1096 | 384 | 92 | 141 | 862 | 1061 | 874 |
| STOR CHANGE | 1 | 253 | 21 | 76 | 145 | -79 | 161 | -466 | -575 | -213 | -229 | 30 | 102 | 86 | 144 | 178 | 366 |
| STORAGE | 14918. | 15171 | 15192 | 15268 | 15413 | 15335 | 15495 | 15030 | 14455 | 14241 | 14013 | 14043 | 14145 | 14230 | 14375 | 14552 | 14919 |
| ELEV FTMSL | 1594.2 | 1595.2 | 1595.3 | 1595.6 | 1596.1 | 1595.8 | 1596.4 | 1594.7 | 1592.4 | 1591.5 | 1590.6 | 1590.7 | 1591.1 | 1591.5 | 1592.1 | 1592.8 | 1594.2 |
| DISCH KCFS | 15.569 | 14.3 | 20.3 | 17.6 | 19.8 | 23.4 | 23.6 | 27.3 | 27.8 | 20.7 | 17.8 | 12.9 | 6.6 | 8.9 | 14.0 | 17.3 | 15.2 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 173 | 246 | 213 | 239 | 283 | 286 | 329 | 332 | 245 | 210 | 152 | 78 | 105 | 166 | 205 | 182 |
| PEAK POW MW | | 644 | 645 | 646 | 649 | 647 | 650 | 642 | 630 | 626 | 622 | 622 | 624 | 626 | 629 | 632 | 640 |
| ENERGY GWH | 2054.6 | 62.1 | 41.3 | 46.0 | 172.4 | 210.7 | 205.7 | 245.0 | 246.9 | 176.3 | 156.6 | 54.9 | 13.1 | 20.2 | 123.9 | 152.8 | 126.7 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 14034 | 426 | 282 | 315 | 1176 | 1438 | 1402 | 1670 | 1685 | 1198 | 1068 | 372 | 86 | 134 | 848 | 1061 | 874 |
| RELEASE | 14034 | 426 | 282 | 315 | 1176 | 1438 | 1402 | 1670 | 1685 | 1198 | 1068 | 372 | 86 | 134 | 848 | 1061 | 874 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.569 | 14.3 | 20.3 | 17.6 | 19.8 | 23.4 | 23.6 | 27.2 | 27.4 | 20.1 | 17.4 | 12.5 | 6.2 | 8.5 | 13.8 | 17.3 | 15.2 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 68 | 95 | 82 | 93 | 109 | 110 | 127 | 128 | 97 | 87 | 63 | 31 | 43 | 70 | 85 | 73 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 529 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 811.5 | 24.4 | 16.0 | 17.8 | 66.6 | 81.5 | 79.4 | 94.6 | 95.5 | 69.5 | 64.4 | 22.7 | 5.3 | 8.2 | 51.8 | 63.1 | 50.7 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 645 | 111 | 52 | 66 | 115 | 93 | 158 | 50 | 36 | | -29 | -11 | -5 | -6 | -14 | -29 | 57 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 139 | | | | | | | 10 | 32 | 38 | 28 | 11 | 4 | 5 | 12 | | |
| REG INFLOW | 14459 | 535 | 333 | 380 | 1287 | 1522 | 1548 | 1692 | 1675 | 1153 | 1010 | 349 | 77 | 123 | 819 | 1029 | 928 |
| RELEASE | 14459 | 255 | 189 | 380 | 1287 | 1522 | 1548 | 1692 | 1675 | 1577 | 1562 | 606 | 77 | 123 | 709 | 688 | 569 |
| STOR CHANGE | 0 | 280 | 144 | | 0 | | 0 | 0 | 0 | -424 | -552 | -257 | 0 | 0 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3001 | 2449 | 2192 | 2192 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1350.0 | 1342.0 | 1337.5 | 1337.5 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.879 | 8.6 | 13.6 | 21.3 | 21.6 | 24.8 | 26.0 | 27.5 | 27.2 | 26.5 | 25.4 | 20.4 | 5.5 | 7.7 | 11.5 | 11.2 | 9.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 71 | 115 | 180 | 183 | 209 | 220 | 232 | 230 | 219 | 198 | 151 | 41 | 57 | 85 | 85 | 79 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 339 | 305 | 285 | 285 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1431.7 | 25.6 | 19.4 | 38.9 | 131.7 | 155.5 | 158.1 | 172.6 | 170.9 | 157.6 | 147.6 | 54.3 | 6.8 | 10.9 | 63.3 | 63.5 | 55.0 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1403 | 99 | 46 | 60 | 135 | 151 | 162 | 92 | 76 | 86 | 113 | 54 | 25 | 29 | 81 | 81 | 113 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 3 | -10 | -15 | -1 | -6 | -2 | -3 | 1 | 1 | 2 | 9 | 28 | -4 | -7 | 1 | 2 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 15705 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1734 | 1659 | 1666 | 661 | 125 | 143 | 769 | 769 | 684 |
| RELEASE | 15705 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1722 | 1636 | 1666 | 661 | 125 | 143 | 769 | 769 | 719 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 28.3 | 28.0 | 27.5 | 27.1 | 22.2 | 9.0 | 9.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 96 | 96 | 96 | 95 | 78 | 32 | 32 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 657.1 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 71.6 | 71.3 | 68.8 | 70.6 | 28.1 | 5.4 | 6.2 | 33.1 | 33.0 | 30.7 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1409 | 155 | 72 | 93 | 186 | 237 | 147 | 128 | 102 | 83 | 45 | 29 | 14 | 15 | 13 | 26 | 64 |
| DEPLETION | 301 | 8 | 4 | 5 | 26 | 38 | 33 | 42 | 41 | 28 | 13 | 8 | 4 | 4 | 16 | 16 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 16813 | 504 | 295 | 513 | 1576 | 1847 | 1798 | 1826 | 1783 | 1691 | 1698 | 682 | 135 | 154 | 766 | 779 | 766 |
| KCFS | | 16.9 | 21.2 | 28.8 | 26.5 | 30.0 | 30.2 | 29.7 | 29.0 | 28.4 | 27.6 | 22.9 | 9.7 | 9.7 | 12.5 | 12.7 | 13.3 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 21800 | 1260 | 588 | 756 | 2017 | 2952 | 5390 | 2986 | 1119 | 937 | 935 | 448 | 209 | 239 | 463 | 553 | 948 |
| DEPLETION | 3115 | 20 | 9 | 12 | 64 | 629 | 1802 | 1442 | 390 | -235 | -192 | -183 | -85 | -98 | -195 | -165 | -101 |
| CHAN STOR | -6 | 67 | -10 | -15 | -30 | -34 | -20 | 2 | 1 | 32 | 43 | 9 | 28 | -7 | -58 | -16 | 2 |
| EVAPORATION | 1878 | | | | | | | 117 | 366 | 455 | 391 | 174 | 81 | 93 | 201 | | |
| STORAGE | 45770. | 46573 | 46847 | 47062 | 47409 | 47850 | 49621 | 49223 | 47805 | 46862 | 45942 | 45726 | 45832 | 45915 | 45548 | 45472 | 45757 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 590 | 750 | 795 | 883 | 1039 | 1094 | 1159 | 1159 | 969 | 832 | 686 | 424 | 484 | 692 | 778 | 734 |
| PEAK POW MW | | 2273 | 2272 | 2275 | 2281 | 2285 | 2309 | 2303 | 2283 | 2279 | 2247 | 2227 | 2229 | 2231 | 2196 | 2216 | 2226 |
| ENERGY GWH | 7762.5 | 212.3 | 125.9 | 171.7 | 635.6 | 773.4 | 787.3 | 862.5 | 861.9 | 697.5 | 619.2 | 247.0 | 71.2 | 93.0 | 514.5 | 578.9 | 510.6 |
| DAILY GWH | | 14.2 | 18.0 | 19.1 | 21.2 | 24.9 | 26.2 | 27.8 | 27.8 | 23.3 | 20.0 | 16.5 | 10.2 | 11.6 | 16.6 | 18.7 | 17.6 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 29FEB |

TIME OF STUDY: 09:12:58 STUDY NO 17

VALUES IN 1000 AF EXCEPT AS INDICATED

| 29FEB24 | | 2024 | | | | | | | | | | | 2025 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 6794 | 229 | 107 | 138 | 525 | 1079 | 1724 | 736 | 331 | 275 | 365 | 192 | 89 | 102 | 274 | 274 | 354 |
| DEPLETION | 599 | -16 | -8 | -10 | 26 | 282 | 606 | 313 | 30 | -128 | -123 | -36 | -17 | -19 | -109 | -117 | -76 |
| EVAPORATION | 487 | | | | | | | 30 | 93 | 116 | 102 | 46 | 22 | 25 | 53 | | |
| MOD INFLOW | 5708 | 246 | 115 | 147 | 499 | 797 | 1118 | 393 | 208 | 287 | 386 | 181 | 84 | 96 | 330 | 391 | 430 |
| RELEASE | 5489 | 164 | 76 | 98 | 417 | 492 | 536 | 553 | 553 | 447 | 307 | 149 | 69 | 83 | 492 | 553 | 500 |
| STOR CHANGE | 219 | 82 | 38 | 49 | 82 | 305 | 582 | -160 | -346 | -161 | 79 | 32 | 15 | 14 | -162 | -162 | -70 |
| STORAGE | 11772. | 11854 | 11893 | 11942 | 12024 | 12329 | 12912 | 12752 | 12406 | 12245 | 12324 | 12356 | 12371 | 12385 | 12223 | 12060 | 11991 |
| ELEV FTMSL | 2218.3 | 2218.8 | 2219.0 | 2219.3 | 2219.7 | 2221.4 | 2224.6 | 2223.7 | 2221.8 | 2221.0 | 2221.4 | 2221.6 | 2221.7 | 2221.7 | 2220.8 | 2219.9 | 2219.6 |
| DISCH KCFS | 9.000 | 5.5 | 5.5 | 5.5 | 7.0 | 8.0 | 9.0 | 9.0 | 9.0 | 7.5 | 5.0 | 5.0 | 5.0 | 5.2 | 8.0 | 9.0 | 9.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 71 | 71 | 71 | 90 | 104 | 118 | 118 | 118 | 98 | 65 | 65 | 65 | 68 | 104 | 117 | 116 |
| PEAK POW MW | | 176 | 176 | 177 | 177 | 179 | 181 | 181 | 179 | 178 | 179 | 179 | 179 | 179 | 178 | 177 | 177 |
| ENERGY GWH | 864.4 | 25.5 | 11.9 | 15.3 | 65.1 | 77.2 | 84.9 | 88.2 | 87.6 | 70.5 | 48.5 | 23.5 | 11.0 | 13.0 | 77.4 | 86.7 | 78.1 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10343 | 457 | 213 | 274 | 723 | 1300 | 2939 | 1922 | 537 | 447 | 446 | 181 | 84 | 97 | 170 | 237 | 316 |
| DEPLETION | 1210 | 2 | 1 | 1 | -51 | 199 | 961 | 826 | 149 | -177 | -77 | -167 | -78 | -89 | -134 | -93 | -65 |
| CHAN STOR | 0 | 37 | | | -16 | -10 | -10 | | | 15 | 26 | | 0 | -2 | -29 | -10 | |
| EVAPORATION | 574 | | | | | | | 35 | 111 | 138 | 120 | 54 | 25 | 29 | 62 | | |
| REG INFLOW | 14049 | 655 | 288 | 371 | 1175 | 1583 | 2503 | 1614 | 831 | 948 | 736 | 442 | 206 | 237 | 705 | 873 | 881 |
| RELEASE | 13798 | 446 | 208 | 268 | 982 | 1353 | 1369 | 1353 | 1353 | 1100 | 922 | 446 | 208 | 254 | 1138 | 1261 | 1139 |
| STOR CHANGE | 251 | 209 | 80 | 103 | 193 | 230 | 1135 | 262 | -522 | -152 | -186 | -4 | -2 | -17 | -432 | -387 | -258 |
| STORAGE | 14107. | 14316 | 14396 | 14499 | 14692 | 14921 | 16056 | 16318 | 15795 | 15644 | 15458 | 15454 | 15452 | 15435 | 15003 | 14615 | 14358 |
| ELEV FTMSL | 1824.7 | 1825.5 | 1825.8 | 1826.2 | 1826.9 | 1827.7 | 1831.8 | 1832.7 | 1830.9 | 1830.3 | 1829.7 | 1829.7 | 1829.7 | 1829.6 | 1828.0 | 1826.6 | 1825.6 |
| DISCH KCFS | 21.000 | 15.0 | 15.0 | 15.0 | 16.5 | 22.0 | 23.0 | 22.0 | 22.0 | 18.5 | 15.0 | 15.0 | 15.0 | 16.0 | 18.5 | 20.5 | 20.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 172 | 172 | 173 | 191 | 255 | 270 | 263 | 262 | 219 | 177 | 177 | 177 | 189 | 217 | 238 | 236 |
| PEAK POW MW | | 470 | 472 | 474 | 477 | 481 | 500 | 504 | 495 | 493 | 490 | 490 | 490 | 489 | 482 | 476 | 471 |
| ENERGY GWH | 1956.2 | 61.9 | 29.0 | 37.3 | 137.3 | 189.5 | 194.7 | 195.7 | 195.1 | 157.7 | 132.1 | 63.8 | 29.8 | 36.2 | 161.2 | 176.7 | 158.3 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1949 | 255 | 119 | 153 | 412 | 188 | 455 | 159 | 72 | 79 | 22 | 18 | 8 | 10 | -51 | -22 | 72 |
| DEPLETION | 860 | 27 | 13 | 16 | 55 | 85 | 185 | 230 | 157 | 37 | -16 | 1 | 0 | 0 | 15 | 22 | 33 |
| CHAN STOR | 3 | 27 | | 0 | -7 | -24 | -4 | 4 | | 16 | 16 | | | -5 | -12 | -9 | |
| EVAPORATION | 520 | | | | | | | 33 | 101 | 125 | 108 | 49 | 23 | 26 | 57 | | |
| REG INFLOW | 14370 | 702 | 315 | 404 | 1332 | 1431 | 1634 | 1253 | 1167 | 1033 | 868 | 415 | 194 | 233 | 1003 | 1207 | 1178 |
| RELEASE | 14113 | 408 | 274 | 304 | 1158 | 1421 | 1377 | 1669 | 1703 | 1227 | 1096 | 460 | 115 | 137 | 863 | 1063 | 838 |
| STOR CHANGE | 257 | 294 | 40 | 100 | 174 | 10 | 257 | -416 | -536 | -194 | -228 | -45 | 79 | 96 | 141 | 144 | 340 |
| STORAGE | 14919. | 15212 | 15253 | 15353 | 15528 | 15538 | 15795 | 15379 | 14843 | 14649 | 14421 | 14376 | 14455 | 14551 | 14691 | 14836 | 15176 |
| ELEV FTMSL | 1594.2 | 1595.4 | 1595.5 | 1595.9 | 1596.6 | 1596.6 | 1597.6 | 1596.0 | 1593.9 | 1593.2 | 1592.3 | 1592.1 | 1592.4 | 1592.8 | 1593.3 | 1593.9 | 1595.2 |
| DISCH KCFS | 15.187 | 13.7 | 19.8 | 17.0 | 19.5 | 23.1 | 23.1 | 27.1 | 27.7 | 20.6 | 17.8 | 15.5 | 8.3 | 8.6 | 14.0 | 17.3 | 15.1 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 166 | 239 | 206 | 236 | 281 | 282 | 330 | 333 | 247 | 212 | 184 | 99 | 103 | 168 | 207 | 182 |
| PEAK POW MW | | 645 | 646 | 648 | 651 | 651 | 656 | 648 | 638 | 634 | 630 | 629 | 630 | 632 | 635 | 638 | 644 |
| ENERGY GWH | 2059.1 | 59.6 | 40.1 | 44.6 | 170.1 | 208.9 | 203.1 | 245.4 | 247.9 | 177.6 | 158.1 | 66.2 | 16.6 | 19.8 | 124.8 | 154.1 | 122.2 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 13982 | 408 | 274 | 304 | 1158 | 1421 | 1377 | 1661 | 1678 | 1196 | 1068 | 448 | 109 | 130 | 848 | 1063 | 838 |
| RELEASE | 13982 | 408 | 274 | 304 | 1158 | 1421 | 1377 | 1661 | 1678 | 1196 | 1068 | 448 | 109 | 130 | 848 | 1063 | 838 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.187 | 13.7 | 19.8 | 17.0 | 19.5 | 23.1 | 23.1 | 27.0 | 27.3 | 20.1 | 17.4 | 15.0 | 7.9 | 8.2 | 13.8 | 17.3 | 15.1 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 65 | 92 | 80 | 91 | 108 | 108 | 126 | 128 | 96 | 87 | 76 | 40 | 42 | 70 | 85 | 72 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 529 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 808.8 | 23.4 | 15.5 | 17.2 | 65.6 | 80.5 | 78.0 | 94.1 | 95.1 | 69.4 | 64.4 | 27.3 | 6.7 | 8.0 | 51.8 | 63.2 | 48.6 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 731 | 126 | 59 | 75 | 130 | 106 | 179 | 57 | 41 | -1 | -33 | -12 | -6 | -6 | -16 | -33 | 65 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 139 | | | | | | | 10 | 32 | 38 | 28 | 11 | 4 | 5 | 12 | | |
| REG INFLOW | 14494 | 532 | 332 | 379 | 1284 | 1518 | 1544 | 1690 | 1673 | 1150 | 1006 | 424 | 99 | 118 | 817 | 1027 | 900 |
| RELEASE | 14494 | 252 | 188 | 379 | 1284 | 1518 | 1544 | 1690 | 1673 | 1574 | 1558 | 681 | 99 | 119 | 708 | 686 | 541 |
| STOR CHANGE | 0 | 280 | 144 | | | | | 0 | 0 | -424 | -552 | -257 | 0 | 0 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3001 | 2449 | 2192 | 2192 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1350.0 | 1342.0 | 1337.5 | 1337.5 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.885 | 8.5 | 13.6 | 21.2 | 21.6 | 24.7 | 26.0 | 27.5 | 27.2 | 26.5 | 25.3 | 22.9 | 7.1 | 7.5 | 11.5 | 11.2 | 9.7 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 70 | 115 | 179 | 182 | 208 | 219 | 232 | 229 | 218 | 198 | 169 | 52 | 55 | 85 | 85 | 78 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 339 | 305 | 285 | 285 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1434.2 | 25.3 | 19.2 | 38.8 | 131.4 | 155.1 | 157.7 | 172.4 | 170.7 | 157.3 | 147.3 | 60.9 | 8.8 | 10.5 | 63.2 | 63.3 | 52.3 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1440 | 102 | 47 | 61 | 138 | 155 | 166 | 94 | 78 | 89 | 117 | 56 | 26 | 30 | 83 | 83 | 116 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 3 | -10 | -15 | -1 | -6 | -2 | -3 | 1 | 1 | 2 | 5 | 29 | -1 | -7 | 1 | 3 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 15777 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1734 | 1659 | 1666 | 732 | 150 | 143 | 769 | 769 | 659 |
| RELEASE | 15777 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1722 | 1636 | 1666 | 732 | 150 | 143 | 769 | 769 | 694 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 28.3 | 28.0 | 27.5 | 27.1 | 24.6 | 10.8 | 9.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 96 | 96 | 96 | 95 | 86 | 38 | 32 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 660.1 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 71.6 | 71.3 | 68.8 | 70.6 | 31.1 | 6.5 | 6.2 | 33.1 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1543 | 170 | 79 | 102 | 203 | 260 | 161 | 140 | 112 | 91 | 50 | 32 | 15 | 17 | 14 | 28 | 70 |
| DEPLETION | 305 | 8 | 4 | 5 | 26 | 38 | 34 | 42 | 42 | 28 | 13 | 8 | 4 | 4 | 16 | 17 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 17015 | 519 | 302 | 522 | 1593 | 1870 | 1811 | 1838 | 1792 | 1699 | 1703 | 756 | 161 | 155 | 767 | 780 | 747 |
| KCFS | | 17.4 | 21.7 | 29.3 | 26.8 | 30.4 | 30.4 | 29.9 | 29.1 | 28.6 | 27.7 | 25.4 | 11.6 | 9.8 | 12.5 | 12.7 | 13.5 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 22800 | 1339 | 624 | 803 | 2131 | 3088 | 5624 | 3108 | 1171 | 980 | 967 | 466 | 217 | 248 | 474 | 567 | 993 |
| DEPLETION | 3168 | 22 | 10 | 13 | 65 | 632 | 1822 | 1468 | 403 | -238 | -200 | -188 | -88 | -100 | -199 | -167 | -88 |
| CHAN STOR | 2 | 67 | -10 | -15 | -23 | -41 | -17 | 1 | 1 | 33 | 44 | 4 | 30 | -7 | -48 | -19 | 3 |
| EVAPORATION | 1893 | | | | | | | 118 | 369 | 458 | 394 | 176 | 82 | 93 | 203 | | |
| STORAGE | 45757. | 46622 | 46924 | 47177 | 47627 | 48172 | 50146 | 49832 | 48440 | 47533 | 46646 | 46372 | 46464 | 46556 | 46211 | 46147 | 46483 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 586 | 746 | 791 | 873 | 1047 | 1094 | 1166 | 1166 | 974 | 835 | 758 | 472 | 488 | 688 | 776 | 728 |
| PEAK POW MW | | 2274 | 2274 | 2278 | 2285 | 2291 | 2317 | 2313 | 2293 | 2290 | 2258 | 2237 | 2239 | 2241 | 2206 | 2226 | 2237 |
| ENERGY GWH | 7782.9 | 210.8 | 125.3 | 170.9 | 628.2 | 779.2 | 787.7 | 867.4 | 867.6 | 701.2 | 620.9 | 272.8 | 79.3 | 93.8 | 511.5 | 577.1 | 489.2 |
| DAILY GWH | | 14.1 | 17.9 | 19.0 | 20.9 | 25.1 | 26.3 | 28.0 | 28.0 | 23.4 | 20.0 | 18.2 | 11.3 | 11.7 | 16.5 | 18.6 | 17.5 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:12:58 STUDY NO 18

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 28FEB25 | 2025 | | | | | | | | | | | | 2026 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 7156 | 242 | 113 | 145 | 553 | 1137 | 1816 | 776 | 349 | 289 | 384 | 201 | 94 | 107 | 289 | 289 | 373 |
| DEPLETION | 599 | -16 | -8 | -10 | 26 | 282 | 606 | 313 | 30 | -128 | -123 | -36 | -17 | -19 | -109 | -117 | -76 |
| EVAPORATION | 498 | | | | | | | 31 | 95 | 119 | 104 | 47 | 22 | 25 | 54 | | |
| MOD INFLOW | 6059 | 258 | 120 | 155 | 527 | 855 | 1210 | 432 | 224 | 298 | 403 | 189 | 88 | 101 | 344 | 406 | 449 |
| RELEASE | 5663 | 164 | 76 | 98 | 417 | 492 | 565 | 584 | 584 | 435 | 307 | 149 | 69 | 87 | 523 | 584 | 528 |
| STOR CHANGE | 397 | 94 | 44 | 57 | 110 | 363 | 645 | -152 | -361 | -137 | 96 | 41 | 19 | 14 | -179 | -178 | -79 |
| STORAGE | 11991. | 12085 | 12129 | 12185 | 12296 | 12659 | 13304 | 13152 | 12791 | 12654 | 12750 | 12791 | 12810 | 12823 | 12644 | 12466 | 12387 |
| ELEV FTMSL | 2219.6 | 2220.1 | 2220.3 | 2220.6 | 2221.2 | 2223.2 | 2226.6 | 2225.8 | 2223.9 | 2223.2 | 2223.7 | 2223.9 | 2224.0 | 2224.1 | 2223.1 | 2222.2 | 2221.7 |
| DISCH KCFS | 9.000 | 5.5 | 5.5 | 5.5 | 7.0 | 8.0 | 9.5 | 9.5 | 9.5 | 7.3 | 5.0 | 5.0 | 5.0 | 5.5 | 8.5 | 9.5 | 9.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 71 | 71 | 71 | 91 | 105 | 125 | 126 | 125 | 96 | 66 | 66 | 66 | 73 | 112 | 124 | 124 |
| PEAK POW MW | | 178 | 178 | 178 | 179 | 180 | 183 | 183 | 181 | 180 | 181 | 181 | 181 | 181 | 180 | 179 | 179 |
| ENERGY GWH | 899.5 | 25.6 | 12.0 | 15.4 | 65.5 | 77.8 | 90.3 | 93.8 | 93.3 | 69.2 | 49.0 | 23.7 | 11.1 | 13.9 | 83.1 | 92.4 | 83.2 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 10840 | 479 | 223 | 287 | 758 | 1362 | 3080 | 2014 | 563 | 468 | 468 | 190 | 88 | 101 | 178 | 249 | 332 |
| DEPLETION | 1210 | 2 | 1 | 1 | -51 | 199 | 961 | 826 | 149 | -177 | -77 | -167 | -78 | -89 | -134 | -93 | -65 |
| CHAN STOR | -5 | 37 | | | -16 | -10 | -15 | | | 22 | 23 | | 0 | -5 | -31 | -10 | |
| EVAPORATION | 587 | | | | | | | 36 | 113 | 141 | 123 | 55 | 26 | 30 | 64 | | |
| REG INFLOW | 14701 | 676 | 299 | 384 | 1210 | 1645 | 2669 | 1736 | 885 | 961 | 753 | 449 | 210 | 243 | 741 | 916 | 925 |
| RELEASE | 14220 | 446 | 208 | 268 | 1071 | 1322 | 1398 | 1383 | 1383 | 1115 | 922 | 446 | 208 | 246 | 1168 | 1383 | 1250 |
| STOR CHANGE | 481 | 230 | 90 | 116 | 139 | 323 | 1270 | 353 | -499 | -154 | -169 | 3 | 1 | -3 | -428 | -468 | -325 |
| STORAGE | 14358. | 14588 | 14678 | 14794 | 14933 | 15255 | 16526 | 16879 | 16380 | 16226 | 16057 | 16060 | 16062 | 16059 | 15631 | 15163 | 14838 |
| ELEV FTMSL | 1825.6 | 1826.5 | 1826.8 | 1827.3 | 1827.8 | 1828.9 | 1833.4 | 1834.6 | 1832.9 | 1832.4 | 1831.8 | 1831.8 | 1831.8 | 1831.8 | 1830.3 | 1828.6 | 1827.4 |
| DISCH KCFS | 20.500 | 15.0 | 15.0 | 15.0 | 18.0 | 21.5 | 23.5 | 22.5 | 22.5 | 18.7 | 15.0 | 15.0 | 15.0 | 15.5 | 19.0 | 22.5 | 22.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 173 | 174 | 174 | 209 | 251 | 279 | 272 | 272 | 225 | 180 | 180 | 180 | 185 | 226 | 264 | 262 |
| PEAK POW MW | | 475 | 477 | 479 | 481 | 487 | 508 | 513 | 505 | 502 | 500 | 500 | 500 | 500 | 493 | 485 | 479 |
| ENERGY GWH | 2037.8 | 62.3 | 29.2 | 37.6 | 150.6 | 186.5 | 200.7 | 202.4 | 202.0 | 162.0 | 133.8 | 64.6 | 30.2 | 35.6 | 168.0 | 196.5 | 175.8 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 2260 | 296 | 138 | 177 | 477 | 218 | 527 | 184 | 84 | 92 | 25 | 21 | 10 | 11 | -59 | -25 | 84 |
| DEPLETION | 860 | 27 | 13 | 16 | 55 | 85 | 185 | 230 | 157 | 37 | -16 | 1 | 0 | 0 | 15 | 22 | 33 |
| CHAN STOR | -9 | 25 | | 0 | -13 | -15 | -9 | 4 | | 17 | 17 | | | -2 | -16 | -16 | |
| EVAPORATION | 534 | | | | | | | 34 | 105 | 129 | 110 | 49 | 23 | 26 | 57 | | |
| REG INFLOW | 15077 | 740 | 334 | 429 | 1480 | 1440 | 1732 | 1308 | 1205 | 1058 | 870 | 417 | 195 | 228 | 1021 | 1321 | 1301 |
| RELEASE | 14582 | 378 | 261 | 286 | 1125 | 1394 | 1335 | 1730 | 1767 | 1576 | 1087 | 519 | 192 | 191 | 853 | 1066 | 820 |
| STOR CHANGE | 495 | 361 | 73 | 143 | 355 | 46 | 396 | -423 | -562 | -518 | -217 | -102 | 3 | 37 | 167 | 254 | 481 |
| STORAGE | 15176. | 15537 | 15610 | 15752 | 16108 | 16153 | 16550 | 16127 | 15565 | 15047 | 14830 | 14728 | 14731 | 14767 | 14935 | 15189 | 15670 |
| ELEV FTMSL | 1595.2 | 1596.6 | 1596.9 | 1597.4 | 1598.7 | 1598.9 | 1600.3 | 1598.8 | 1596.7 | 1594.7 | 1593.9 | 1593.5 | 1593.5 | 1593.6 | 1594.3 | 1595.3 | 1597.1 |
| DISCH KCFS | 15.081 | 12.7 | 18.8 | 16.0 | 18.9 | 22.7 | 22.4 | 28.1 | 28.7 | 26.5 | 17.7 | 17.5 | 13.8 | 12.1 | 13.9 | 17.3 | 14.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 155 | 229 | 196 | 232 | 279 | 277 | 347 | 351 | 320 | 213 | 209 | 166 | 145 | 167 | 209 | 179 |
| PEAK POW MW | | 651 | 653 | 655 | 662 | 662 | 670 | 662 | 652 | 642 | 638 | 636 | 636 | 637 | 640 | 645 | 654 |
| ENERGY GWH | 2149.8 | 55.7 | 38.4 | 42.3 | 167.0 | 207.6 | 199.8 | 258.3 | 261.0 | 230.4 | 158.2 | 75.3 | 27.9 | 27.8 | 124.1 | 155.6 | 120.6 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 14451 | 378 | 261 | 286 | 1125 | 1394 | 1335 | 1723 | 1742 | 1545 | 1060 | 507 | 186 | 185 | 839 | 1066 | 820 |
| RELEASE | 14451 | 378 | 261 | 286 | 1125 | 1394 | 1335 | 1723 | 1742 | 1545 | 1060 | 507 | 186 | 185 | 839 | 1066 | 820 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.081 | 12.7 | 18.8 | 16.0 | 18.9 | 22.7 | 22.4 | 28.0 | 28.3 | 26.0 | 17.2 | 17.0 | 13.4 | 11.6 | 13.6 | 17.3 | 14.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 60 | 88 | 75 | 89 | 106 | 105 | 131 | 133 | 123 | 85 | 85 | 68 | 59 | 69 | 85 | 71 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 517 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 834.5 | 21.7 | 14.8 | 16.2 | 63.7 | 79.0 | 75.7 | 97.6 | 98.7 | 88.6 | 63.0 | 30.7 | 11.4 | 11.3 | 51.2 | 63.4 | 47.6 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 880 | 151 | 71 | 91 | 157 | 127 | 215 | 68 | 49 | | -39 | -15 | -7 | -8 | -20 | -39 | 78 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 145 | | | | | | | 10 | 32 | 39 | 31 | 12 | 5 | 5 | 12 | | |
| REG INFLOW | 15106 | 529 | 330 | 376 | 1278 | 1512 | 1538 | 1763 | 1744 | 1498 | 989 | 480 | 174 | 171 | 804 | 1024 | 895 |
| RELEASE | 15106 | 248 | 186 | 376 | 1278 | 1512 | 1538 | 1763 | 1744 | 1642 | 1628 | 734 | 344 | 197 | 695 | 683 | 536 |
| STOR CHANGE | 0 | 280 | 144 | 0 | | | | 0 | 0 | -144 | -639 | -254 | -170 | -26 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3281 | 2642 | 2388 | 2218 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1353.5 | 1345.0 | 1341.0 | 1338.0 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.734 | 8.3 | 13.4 | 21.1 | 21.5 | 24.6 | 25.9 | 28.7 | 28.4 | 27.6 | 26.5 | 24.7 | 24.8 | 12.4 | 11.3 | 11.1 | 9.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 69 | 113 | 178 | 182 | 208 | 218 | 242 | 239 | 231 | 213 | 188 | 183 | 91 | 83 | 85 | 77 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 350 | 319 | 301 | 287 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1499.6 | 25.0 | 19.1 | 38.5 | 130.8 | 154.5 | 157.1 | 179.7 | 177.9 | 166.4 | 158.1 | 67.5 | 30.7 | 17.5 | 62.0 | 63.1 | 51.8 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1494 | 106 | 49 | 63 | 144 | 161 | 172 | 98 | 80 | 92 | 121 | 58 | 27 | 31 | 86 | 86 | 121 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 3 | -10 | -15 | -1 | -6 | -2 | -5 | 1 | 1 | 2 | 3 | 0 | 23 | 2 | 0 | 3 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 16443 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1814 | 1807 | 1731 | 1740 | 785 | 367 | 246 | 769 | 769 | 659 |
| RELEASE | 16443 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1814 | 1795 | 1708 | 1740 | 785 | 367 | 246 | 769 | 769 | 694 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 29.5 | 29.2 | 28.7 | 28.3 | 26.4 | 26.4 | 15.5 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 100 | 99 | 99 | 99 | 93 | 93 | 55 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 687.0 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 74.2 | 74.0 | 71.6 | 73.7 | 33.3 | 15.5 | 10.5 | 33.0 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1770 | 195 | 91 | 117 | 233 | 298 | 185 | 161 | 129 | 105 | 57 | 36 | 17 | 19 | 16 | 32 | 80 |
| DEPLETION | 305 | 8 | 4 | 5 | 26 | 38 | 34 | 42 | 42 | 28 | 13 | 8 | 4 | 4 | 16 | 17 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 17908 | 543 | 313 | 537 | 1623 | 1908 | 1835 | 1933 | 1882 | 1785 | 1784 | 814 | 380 | 261 | 769 | 784 | 757 |
| KCFS | | 18.3 | 22.5 | 30.1 | 27.3 | 31.0 | 30.8 | 31.4 | 30.6 | 30.0 | 29.0 | 27.4 | 27.4 | 16.5 | 12.5 | 12.7 | 13.6 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 24400 | 1467 | 684 | 880 | 2322 | 3303 | 5995 | 3301 | 1254 | 1046 | 1016 | 491 | 229 | 262 | 490 | 592 | 1068 |
| DEPLETION | 3168 | 22 | 10 | 13 | 65 | 632 | 1822 | 1468 | 403 | -238 | -200 | -188 | -88 | -100 | -199 | -167 | -88 |
| CHAN STOR | -15 | 64 | -10 | -15 | -30 | -32 | -27 | -1 | 1 | 40 | 42 | 3 | 0 | 16 | -45 | -26 | 3 |
| EVAPORATION | 1937 | | | | | | | 121 | 378 | 469 | 404 | 180 | 83 | 95 | 206 | | |
| STORAGE | 46483. | 47449 | 47800 | 48115 | 48720 | 49451 | 51763 | 51541 | 50132 | 49202 | 48273 | 47960 | 47813 | 47834 | 47504 | 47454 | 47855 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 570 | 731 | 777 | 884 | 1039 | 1101 | 1218 | 1219 | 1095 | 855 | 820 | 755 | 608 | 701 | 812 | 757 |
| PEAK POW MW | | 2286 | 2287 | 2291 | 2301 | 2309 | 2340 | 2337 | 2318 | 2309 | 2292 | 2272 | 2259 | 2257 | 2223 | 2244 | 2256 |
| ENERGY GWH | 8108.1 | 205.3 | 122.9 | 167.8 | 636.4 | 773.3 | 792.9 | 905.9 | 906.9 | 788.2 | 635.8 | 295.3 | 126.8 | 116.7 | 521.5 | 604.0 | 508.7 |
| DAILY GWH | | 13.7 | 17.6 | 18.6 | 21.2 | 24.9 | 26.4 | 29.2 | 29.3 | 26.3 | 20.5 | 19.7 | 18.1 | 14.6 | 16.8 | 19.5 | 18.2 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:13:18 STUDY NO 19

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 28FEB21 | 2021 | | | | | | | | | | | | 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 5518 | 202 | 94 | 121 | 458 | 885 | 1228 | 619 | 271 | 240 | 323 | 151 | 70 | 81 | 229 | 239 | 307 |
| DEPLETION | 545 | -23 | -11 | -14 | 20 | 281 | 569 | 303 | 43 | -117 | -111 | -37 | -17 | -19 | -125 | -130 | -68 |
| EVAPORATION | 475 | | | | | | | 29 | 92 | 114 | 99 | 45 | 21 | 24 | 51 | | |
| MOD INFLOW | 4498 | 225 | 105 | 135 | 438 | 604 | 659 | 287 | 136 | 243 | 335 | 143 | 67 | 76 | 303 | 369 | 375 |
| RELEASE | 5684 | 179 | 83 | 107 | 417 | 461 | 565 | 584 | 584 | 459 | 369 | 179 | 83 | 100 | 461 | 553 | 500 |
| STOR CHANGE | -1186 | 46 | 21 | 28 | 21 | 143 | 94 | -298 | -448 | -216 | -34 | -36 | -17 | -24 | -159 | -184 | -125 |
| STORAGE | 12368. | 12414 | 12436 | 12463 | 12485 | 12628 | 12721 | 12424 | 11976 | 11760 | 11726 | 11690 | 11674 | 11650 | 11491 | 11307 | 11182 |
| ELEV FTMSL | 2221.6 | 2221.9 | 2222.0 | 2222.2 | 2222.3 | 2223.0 | 2223.6 | 2221.9 | 2219.5 | 2218.3 | 2218.1 | 2217.9 | 2217.8 | 2217.6 | 2216.7 | 2215.7 | 2215.0 |
| DISCH KCFS | 11.000 | 6.0 | 6.0 | 6.0 | 7.0 | 7.5 | 9.5 | 9.5 | 9.5 | 7.7 | 6.0 | 6.0 | 6.0 | 6.3 | 7.5 | 9.0 | 9.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 78 | 78 | 78 | 92 | 98 | 125 | 124 | 123 | 99 | 77 | 77 | 77 | 81 | 96 | 114 | 114 |
| PEAK POW MW | | 179 | 179 | 179 | 179 | 180 | 181 | 179 | 177 | 175 | 175 | 175 | 175 | 175 | 174 | 172 | 171 |
| ENERGY GWH | 888.8 | 28.2 | 13.2 | 16.9 | 65.9 | 73.1 | 89.7 | 92.5 | 91.6 | 71.4 | 57.4 | 27.7 | 12.9 | 15.5 | 71.3 | 85.0 | 76.5 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 7937 | 410 | 191 | 246 | 622 | 1180 | 2322 | 1003 | 349 | 230 | 413 | 161 | 75 | 86 | 150 | 209 | 290 |
| DEPLETION | 1379 | 32 | 15 | 19 | 45 | 221 | 871 | 741 | 131 | -168 | -58 | -141 | -66 | -75 | -97 | -57 | -35 |
| CHAN STOR | 21 | 52 | | | -10 | -5 | -21 | | | 19 | 18 | | | -3 | -13 | -16 | |
| EVAPORATION | 551 | | | | | | | 35 | 107 | 133 | 115 | 52 | 24 | 28 | 59 | | |
| REG INFLOW | 11711 | 608 | 259 | 334 | 983 | 1415 | 1996 | 812 | 695 | 742 | 743 | 429 | 200 | 230 | 637 | 804 | 825 |
| RELEASE | 13148 | 446 | 208 | 268 | 1071 | 1230 | 1250 | 1230 | 1230 | 1040 | 922 | 446 | 208 | 238 | 1138 | 1168 | 1055 |
| STOR CHANGE | -1437 | 162 | 51 | 66 | -88 | 185 | 746 | -418 | -535 | -297 | -179 | -17 | -8 | -8 | -501 | -365 | -230 |
| STORAGE | 14817. | 14979 | 15030 | 15096 | 15008 | 15193 | 15939 | 15521 | 14986 | 14689 | 14509 | 14492 | 14484 | 14476 | 13975 | 13611 | 13380 |
| ELEV FTMSL | 1827.3 | 1827.9 | 1828.1 | 1828.4 | 1828.0 | 1828.7 | 1831.4 | 1829.9 | 1828.0 | 1826.9 | 1826.2 | 1826.1 | 1826.1 | 1826.1 | 1824.2 | 1822.8 | 1821.9 |
| DISCH KCFS | 23.000 | 15.0 | 15.0 | 15.0 | 18.0 | 20.0 | 21.0 | 20.0 | 20.0 | 17.5 | 15.0 | 15.0 | 15.0 | 15.0 | 18.5 | 19.0 | 19.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 175 | 175 | 175 | 210 | 233 | 248 | 237 | 234 | 203 | 174 | 173 | 173 | 173 | 212 | 215 | 213 |
| PEAK POW MW | | 482 | 483 | 484 | 482 | 485 | 498 | 491 | 482 | 477 | 474 | 473 | 473 | 473 | 464 | 458 | 454 |
| ENERGY GWH | 1844.2 | 62.9 | 29.4 | 37.9 | 151.3 | 173.7 | 178.3 | 176.2 | 174.3 | 146.2 | 129.1 | 62.3 | 29.1 | 33.2 | 157.4 | 159.8 | 143.2 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1213 | 179 | 83 | 107 | 211 | 116 | 322 | 111 | 42 | 47 | 5 | 8 | 4 | 4 | -47 | -21 | 42 |
| DEPLETION | 817 | 26 | 12 | 16 | 54 | 82 | 175 | 217 | 147 | 35 | -15 | 1 | 0 | 0 | 14 | 21 | 32 |
| CHAN STOR | 18 | 35 | | 0 | -13 | -9 | -4 | 4 | | 12 | 12 | | | | -17 | -2 | |
| EVAPORATION | 505 | | | | | | | 32 | 98 | 121 | 105 | 47 | 22 | 25 | 55 | | |
| REG INFLOW | 13058 | 634 | 279 | 359 | 1215 | 1255 | 1392 | 1096 | 1027 | 943 | 849 | 407 | 190 | 217 | 1005 | 1124 | 1065 |
| RELEASE | 14539 | 481 | 308 | 347 | 1209 | 1494 | 1481 | 1711 | 1744 | 1093 | 1252 | 355 | 97 | 143 | 879 | 1068 | 878 |
| STOR CHANGE | -1481 | 153 | -28 | 12 | 6 | -239 | -88 | -614 | -717 | -150 | -403 | 52 | 93 | 74 | 126 | 56 | 188 |
| STORAGE | 15649. | 15803 | 15774 | 15787 | 15793 | 15553 | 15465 | 14851 | 14133 | 13983 | 13580 | 13632 | 13725 | 13799 | 13925 | 13981 | 14168 |
| ELEV FTMSL | 1597.0 | 1597.6 | 1597.5 | 1597.5 | 1597.6 | 1596.7 | 1596.3 | 1594.0 | 1591.1 | 1590.5 | 1588.8 | 1589.0 | 1589.4 | 1589.7 | 1590.2 | 1590.5 | 1591.2 |
| DISCH KCFS | 15.912 | 16.2 | 22.2 | 19.4 | 20.3 | 24.3 | 24.9 | 27.8 | 28.4 | 18.4 | 20.4 | 11.9 | 7.0 | 9.0 | 14.3 | 17.4 | 15.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 198 | 271 | 238 | 248 | 296 | 302 | 335 | 337 | 217 | 238 | 139 | 82 | 106 | 168 | 204 | 187 |
| PEAK POW MW | | 656 | 656 | 656 | 656 | 652 | 650 | 638 | 624 | 621 | 613 | 614 | 616 | 617 | 620 | 621 | 625 |
| ENERGY GWH | 2104.1 | 71.2 | 45.5 | 51.4 | 178.9 | 220.2 | 217.5 | 249.2 | 250.4 | 155.9 | 177.4 | 50.2 | 13.7 | 20.3 | 125.0 | 152.0 | 125.4 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 14408 | 481 | 308 | 347 | 1209 | 1494 | 1481 | 1703 | 1719 | 1062 | 1225 | 342 | 91 | 136 | 865 | 1068 | 878 |
| RELEASE | 14408 | 481 | 308 | 347 | 1209 | 1494 | 1481 | 1703 | 1719 | 1062 | 1225 | 342 | 91 | 136 | 865 | 1068 | 878 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.912 | 16.2 | 22.2 | 19.4 | 20.3 | 24.3 | 24.9 | 27.7 | 28.0 | 17.8 | 19.9 | 11.5 | 6.5 | 8.6 | 14.1 | 17.4 | 15.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 77 | 104 | 91 | 95 | 114 | 116 | 130 | 131 | 87 | 99 | 58 | 33 | 44 | 71 | 85 | 76 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 537 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 833.7 | 27.6 | 17.4 | 19.7 | 68.5 | 84.6 | 83.9 | 96.4 | 97.4 | 62.4 | 73.7 | 20.9 | 5.6 | 8.4 | 52.8 | 63.5 | 51.0 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 380 | 74 | 34 | 44 | 92 | 54 | 103 | 27 | 16 | -5 | -27 | -11 | -5 | -6 | -22 | -27 | 38 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 138 | | | | | | | 10 | 32 | 37 | 27 | 11 | 4 | 5 | 12 | | |
| REG INFLOW | 14569 | 553 | 341 | 390 | 1297 | 1539 | 1572 | 1702 | 1689 | 1013 | 1169 | 319 | 82 | 125 | 828 | 1038 | 913 |
| RELEASE | 14569 | 273 | 197 | 390 | 1297 | 1539 | 1572 | 1702 | 1689 | 1586 | 1572 | 576 | 81 | 125 | 718 | 697 | 554 |
| STOR CHANGE | 0 | 280 | 144 | 0 | 0 | | | 0 | 0 | -573 | -403 | -257 | 0 | 0 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 2852 | 2449 | 2192 | 2192 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1348.0 | 1342.0 | 1337.5 | 1337.5 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 10.024 | 9.2 | 14.2 | 21.9 | 21.8 | 25.0 | 26.4 | 27.7 | 27.5 | 26.7 | 25.6 | 19.4 | 5.9 | 7.9 | 11.7 | 11.3 | 10.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 76 | 120 | 185 | 184 | 211 | 223 | 233 | 232 | 218 | 198 | 144 | 43 | 58 | 86 | 86 | 80 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 332 | 305 | 285 | 285 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1440.1 | 27.4 | 20.2 | 39.9 | 132.7 | 157.2 | 160.4 | 173.6 | 172.3 | 157.1 | 147.3 | 51.7 | 7.2 | 11.1 | 64.1 | 64.3 | 53.6 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1236 | 82 | 38 | 49 | 124 | 134 | 139 | 82 | 62 | 77 | 103 | 49 | 23 | 26 | 72 | 72 | 103 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 2 | -10 | -15 | 0 | -6 | -3 | -2 | 0 | 2 | 2 | 11 | 25 | -4 | -7 | 1 | 3 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 15648 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1734 | 1659 | 1666 | 628 | 125 | 143 | 769 | 769 | 659 |
| RELEASE | 15648 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1722 | 1636 | 1666 | 628 | 125 | 143 | 769 | 769 | 694 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 28.3 | 28.0 | 27.5 | 27.1 | 21.1 | 9.0 | 9.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 96 | 96 | 96 | 95 | 74 | 32 | 32 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 654.7 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 71.6 | 71.3 | 68.8 | 70.6 | 26.8 | 5.4 | 6.2 | 33.1 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 816 | 102 | 47 | 61 | 105 | 140 | 76 | 82 | 46 | 35 | 35 | 21 | 10 | 11 | 6 | 17 | 23 |
| DEPLETION | 295 | 8 | 4 | 5 | 25 | 38 | 33 | 42 | 40 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 16 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 16169 | 451 | 270 | 482 | 1496 | 1750 | 1727 | 1780 | 1728 | 1644 | 1688 | 641 | 131 | 150 | 760 | 770 | 701 |
| KCFS | | 15.2 | 19.4 | 27.0 | 25.1 | 28.5 | 29.0 | 29.0 | 28.1 | 27.6 | 27.5 | 21.6 | 9.5 | 9.4 | 12.4 | 12.5 | 12.6 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 17100 | 1048 | 489 | 628 | 1612 | 2509 | 4190 | 1924 | 786 | 624 | 852 | 379 | 177 | 202 | 388 | 489 | 803 |
| DEPLETION | 3230 | 45 | 21 | 27 | 153 | 650 | 1684 | 1360 | 386 | -221 | -168 | -164 | -77 | -87 | -180 | -146 | -52 |
| CHAN STOR | 37 | 89 | -10 | -15 | -23 | -20 | -28 | 2 | 0 | 32 | 31 | 11 | 26 | -7 | -37 | -17 | 3 |
| EVAPORATION | 1842 | | | | | | | 116 | 361 | 446 | 383 | 170 | 79 | 90 | 196 | | |
| STORAGE | 47794. | 48435 | 48624 | 48729 | 48669 | 48758 | 49509 | 48179 | 46491 | 45277 | 44258 | 44000 | 44068 | 44110 | 43686 | 43534 | 43690 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 645 | 805 | 849 | 911 | 1044 | 1110 | 1155 | 1152 | 919 | 881 | 666 | 440 | 493 | 677 | 750 | 713 |
| PEAK POW MW | | 2299 | 2297 | 2299 | 2297 | 2297 | 2308 | 2288 | 2263 | 2260 | 2222 | 2202 | 2204 | 2205 | 2168 | 2187 | 2194 |
| ENERGY GWH | 7765.6 | 232.3 | 135.2 | 183.5 | 656.0 | 776.8 | 799.1 | 859.5 | 857.2 | 661.8 | 655.4 | 239.6 | 73.9 | 94.7 | 503.6 | 557.7 | 479.2 |
| DAILY GWH | | 15.5 | 19.3 | 20.4 | 21.9 | 25.1 | 26.6 | 27.7 | 27.7 | 22.1 | 21.1 | 16.0 | 10.6 | 11.8 | 16.2 | 18.0 | 17.1 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:13:18 STUDY NO 20

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 28FEB22 | 2022 | | | | | | | | | | | | 2023 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 5601 | 205 | 95 | 123 | 465 | 898 | 1247 | 629 | 275 | 243 | 328 | 153 | 71 | 82 | 232 | 243 | 312 |
| DEPLETION | 575 | -15 | -7 | -9 | 35 | 280 | 561 | 310 | 47 | -118 | -112 | -38 | -18 | -20 | -125 | -130 | -68 |
| EVAPORATION | 449 | | | | | | | 28 | 87 | 107 | 94 | 42 | 20 | 23 | 49 | | |
| MOD INFLOW | 4577 | 219 | 102 | 131 | 430 | 618 | 686 | 291 | 141 | 254 | 346 | 148 | 69 | 79 | 308 | 373 | 380 |
| RELEASE | 5441 | 149 | 69 | 89 | 446 | 492 | 536 | 553 | 553 | 415 | 307 | 149 | 69 | 95 | 523 | 523 | 472 |
| STOR CHANGE | -865 | 70 | 33 | 42 | -16 | 126 | 150 | -262 | -412 | -162 | 39 | -1 | 0 | -16 | -214 | -150 | -92 |
| STORAGE | 11182. | 11253 | 11286 | 11328 | 11311 | 11438 | 11588 | 11326 | 10914 | 10752 | 10791 | 10790 | 10790 | 10774 | 10559 | 10409 | 10317 |
| ELEV FTMSL | 2215.0 | 2215.4 | 2215.6 | 2215.8 | 2215.7 | 2216.4 | 2217.3 | 2215.8 | 2213.4 | 2212.4 | 2212.7 | 2212.7 | 2212.7 | 2212.6 | 2211.3 | 2210.4 | 2209.8 |
| DISCH KCFS | 9.000 | 5.0 | 5.0 | 5.0 | 7.5 | 8.0 | 9.0 | 9.0 | 9.0 | 7.0 | 5.0 | 5.0 | 5.0 | 6.0 | 8.5 | 8.5 | 8.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 63 | 63 | 64 | 95 | 102 | 115 | 114 | 113 | 87 | 63 | 63 | 63 | 75 | 106 | 105 | 105 |
| PEAK POW MW | | 172 | 172 | 172 | 172 | 173 | 174 | 172 | 169 | 168 | 169 | 169 | 169 | 168 | 167 | 166 | 165 |
| ENERGY GWH | 827.7 | 22.8 | 10.7 | 13.7 | 68.5 | 75.6 | 82.5 | 85.2 | 84.4 | 62.9 | 46.6 | 22.5 | 10.5 | 14.4 | 78.7 | 78.3 | 70.4 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 8154 | 422 | 197 | 253 | 639 | 1212 | 2386 | 1030 | 358 | 236 | 424 | 166 | 77 | 88 | 154 | 215 | 298 |
| DEPLETION | 1191 | 18 | 8 | 11 | 30 | 206 | 866 | 754 | 139 | -171 | -62 | -161 | -75 | -86 | -131 | -91 | -65 |
| CHAN STOR | 5 | 42 | 0 | 0 | -26 | -5 | -10 | | | 21 | 21 | | 0 | -11 | -27 | | |
| EVAPORATION | 525 | | | | | | | 33 | 102 | 126 | 109 | 49 | 23 | 26 | 56 | | |
| REG INFLOW | 11885 | 595 | 258 | 331 | 1029 | 1493 | 2045 | 797 | 671 | 717 | 705 | 426 | 199 | 232 | 725 | 829 | 835 |
| RELEASE | 12931 | 446 | 208 | 268 | 1012 | 1138 | 1220 | 1199 | 1199 | 1013 | 892 | 431 | 201 | 254 | 1168 | 1199 | 1083 |
| STOR CHANGE | -1047 | 149 | 49 | 64 | 17 | 355 | 825 | -402 | -528 | -296 | -187 | -6 | -3 | -22 | -443 | -370 | -248 |
| STORAGE | 13380. | 13529 | 13578 | 13642 | 13659 | 14014 | 14839 | 14437 | 13908 | 13612 | 13425 | 13420 | 13417 | 13395 | 12952 | 12581 | 12333 |
| ELEV FTMSL | 1821.9 | 1822.4 | 1822.6 | 1822.9 | 1823.0 | 1824.3 | 1827.4 | 1825.9 | 1823.9 | 1822.8 | 1822.0 | 1822.0 | 1822.0 | 1821.9 | 1820.2 | 1818.6 | 1817.6 |
| DISCH KCFS | 19.000 | 15.0 | 15.0 | 15.0 | 17.0 | 18.5 | 20.5 | 19.5 | 19.5 | 17.0 | 14.5 | 14.5 | 14.5 | 16.0 | 19.0 | 19.5 | 19.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 168 | 169 | 169 | 192 | 209 | 235 | 225 | 222 | 193 | 163 | 163 | 163 | 179 | 211 | 214 | 212 |
| PEAK POW MW | | 456 | 457 | 458 | 459 | 465 | 480 | 472 | 463 | 458 | 454 | 454 | 454 | 454 | 446 | 439 | 434 |
| ENERGY GWH | 1761.4 | 60.6 | 28.4 | 36.5 | 138.0 | 155.8 | 169.4 | 167.5 | 165.5 | 138.6 | 121.4 | 58.6 | 27.3 | 34.4 | 157.1 | 159.4 | 142.7 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1239 | 182 | 85 | 109 | 215 | 118 | 329 | 113 | 44 | 49 | 5 | 8 | 4 | 4 | -48 | -22 | 43 |
| DEPLETION | 830 | 27 | 12 | 16 | 54 | 83 | 178 | 221 | 150 | 35 | -15 | 1 | 0 | 0 | 15 | 21 | 32 |
| CHAN STOR | -2 | 19 | | 0 | -9 | -7 | -9 | 5 | | 12 | 13 | | 0 | -7 | -15 | -2 | |
| EVAPORATION | 467 | | | | | | | 30 | 90 | 111 | 97 | 44 | 21 | 24 | 52 | | |
| REG INFLOW | 12871 | 621 | 281 | 361 | 1163 | 1166 | 1361 | 1066 | 1003 | 929 | 827 | 395 | 184 | 227 | 1039 | 1154 | 1094 |
| RELEASE | 13950 | 477 | 306 | 345 | 1205 | 1491 | 1475 | 1709 | 1743 | 950 | 932 | 232 | 124 | 139 | 879 | 1068 | 876 |
| STOR CHANGE | -1080 | 144 | -25 | 17 | -42 | -326 | -113 | -643 | -740 | -22 | -104 | 163 | 60 | 88 | 160 | 86 | 218 |
| STORAGE | 14168. | 14312 | 14287 | 14303 | 14261 | 13936 | 13822 | 13180 | 12440 | 12418 | 12314 | 12477 | 12537 | 12625 | 12785 | 12870 | 13088 |
| ELEV FTMSL | 1591.2 | 1591.8 | 1591.7 | 1591.8 | 1591.6 | 1590.3 | 1589.8 | 1587.2 | 1584.0 | 1583.9 | 1583.4 | 1584.1 | 1584.4 | 1584.8 | 1585.5 | 1585.8 | 1586.8 |
| DISCH KCFS | 15.804 | 16.0 | 22.1 | 19.3 | 20.3 | 24.3 | 24.8 | 27.8 | 28.4 | 16.0 | 15.2 | 7.8 | 8.9 | 8.8 | 14.3 | 17.4 | 15.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 190 | 261 | 229 | 240 | 286 | 290 | 322 | 323 | 181 | 172 | 89 | 102 | 100 | 163 | 199 | 181 |
| PEAK POW MW | | 628 | 627 | 627 | 627 | 620 | 618 | 604 | 587 | 587 | 584 | 588 | 589 | 591 | 595 | 597 | 602 |
| ENERGY GWH | 1953.4 | 68.4 | 43.9 | 49.4 | 172.7 | 212.4 | 209.0 | 239.7 | 240.4 | 130.4 | 127.7 | 31.9 | 17.1 | 19.2 | 121.5 | 148.0 | 121.9 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 13819 | 477 | 306 | 345 | 1205 | 1491 | 1475 | 1701 | 1718 | 919 | 904 | 219 | 118 | 133 | 864 | 1068 | 876 |
| RELEASE | 13819 | 477 | 306 | 345 | 1205 | 1491 | 1475 | 1701 | 1718 | 919 | 904 | 219 | 118 | 133 | 864 | 1068 | 876 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.804 | 16.0 | 22.1 | 19.3 | 20.3 | 24.3 | 24.8 | 27.7 | 27.9 | 15.4 | 14.7 | 7.4 | 8.5 | 8.4 | 14.1 | 17.4 | 15.8 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 76 | 103 | 90 | 95 | 114 | 116 | 129 | 131 | 76 | 74 | 37 | 43 | 42 | 71 | 85 | 76 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 538 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 799.8 | 27.4 | 17.3 | 19.5 | 68.3 | 84.5 | 83.5 | 96.3 | 97.3 | 54.5 | 55.2 | 13.5 | 7.3 | 8.1 | 52.8 | 63.5 | 50.8 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 393 | 76 | 35 | 46 | 95 | 56 | 107 | 28 | 17 | -6 | -28 | -11 | -5 | -6 | -22 | -28 | 39 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 133 | | | | | | | 10 | 32 | 36 | 25 | 10 | 4 | 5 | 12 | | |
| REG INFLOW | 13999 | 552 | 341 | 389 | 1296 | 1538 | 1570 | 1701 | 1689 | 870 | 850 | 199 | 108 | 121 | 827 | 1037 | 912 |
| RELEASE | 13999 | 272 | 197 | 389 | 1296 | 1538 | 1570 | 1701 | 1689 | 1585 | 1369 | 199 | 108 | 121 | 718 | 696 | 553 |
| STOR CHANGE | 0 | 280 | 144 | | 0 | 0 | | 0 | 0 | -715 | -518 | 0 | 0 | 0 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 2710 | 2192 | 2192 | 2192 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1346.0 | 1337.5 | 1337.5 | 1337.5 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.970 | 9.1 | 14.2 | 21.8 | 21.8 | 25.0 | 26.4 | 27.7 | 27.5 | 26.6 | 22.3 | 6.7 | 7.8 | 7.6 | 11.7 | 11.3 | 10.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 76 | 120 | 184 | 184 | 211 | 223 | 233 | 232 | 216 | 168 | 49 | 57 | 56 | 86 | 86 | 80 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 324 | 284 | 285 | 285 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1383.2 | 27.3 | 20.1 | 39.9 | 132.7 | 157.1 | 160.2 | 173.5 | 172.3 | 155.7 | 124.8 | 17.6 | 9.6 | 10.7 | 64.0 | 64.3 | 53.5 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1249 | 83 | 39 | 50 | 125 | 135 | 141 | 83 | 62 | 78 | 104 | 50 | 23 | 26 | 73 | 73 | 104 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 2 | -10 | -15 | 0 | -6 | -3 | -2 | 0 | 2 | 8 | 29 | -2 | 0 | -7 | 1 | 3 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 15091 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1734 | 1659 | 1470 | 268 | 125 | 143 | 769 | 769 | 659 |
| RELEASE | 15091 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1722 | 1636 | 1470 | 268 | 125 | 143 | 769 | 769 | 694 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 28.3 | 28.0 | 27.5 | 23.9 | 9.0 | 9.0 | 9.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 96 | 96 | 96 | 84 | 32 | 32 | 32 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 631.3 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 71.6 | 71.3 | 68.8 | 62.5 | 11.6 | 5.4 | 6.2 | 33.0 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 864 | 107 | 50 | 64 | 111 | 148 | 80 | 86 | 49 | 38 | 37 | 22 | 10 | 11 | 6 | 19 | 25 |
| DEPLETION | 297 | 8 | 4 | 5 | 25 | 38 | 33 | 42 | 41 | 27 | 13 | 7 | 3 | 4 | 15 | 16 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 15658 | 457 | 273 | 485 | 1502 | 1758 | 1731 | 1784 | 1730 | 1647 | 1494 | 282 | 132 | 151 | 760 | 772 | 702 |
| KCFS | | 15.4 | 19.6 | 27.2 | 25.2 | 28.6 | 29.1 | 29.0 | 28.1 | 27.7 | 24.3 | 9.5 | 9.5 | 9.5 | 12.4 | 12.5 | 12.6 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 17500 | 1075 | 502 | 645 | 1650 | 2567 | 4290 | 1969 | 805 | 638 | 870 | 387 | 180 | 206 | 395 | 500 | 821 |
| DEPLETION | 3087 | 39 | 18 | 23 | 153 | 635 | 1674 | 1384 | 402 | -225 | -173 | -185 | -86 | -98 | -213 | -180 | -81 |
| CHAN STOR | 2 | 63 | -10 | -15 | -36 | -18 | -23 | 2 | 0 | 35 | 41 | 30 | -2 | -18 | -50 | -2 | 3 |
| EVAPORATION | 1748 | | | | | | | 110 | 343 | 422 | 361 | 162 | 76 | 86 | 188 | | |
| STORAGE | 43690. | 44333 | 44534 | 44656 | 44615 | 44771 | 45633 | 44326 | 42657 | 41486 | 40715 | 40872 | 40929 | 40979 | 40590 | 40496 | 40699 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 616 | 773 | 818 | 887 | 1013 | 1075 | 1121 | 1117 | 848 | 723 | 432 | 460 | 485 | 682 | 734 | 698 |
| PEAK POW MW | | 2238 | 2236 | 2238 | 2237 | 2238 | 2251 | 2229 | 2200 | 2192 | 2147 | 2151 | 2152 | 2154 | 2118 | 2137 | 2145 |
| ENERGY GWH | 7357.0 | 221.7 | 129.9 | 176.7 | 638.8 | 753.4 | 774.0 | 833.9 | 831.2 | 610.8 | 538.1 | 155.7 | 77.2 | 93.1 | 507.1 | 546.4 | 469.0 |
| DAILY GWH | | 14.8 | 18.6 | 19.6 | 21.3 | 24.3 | 25.8 | 26.9 | 26.8 | 20.4 | 17.4 | 10.4 | 11.0 | 11.6 | 16.4 | 17.6 | 16.7 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:13:18 STUDY NO 21

VALUES IN 1000 AF EXCEPT AS INDICATED

| 28FEB23 | | 2023 | | | | | | | | | | | | 2024 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 29FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 5800 | 212 | 99 | 127 | 482 | 930 | 1291 | 651 | 285 | 251 | 339 | 159 | 74 | 85 | 241 | 252 | 323 |
| DEPLETION | 579 | -15 | -7 | -9 | 35 | 281 | 565 | 318 | 52 | -118 | -114 | -37 | -17 | -20 | -126 | -131 | -78 |
| EVAPORATION | 430 | | | | | | | 27 | 83 | 103 | 90 | 41 | 19 | 22 | 47 | | |
| MOD INFLOW | 4791 | 227 | 106 | 136 | 447 | 649 | 726 | 306 | 150 | 266 | 363 | 155 | 72 | 83 | 320 | 383 | 401 |
| RELEASE | 5398 | 149 | 69 | 89 | 417 | 492 | 536 | 553 | 553 | 416 | 307 | 149 | 69 | 95 | 492 | 523 | 489 |
| STOR CHANGE | -607 | 78 | 36 | 47 | 30 | 157 | 190 | -247 | -403 | -149 | 56 | 6 | 3 | -13 | -172 | -140 | -88 |
| STORAGE | 10317. | 10396 | 10432 | 10479 | 10509 | 10667 | 10857 | 10610 | 10207 | 10057 | 10113 | 10119 | 10122 | 10109 | 9938 | 9798 | 9710 |
| ELEV FTMSL | 2209.8 | 2210.3 | 2210.5 | 2210.8 | 2211.0 | 2211.9 | 2213.1 | 2211.6 | 2209.1 | 2208.2 | 2208.5 | 2208.6 | 2208.6 | 2208.5 | 2207.4 | 2206.6 | 2206.0 |
| DISCH KCFS | 8.500 | 5.0 | 5.0 | 5.0 | 7.0 | 8.0 | 9.0 | 9.0 | 9.0 | 7.0 | 5.0 | 5.0 | 5.0 | 6.0 | 8.0 | 8.5 | 8.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 62 | 62 | 62 | 87 | 99 | 112 | 112 | 111 | 86 | 61 | 61 | 61 | 74 | 98 | 103 | 103 |
| PEAK POW MW | | 166 | 166 | 166 | 166 | 168 | 169 | 167 | 164 | 163 | 163 | 163 | 163 | 163 | 162 | 161 | 160 |
| ENERGY GWH | 804.2 | 22.3 | 10.4 | 13.4 | 62.5 | 73.9 | 80.8 | 83.4 | 82.6 | 61.7 | 45.6 | 22.1 | 10.3 | 14.1 | 72.6 | 76.8 | 71.6 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 8704 | 450 | 210 | 270 | 682 | 1294 | 2546 | 1100 | 382 | 253 | 453 | 177 | 82 | 94 | 165 | 229 | 318 |
| DEPLETION | 1188 | 2 | 1 | 1 | 34 | 209 | 879 | 771 | 145 | -174 | -67 | -163 | -76 | -87 | -130 | -89 | -69 |
| CHAN STOR | 0 | 38 | 0 | 0 | -21 | -11 | -11 | | | 21 | 21 | | 0 | -11 | -21 | -5 | |
| EVAPORATION | 505 | | | | | | | 32 | 98 | 121 | 105 | 47 | 22 | 25 | 54 | | |
| REG INFLOW | 12409 | 634 | 278 | 357 | 1043 | 1566 | 2192 | 851 | 692 | 743 | 744 | 441 | 206 | 240 | 711 | 835 | 876 |
| RELEASE | 13145 | 446 | 208 | 268 | 1071 | 1199 | 1250 | 1230 | 1230 | 1030 | 892 | 431 | 201 | 230 | 1138 | 1199 | 1122 |
| STOR CHANGE | -735 | 187 | 70 | 90 | -28 | 367 | 942 | -379 | -537 | -288 | -148 | 9 | 4 | 10 | -426 | -364 | -246 |
| STORAGE | 12333. | 12521 | 12591 | 12680 | 12652 | 13019 | 13962 | 13583 | 13045 | 12758 | 12610 | 12619 | 12624 | 12634 | 12208 | 11844 | 11598 |
| ELEV FTMSL | 1817.6 | 1818.4 | 1818.7 | 1819.1 | 1818.9 | 1820.4 | 1824.1 | 1822.7 | 1820.5 | 1819.4 | 1818.8 | 1818.8 | 1818.8 | 1818.9 | 1817.1 | 1815.6 | 1814.5 |
| DISCH KCFS | 19.500 | 15.0 | 15.0 | 15.0 | 18.0 | 19.5 | 21.0 | 20.0 | 20.0 | 17.3 | 14.5 | 14.5 | 14.5 | 14.5 | 18.5 | 19.5 | 19.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 164 | 164 | 165 | 197 | 215 | 235 | 226 | 223 | 191 | 159 | 159 | 159 | 159 | 201 | 210 | 208 |
| PEAK POW MW | | 438 | 439 | 441 | 440 | 447 | 464 | 457 | 447 | 442 | 439 | 439 | 440 | 440 | 432 | 425 | 420 |
| ENERGY GWH | 1748.7 | 58.9 | 27.6 | 35.6 | 142.1 | 159.7 | 169.3 | 168.0 | 165.9 | 137.7 | 118.7 | 57.3 | 26.7 | 30.6 | 149.8 | 156.0 | 144.6 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1301 | 192 | 89 | 115 | 226 | 124 | 345 | 119 | 45 | 52 | 6 | 9 | 4 | 5 | -51 | -23 | 45 |
| DEPLETION | 845 | 27 | 12 | 16 | 55 | 84 | 181 | 226 | 153 | 36 | -15 | 1 | 0 | 0 | 15 | 21 | 33 |
| CHAN STOR | 1 | 22 | | 0 | -15 | -7 | -7 | 5 | | 14 | 15 | | 0 | 0 | -20 | -5 | |
| EVAPORATION | 445 | | | | | | | 28 | 86 | 106 | 92 | 42 | 20 | 23 | 49 | | |
| REG INFLOW | 13156 | 633 | 285 | 367 | 1228 | 1232 | 1406 | 1099 | 1036 | 955 | 835 | 398 | 185 | 212 | 1002 | 1150 | 1134 |
| RELEASE | 13914 | 469 | 302 | 340 | 1194 | 1482 | 1464 | 1705 | 1740 | 949 | 932 | 232 | 124 | 139 | 878 | 1068 | 895 |
| STOR CHANGE | -758 | 164 | -17 | 27 | 34 | -250 | -57 | -605 | -704 | 5 | -97 | 165 | 61 | 72 | 123 | 82 | 239 |
| STORAGE | 13088. | 13253 | 13236 | 13263 | 13296 | 13046 | 12989 | 12383 | 11679 | 11684 | 11587 | 11753 | 11814 | 11886 | 12009 | 12091 | 12330 |
| ELEV FTMSL | 1586.8 | 1587.5 | 1587.4 | 1587.5 | 1587.6 | 1586.6 | 1586.3 | 1583.7 | 1580.5 | 1580.5 | 1580.1 | 1580.8 | 1581.1 | 1581.5 | 1582.0 | 1582.4 | 1583.5 |
| DISCH KCFS | 15.768 | 15.8 | 21.8 | 19.0 | 20.1 | 24.1 | 24.6 | 27.7 | 28.3 | 16.0 | 15.2 | 7.8 | 8.9 | 8.8 | 14.3 | 17.4 | 15.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 182 | 251 | 220 | 232 | 278 | 282 | 315 | 316 | 177 | 168 | 87 | 100 | 98 | 160 | 195 | 175 |
| PEAK POW MW | | 606 | 605 | 606 | 607 | 601 | 600 | 586 | 569 | 569 | 567 | 571 | 572 | 574 | 577 | 579 | 585 |
| ENERGY GWH | 1907.5 | 65.6 | 42.2 | 47.6 | 167.1 | 206.6 | 203.2 | 234.4 | 235.1 | 127.6 | 125.1 | 31.3 | 16.8 | 18.9 | 119.1 | 145.0 | 122.0 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 13783 | 469 | 302 | 340 | 1194 | 1482 | 1464 | 1697 | 1715 | 918 | 904 | 220 | 118 | 133 | 864 | 1068 | 895 |
| RELEASE | 13783 | 469 | 302 | 340 | 1194 | 1482 | 1464 | 1697 | 1715 | 918 | 904 | 220 | 118 | 133 | 864 | 1068 | 895 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.768 | 15.8 | 21.8 | 19.0 | 20.1 | 24.1 | 24.6 | 27.6 | 27.9 | 15.4 | 14.7 | 7.4 | 8.5 | 8.4 | 14.1 | 17.4 | 15.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 102 | 89 | 94 | 113 | 115 | 129 | 131 | 76 | 74 | 38 | 43 | 42 | 71 | 85 | 75 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 538 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 797.7 | 26.9 | 17.1 | 19.3 | 67.6 | 84.0 | 82.9 | 96.1 | 97.2 | 54.4 | 55.2 | 13.5 | 7.3 | 8.2 | 52.8 | 63.5 | 51.9 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 424 | 82 | 38 | 49 | 103 | 61 | 115 | 30 | 18 | -7 | -30 | -12 | -6 | -6 | -24 | -30 | 42 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 133 | | | | | | | 10 | 32 | 36 | 25 | 10 | 4 | 5 | 12 | | |
| REG INFLOW | 13994 | 550 | 340 | 389 | 1293 | 1534 | 1567 | 1699 | 1687 | 868 | 848 | 198 | 108 | 121 | 825 | 1035 | 934 |
| RELEASE | 13994 | 270 | 196 | 389 | 1293 | 1534 | 1567 | 1699 | 1687 | 1583 | 1367 | 198 | 108 | 121 | 716 | 694 | 575 |
| STOR CHANGE | 0 | 280 | 144 | 0 | | 0 | | 0 | 0 | -715 | -518 | 0 | 0 | 0 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 2710 | 2192 | 2192 | 2192 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1346.0 | 1337.5 | 1337.5 | 1337.5 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.952 | 9.1 | 14.1 | 21.8 | 21.7 | 24.9 | 26.3 | 27.6 | 27.4 | 26.6 | 22.2 | 6.7 | 7.8 | 7.6 | 11.6 | 11.3 | 10.0 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 119 | 184 | 184 | 211 | 222 | 233 | 231 | 216 | 167 | 49 | 57 | 56 | 86 | 86 | 80 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 324 | 284 | 285 | 285 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1382.7 | 27.1 | 20.0 | 39.8 | 132.3 | 156.7 | 159.9 | 173.3 | 172.1 | 155.5 | 124.6 | 17.6 | 9.6 | 10.7 | 63.9 | 64.1 | 55.6 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1279 | 85 | 40 | 51 | 128 | 139 | 144 | 85 | 64 | 80 | 106 | 50 | 23 | 27 | 75 | 75 | 107 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 2 | -10 | -15 | 0 | -6 | -3 | -2 | 0 | 2 | 8 | 29 | -2 | 0 | -7 | 1 | 2 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 15116 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1734 | 1659 | 1470 | 268 | 125 | 143 | 769 | 769 | 684 |
| RELEASE | 15116 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1722 | 1636 | 1470 | 268 | 125 | 143 | 769 | 769 | 719 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 28.3 | 28.0 | 27.5 | 23.9 | 9.0 | 9.0 | 9.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 96 | 96 | 96 | 84 | 32 | 32 | 32 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 632.4 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 71.6 | 71.3 | 68.8 | 62.5 | 11.6 | 5.4 | 6.2 | 33.0 | 33.0 | 30.7 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 992 | 123 | 58 | 74 | 128 | 170 | 92 | 99 | 57 | 42 | 43 | 25 | 12 | 13 | 7 | 21 | 28 |
| DEPLETION | 301 | 8 | 4 | 5 | 26 | 38 | 33 | 42 | 41 | 28 | 13 | 8 | 4 | 4 | 16 | 16 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 15807 | 473 | 280 | 495 | 1518 | 1780 | 1743 | 1797 | 1738 | 1650 | 1500 | 285 | 133 | 152 | 760 | 774 | 730 |
| KCFS | | 15.9 | 20.2 | 27.7 | 25.5 | 28.9 | 29.3 | 29.2 | 28.3 | 27.7 | 24.4 | 9.6 | 9.6 | 9.6 | 12.4 | 12.6 | 12.7 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 18500 | 1144 | 534 | 686 | 1749 | 2718 | 4533 | 2084 | 851 | 671 | 917 | 407 | 190 | 217 | 413 | 524 | 863 |
| DEPLETION | 3107 | 23 | 11 | 14 | 159 | 640 | 1694 | 1414 | 416 | -226 | -180 | -186 | -87 | -99 | -212 | -179 | -94 |
| CHAN STOR | -1 | 61 | -10 | -15 | -36 | -24 | -21 | 2 | 0 | 37 | 44 | 30 | -2 | -10 | -50 | -10 | 2 |
| EVAPORATION | 1686 | | | | | | | 107 | 331 | 407 | 348 | 156 | 73 | 83 | 181 | | |
| STORAGE | 40699. | 41409 | 41642 | 41805 | 41841 | 42115 | 43191 | 41959 | 40326 | 39203 | 38496 | 38677 | 38745 | 38815 | 38449 | 38369 | 38598 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 600 | 755 | 802 | 876 | 1007 | 1063 | 1111 | 1108 | 841 | 715 | 426 | 453 | 462 | 660 | 724 | 685 |
| PEAK POW MW | | 2191 | 2190 | 2192 | 2193 | 2195 | 2213 | 2190 | 2161 | 2153 | 2109 | 2114 | 2115 | 2117 | 2081 | 2100 | 2109 |
| ENERGY GWH | 7273.2 | 215.8 | 126.9 | 173.2 | 630.4 | 748.9 | 765.5 | 826.8 | 824.1 | 605.6 | 531.7 | 153.4 | 76.1 | 88.6 | 491.2 | 538.3 | 476.5 |
| DAILY GWH | | 14.4 | 18.1 | 19.2 | 21.0 | 24.2 | 25.5 | 26.7 | 26.6 | 20.2 | 17.2 | 10.2 | 10.9 | 11.1 | 15.8 | 17.4 | 16.4 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 29FEB |

TIME OF STUDY: 09:13:18 STUDY NO 22

VALUES IN 1000 AF EXCEPT AS INDICATED

| | 29FEB24 | 2024 | | | | | | | | | | | | 2025 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 5950 | 217 | 101 | 130 | 494 | 954 | 1325 | 668 | 292 | 258 | 348 | 163 | 76 | 87 | 247 | 258 | 331 |
| DEPLETION | 603 | -15 | -7 | -9 | 36 | 284 | 572 | 325 | 56 | -119 | -116 | -39 | -18 | -21 | -127 | -131 | -69 |
| EVAPORATION | 416 | | | | | | | 26 | 80 | 99 | 87 | 39 | 18 | 21 | 45 | | |
| MOD INFLOW | 4931 | 232 | 108 | 139 | 458 | 670 | 753 | 317 | 156 | 278 | 377 | 162 | 76 | 86 | 329 | 389 | 400 |
| RELEASE | 5335 | 149 | 69 | 89 | 417 | 461 | 536 | 553 | 553 | 416 | 307 | 149 | 69 | 79 | 492 | 523 | 472 |
| STOR CHANGE | -403 | 84 | 39 | 50 | 41 | 209 | 217 | -236 | -397 | -138 | 70 | 13 | 6 | 7 | -163 | -134 | -72 |
| STORAGE | 9710. | 9794 | 9833 | 9883 | 9924 | 10133 | 10350 | 10114 | 9717 | 9579 | 9649 | 9662 | 9669 | 9676 | 9512 | 9379 | 9307 |
| ELEV FTMSL | 2206.0 | 2206.5 | 2206.8 | 2207.1 | 2207.4 | 2208.7 | 2210.0 | 2208.5 | 2206.0 | 2205.2 | 2205.6 | 2205.7 | 2205.7 | 2205.8 | 2204.7 | 2203.9 | 2203.4 |
| DISCH KCFS | 8.500 | 5.0 | 5.0 | 5.0 | 7.0 | 7.5 | 9.0 | 9.0 | 9.0 | 7.0 | 5.0 | 5.0 | 5.0 | 5.0 | 8.0 | 8.5 | 8.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 61 | 61 | 61 | 85 | 92 | 111 | 110 | 109 | 84 | 60 | 60 | 61 | 61 | 96 | 102 | 101 |
| PEAK POW MW | | 161 | 161 | 162 | 162 | 164 | 165 | 163 | 160 | 159 | 160 | 160 | 160 | 160 | 159 | 158 | 157 |
| ENERGY GWH | 782.6 | 21.8 | 10.2 | 13.2 | 61.3 | 68.1 | 79.6 | 82.2 | 81.4 | 60.7 | 44.9 | 21.8 | 10.2 | 11.6 | 71.6 | 75.7 | 68.2 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 9150 | 473 | 221 | 284 | 717 | 1360 | 2677 | 1156 | 402 | 266 | 476 | 186 | 87 | 99 | 173 | 241 | 334 |
| DEPLETION | 1204 | 4 | 2 | 2 | 39 | 214 | 894 | 787 | 150 | -177 | -72 | -169 | -79 | -90 | -137 | -95 | -69 |
| CHAN STOR | 0 | 38 | 0 | 0 | -22 | -5 | -16 | | | 22 | 21 | | 0 | 0 | -32 | -5 | |
| EVAPORATION | 495 | | | | | | | 31 | 96 | 119 | 103 | 46 | 22 | 25 | 53 | | |
| REG INFLOW | 12786 | 656 | 288 | 371 | 1073 | 1602 | 2302 | 891 | 709 | 761 | 774 | 457 | 213 | 244 | 716 | 853 | 875 |
| RELEASE | 13274 | 446 | 208 | 268 | 1012 | 1199 | 1250 | 1230 | 1230 | 1042 | 922 | 446 | 208 | 246 | 1168 | 1261 | 1139 |
| STOR CHANGE | -488 | 210 | 80 | 103 | 61 | 403 | 1053 | -338 | -520 | -281 | -148 | 11 | 5 | -2 | -452 | -407 | -263 |
| STORAGE | 11598. | 11808 | 11888 | 11991 | 12052 | 12454 | 13507 | 13169 | 12648 | 12368 | 12219 | 12230 | 12235 | 12232 | 11781 | 11373 | 11110 |
| ELEV FTMSL | 1814.5 | 1815.4 | 1815.8 | 1816.2 | 1816.4 | 1818.1 | 1822.4 | 1821.0 | 1818.9 | 1817.8 | 1817.1 | 1817.2 | 1817.2 | 1817.2 | 1815.3 | 1813.5 | 1812.4 |
| DISCH KCFS | 19.500 | 15.0 | 15.0 | 15.0 | 17.0 | 19.5 | 21.0 | 20.0 | 20.0 | 17.5 | 15.0 | 15.0 | 15.0 | 15.5 | 19.0 | 20.5 | 20.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 160 | 161 | 161 | 183 | 211 | 232 | 223 | 221 | 191 | 163 | 163 | 163 | 168 | 204 | 217 | 215 |
| PEAK POW MW | | 424 | 425 | 427 | 429 | 437 | 456 | 450 | 440 | 435 | 432 | 432 | 432 | 432 | 423 | 415 | 411 |
| ENERGY GWH | 1741.1 | 57.7 | 27.0 | 34.9 | 131.8 | 157.1 | 167.0 | 166.0 | 164.1 | 137.7 | 121.3 | 58.6 | 27.4 | 32.3 | 152.0 | 161.7 | 144.5 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1350 | 199 | 93 | 119 | 235 | 129 | 358 | 123 | 47 | 52 | 6 | 9 | 4 | 5 | -53 | -23 | 47 |
| DEPLETION | 860 | 27 | 13 | 16 | 55 | 85 | 185 | 230 | 157 | 37 | -16 | 1 | 0 | 0 | 15 | 22 | 33 |
| CHAN STOR | -5 | 23 | | 0 | -10 | -12 | -8 | 5 | | 13 | 13 | | | -3 | -18 | -8 | |
| EVAPORATION | 421 | | | | | | | 27 | 81 | 99 | 87 | 40 | 19 | 21 | 47 | | |
| REG INFLOW | 13339 | 641 | 288 | 371 | 1182 | 1231 | 1415 | 1101 | 1039 | 971 | 871 | 415 | 194 | 226 | 1035 | 1208 | 1153 |
| RELEASE | 13842 | 462 | 299 | 336 | 1186 | 1477 | 1455 | 1701 | 1738 | 947 | 931 | 232 | 124 | 139 | 880 | 1069 | 866 |
| STOR CHANGE | -503 | 178 | -11 | 35 | -4 | -247 | -40 | -600 | -700 | 23 | -60 | 183 | 70 | 87 | 155 | 139 | 287 |
| STORAGE | 12330. | 12509 | 12498 | 12532 | 12528 | 12281 | 12242 | 11642 | 10942 | 10966 | 10906 | 11089 | 11159 | 11246 | 11401 | 11540 | 11827 |
| ELEV FTMSL | 1583.5 | 1584.3 | 1584.2 | 1584.4 | 1584.3 | 1583.2 | 1583.1 | 1580.3 | 1577.0 | 1577.1 | 1576.8 | 1577.7 | 1578.0 | 1578.4 | 1579.2 | 1579.9 | 1581.2 |
| DISCH KCFS | 15.553 | 15.5 | 21.6 | 18.8 | 19.9 | 24.0 | 24.4 | 27.7 | 28.3 | 15.9 | 15.1 | 7.8 | 8.9 | 8.8 | 14.3 | 17.4 | 15.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 176 | 244 | 214 | 226 | 271 | 275 | 308 | 309 | 173 | 165 | 85 | 98 | 96 | 157 | 192 | 173 |
| PEAK POW MW | | 589 | 589 | 589 | 589 | 584 | 583 | 568 | 551 | 551 | 550 | 554 | 556 | 558 | 562 | 566 | 573 |
| ENERGY GWH | 1861.4 | 63.4 | 41.1 | 46.2 | 162.9 | 201.9 | 198.0 | 229.2 | 229.9 | 124.6 | 122.4 | 30.6 | 16.4 | 18.5 | 117.1 | 142.7 | 116.4 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 131 | | | | | | | 8 | 25 | 31 | 28 | 12 | 6 | 7 | 14 | | |
| REG INFLOW | 13711 | 462 | 299 | 336 | 1186 | 1477 | 1455 | 1693 | 1713 | 916 | 903 | 219 | 118 | 133 | 865 | 1069 | 866 |
| RELEASE | 13711 | 462 | 299 | 336 | 1186 | 1477 | 1455 | 1693 | 1713 | 916 | 903 | 219 | 118 | 133 | 865 | 1069 | 866 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.553 | 15.5 | 21.6 | 18.8 | 19.9 | 24.0 | 24.4 | 27.5 | 27.9 | 15.4 | 14.7 | 7.4 | 8.5 | 8.4 | 14.1 | 17.4 | 15.6 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 74 | 101 | 88 | 93 | 112 | 114 | 129 | 130 | 75 | 74 | 37 | 43 | 42 | 71 | 85 | 75 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 538 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 793.6 | 26.5 | 17.0 | 19.1 | 67.2 | 83.7 | 82.4 | 95.9 | 97.0 | 54.3 | 55.1 | 13.5 | 7.3 | 8.1 | 52.8 | 63.5 | 50.3 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 450 | 87 | 41 | 52 | 109 | 64 | 122 | 32 | 19 | -6 | -31 | -13 | -6 | -7 | -26 | -32 | 45 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 133 | | | | | | | 10 | 32 | 36 | 25 | 10 | 4 | 5 | 12 | | |
| REG INFLOW | 13948 | 548 | 339 | 388 | 1291 | 1532 | 1565 | 1697 | 1686 | 867 | 846 | 197 | 107 | 120 | 824 | 1034 | 908 |
| RELEASE | 13948 | 268 | 195 | 388 | 1291 | 1532 | 1565 | 1697 | 1686 | 1582 | 1364 | 197 | 107 | 120 | 715 | 693 | 549 |
| STOR CHANGE | 0 | 280 | 144 | | | | | 0 | 0 | -715 | -518 | 0 | 0 | 0 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 2710 | 2192 | 2192 | 2192 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1346.0 | 1337.5 | 1337.5 | 1337.5 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.990 | 9.0 | 14.1 | 21.7 | 21.7 | 24.9 | 26.3 | 27.6 | 27.4 | 26.6 | 22.2 | 6.6 | 7.7 | 7.6 | 11.6 | 11.3 | 9.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 119 | 184 | 184 | 210 | 222 | 233 | 231 | 216 | 167 | 49 | 57 | 55 | 86 | 86 | 79 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 324 | 284 | 285 | 285 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1378.3 | 26.9 | 20.0 | 39.7 | 132.1 | 156.5 | 159.7 | 173.1 | 172.0 | 155.4 | 124.4 | 17.5 | 9.5 | 10.6 | 63.8 | 64.0 | 53.1 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1300 | 87 | 40 | 52 | 130 | 141 | 146 | 87 | 65 | 81 | 108 | 52 | 24 | 27 | 76 | 76 | 108 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 2 | -10 | -15 | 0 | -6 | -3 | -2 | 0 | 2 | 8 | 29 | -2 | 0 | -8 | 1 | 3 |
| EVAPORATION | 42 | | | | | | | 2 | 8 | 10 | 9 | 4 | 2 | 2 | 5 | | |
| REG INFLOW | 15091 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1734 | 1659 | 1470 | 268 | 125 | 143 | 769 | 769 | 659 |
| RELEASE | 15091 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1722 | 1636 | 1470 | 268 | 125 | 143 | 769 | 769 | 694 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 28.3 | 28.0 | 27.5 | 23.9 | 9.0 | 9.0 | 9.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 96 | 96 | 96 | 84 | 32 | 32 | 32 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 631.3 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 71.6 | 71.3 | 68.8 | 62.5 | 11.6 | 5.4 | 6.2 | 33.0 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1100 | 137 | 64 | 82 | 141 | 189 | 102 | 110 | 63 | 55 | 39 | 28 | 13 | 15 | 8 | 24 | 31 |
| DEPLETION | 305 | 8 | 4 | 5 | 26 | 38 | 34 | 42 | 42 | 28 | 13 | 8 | 4 | 4 | 16 | 17 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 15886 | 486 | 286 | 502 | 1531 | 1799 | 1752 | 1808 | 1743 | 1663 | 1496 | 288 | 134 | 154 | 761 | 776 | 708 |
| KCFS | | 16.3 | 20.6 | 28.1 | 25.7 | 29.3 | 29.4 | 29.4 | 28.3 | 28.0 | 24.3 | 9.7 | 9.7 | 9.7 | 12.4 | 12.6 | 12.8 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 19300 | 1200 | 560 | 720 | 1826 | 2837 | 4730 | 2176 | 888 | 706 | 946 | 424 | 198 | 226 | 425 | 544 | 896 |
| DEPLETION | 3166 | 25 | 12 | 15 | 165 | 649 | 1721 | 1441 | 430 | -229 | -188 | -194 | -90 | -103 | -220 | -183 | -85 |
| CHAN STOR | -6 | 63 | -10 | -15 | -32 | -24 | -26 | 3 | 0 | 36 | 43 | 30 | -2 | -2 | -59 | -13 | 3 |
| EVAPORATION | 1638 | | | | | | | 104 | 321 | 395 | 338 | 151 | 71 | 81 | 176 | | |
| STORAGE | 38598. | 39350 | 39601 | 39789 | 39887 | 40252 | 41483 | 40308 | 38703 | 37616 | 36959 | 37167 | 37247 | 37339 | 36989 | 36927 | 37203 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 588 | 742 | 790 | 853 | 988 | 1050 | 1100 | 1096 | 835 | 713 | 426 | 453 | 455 | 659 | 727 | 688 |
| PEAK POW MW | | 2156 | 2155 | 2158 | 2160 | 2163 | 2184 | 2161 | 2131 | 2124 | 2081 | 2086 | 2088 | 2090 | 2055 | 2074 | 2085 |
| ENERGY GWH | 7188.3 | 211.5 | 124.7 | 170.6 | 614.1 | 735.3 | 756.0 | 818.1 | 815.7 | 601.5 | 530.7 | 153.5 | 76.1 | 87.4 | 490.4 | 540.7 | 462.1 |
| DAILY GWH | | 14.1 | 17.8 | 19.0 | 20.5 | 23.7 | 25.2 | 26.4 | 26.3 | 20.0 | 17.1 | 10.2 | 10.9 | 10.9 | 15.8 | 17.4 | 16.5 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |

TIME OF STUDY: 09:13:18 STUDY NO 23

VALUES IN 1000 AF EXCEPT AS INDICATED

| 28FEB25 | | 2025 | | | | | | | | | | | | 2026 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |
| --FORT PECK-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 6000 | 219 | 102 | 131 | 498 | 962 | 1336 | 674 | 294 | 260 | 352 | 164 | 77 | 87 | 249 | 260 | 334 |
| DEPLETION | 603 | -15 | -7 | -9 | 36 | 284 | 572 | 325 | 56 | -119 | -116 | -39 | -18 | -21 | -127 | -131 | -69 |
| EVAPORATION | 379 | | | | | | | 25 | 78 | 97 | 85 | 24 | 11 | 13 | 45 | | |
| MOD INFLOW | 5018 | 234 | 109 | 140 | 462 | 678 | 764 | 324 | 160 | 282 | 383 | 178 | 83 | 95 | 331 | 391 | 403 |
| RELEASE | 5266 | 149 | 69 | 89 | 417 | 492 | 506 | 523 | 523 | 407 | 307 | 149 | 69 | 79 | 492 | 523 | 472 |
| STOR CHANGE | -248 | 85 | 40 | 51 | 45 | 186 | 258 | -199 | -363 | -126 | 76 | 29 | 14 | 16 | -160 | -132 | -69 |
| STORAGE | 9307. | 9392 | 9432 | 9483 | 9529 | 9715 | 9973 | 9774 | 9411 | 9285 | 9361 | 9390 | 9404 | 9420 | 9259 | 9127 | 9058 |
| ELEV FTMSL | 2203.4 | 2203.9 | 2204.2 | 2204.5 | 2204.8 | 2206.0 | 2207.7 | 2206.4 | 2204.1 | 2203.2 | 2203.7 | 2203.9 | 2204.0 | 2204.1 | 2203.1 | 2202.2 | 2201.7 |
| DISCH KCFS | 8.500 | 5.0 | 5.0 | 5.0 | 7.0 | 8.0 | 8.5 | 8.5 | 8.5 | 6.8 | 5.0 | 5.0 | 5.0 | 5.0 | 8.0 | 8.5 | 8.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 60 | 60 | 60 | 84 | 96 | 103 | 103 | 102 | 82 | 60 | 60 | 60 | 60 | 95 | 101 | 101 |
| PEAK POW MW | | 158 | 158 | 158 | 159 | 160 | 162 | 161 | 158 | 157 | 157 | 158 | 158 | 158 | 157 | 156 | 155 |
| ENERGY GWH | 764.3 | 21.6 | 10.1 | 13.0 | 60.6 | 71.7 | 74.2 | 76.8 | 76.1 | 58.9 | 44.5 | 21.6 | 10.1 | 11.5 | 71.0 | 75.1 | 67.6 |
| --GARRISON-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 9222 | 477 | 222 | 286 | 723 | 1371 | 2698 | 1165 | 405 | 268 | 480 | 187 | 87 | 100 | 174 | 243 | 336 |
| DEPLETION | 1204 | 4 | 2 | 2 | 39 | 214 | 894 | 787 | 150 | -177 | -72 | -169 | -79 | -90 | -137 | -95 | -69 |
| CHAN STOR | 0 | 39 | 0 | 0 | -22 | -11 | -5 | | | 18 | 20 | | 0 | 0 | -33 | -5 | |
| EVAPORATION | 451 | | | | | | | 30 | 94 | 116 | 101 | 29 | 13 | 15 | 52 | | |
| REG INFLOW | 12833 | 660 | 290 | 373 | 1079 | 1638 | 2304 | 870 | 684 | 754 | 779 | 476 | 222 | 254 | 718 | 855 | 877 |
| RELEASE | 13133 | 417 | 194 | 250 | 982 | 1168 | 1279 | 1261 | 1261 | 1031 | 892 | 431 | 201 | 230 | 1138 | 1261 | 1139 |
| STOR CHANGE | -299 | 244 | 96 | 123 | 97 | 470 | 1025 | -390 | -577 | -276 | -113 | 45 | 21 | 24 | -419 | -405 | -261 |
| STORAGE | 11110. | 11353 | 11449 | 11572 | 11669 | 12138 | 13164 | 12773 | 12196 | 11920 | 11807 | 11852 | 11873 | 11897 | 11477 | 11072 | 10810 |
| ELEV FTMSL | 1812.4 | 1813.4 | 1813.9 | 1814.4 | 1814.8 | 1816.8 | 1821.0 | 1819.4 | 1817.1 | 1815.9 | 1815.4 | 1815.6 | 1815.7 | 1815.8 | 1814.0 | 1812.2 | 1811.0 |
| DISCH KCFS | 20.500 | 14.0 | 14.0 | 14.0 | 16.5 | 19.0 | 21.5 | 20.5 | 20.5 | 17.3 | 14.5 | 14.5 | 14.5 | 14.5 | 18.5 | 20.5 | 20.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 147 | 148 | 149 | 176 | 204 | 235 | 226 | 223 | 187 | 156 | 156 | 156 | 156 | 197 | 215 | 213 |
| PEAK POW MW | | 415 | 417 | 419 | 421 | 430 | 450 | 442 | 431 | 426 | 424 | 425 | 425 | 426 | 417 | 410 | 405 |
| ENERGY GWH | 1704.1 | 53.1 | 24.9 | 32.1 | 126.5 | 151.5 | 169.3 | 168.4 | 166.1 | 134.4 | 115.9 | 56.0 | 26.2 | 29.9 | 146.6 | 160.2 | 143.0 |
| --OAHE-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1381 | 203 | 95 | 122 | 240 | 132 | 366 | 126 | 48 | 55 | 6 | 9 | 4 | 5 | -54 | -24 | 48 |
| DEPLETION | 860 | 27 | 13 | 16 | 55 | 85 | 185 | 230 | 157 | 37 | -16 | 1 | 0 | 0 | 15 | 22 | 33 |
| CHAN STOR | 1 | 33 | | | -13 | -13 | -13 | 5 | | 17 | 15 | | 0 | 0 | -21 | -11 | |
| EVAPORATION | 379 | | | | | | | 26 | 78 | 96 | 84 | 24 | 12 | 13 | 46 | | |
| REG INFLOW | 13276 | 626 | 277 | 356 | 1154 | 1203 | 1447 | 1136 | 1074 | 970 | 844 | 415 | 194 | 221 | 1001 | 1204 | 1154 |
| RELEASE | 13585 | 459 | 298 | 334 | 1181 | 1474 | 1450 | 1700 | 1737 | 946 | 710 | 229 | 119 | 134 | 881 | 1070 | 864 |
| STOR CHANGE | -309 | 167 | -21 | 21 | -27 | -272 | -2 | -564 | -664 | 24 | 135 | 186 | 75 | 88 | 121 | 134 | 290 |
| STORAGE | 11827. | 11994 | 11972 | 11994 | 11967 | 11695 | 11693 | 11129 | 10466 | 10489 | 10624 | 10810 | 10885 | 10973 | 11093 | 11227 | 11517 |
| ELEV FTMSL | 1581.2 | 1582.0 | 1581.9 | 1582.0 | 1581.8 | 1580.6 | 1580.6 | 1577.9 | 1574.6 | 1574.7 | 1575.4 | 1576.3 | 1576.7 | 1577.1 | 1577.7 | 1578.3 | 1579.7 |
| DISCH KCFS | 15.587 | 15.4 | 21.4 | 18.7 | 19.8 | 24.0 | 24.4 | 27.6 | 28.3 | 15.9 | 11.5 | 7.7 | 8.6 | 8.4 | 14.3 | 17.4 | 15.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 173 | 240 | 210 | 222 | 267 | 270 | 303 | 304 | 170 | 124 | 83 | 93 | 92 | 156 | 190 | 171 |
| PEAK POW MW | | 577 | 576 | 577 | 576 | 570 | 570 | 555 | 538 | 539 | 542 | 547 | 549 | 551 | 554 | 558 | 565 |
| ENERGY GWH | 1803.3 | 62.1 | 40.3 | 45.3 | 159.8 | 198.4 | 194.3 | 225.7 | 226.3 | 122.6 | 92.4 | 30.0 | 15.6 | 17.7 | 116.2 | 141.6 | 115.1 |
| --BIG BEND-- | | | | | | | | | | | | | | | | | |
| EVAPORATION | 122 | | | | | | | 8 | 25 | 31 | 28 | 8 | 4 | 4 | 14 | | |
| REG INFLOW | 13463 | 459 | 298 | 334 | 1181 | 1474 | 1450 | 1692 | 1712 | 915 | 682 | 221 | 115 | 130 | 866 | 1070 | 864 |
| RELEASE | 13463 | 459 | 298 | 334 | 1181 | 1474 | 1450 | 1692 | 1712 | 915 | 682 | 221 | 115 | 130 | 866 | 1070 | 864 |
| STORAGE | 1631. | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 | 1631 |
| ELEV FTMSL | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 | 1420.0 |
| DISCH KCFS | 15.587 | 15.4 | 21.4 | 18.7 | 19.8 | 24.0 | 24.4 | 27.5 | 27.9 | 15.4 | 11.1 | 7.4 | 8.3 | 8.2 | 14.1 | 17.4 | 15.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 73 | 100 | 88 | 93 | 112 | 114 | 129 | 130 | 75 | 56 | 38 | 42 | 41 | 71 | 85 | 75 |
| PEAK POW MW | | 517 | 509 | 509 | 509 | 509 | 509 | 509 | 509 | 538 | 538 | 538 | 538 | 538 | 538 | 538 | 529 |
| ENERGY GWH | 778.7 | 26.3 | 16.9 | 18.9 | 66.9 | 83.5 | 82.1 | 95.8 | 97.0 | 54.2 | 41.8 | 13.6 | 7.1 | 8.0 | 52.9 | 63.6 | 50.1 |
| --FORT RANDALL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 465 | 90 | 42 | 54 | 113 | 66 | 126 | 33 | 20 | -6 | -32 | -14 | -6 | -7 | -27 | -33 | 46 |
| DEPLETION | 80 | 1 | 1 | 1 | 4 | 9 | 12 | 18 | 15 | 7 | 1 | 1 | 0 | 1 | 3 | 3 | 3 |
| EVAPORATION | 126 | | | | | | | 10 | 32 | 36 | 25 | 6 | 3 | 3 | 12 | | |
| REG INFLOW | 13721 | 548 | 339 | 387 | 1290 | 1531 | 1564 | 1697 | 1686 | 866 | 623 | 201 | 105 | 119 | 824 | 1034 | 907 |
| RELEASE | 13721 | 268 | 195 | 387 | 1290 | 1531 | 1564 | 1697 | 1686 | 1581 | 1142 | 201 | 106 | 119 | 715 | 693 | 548 |
| STOR CHANGE | 0 | 280 | 144 | | 0 | 0 | | 0 | 0 | -715 | -518 | 0 | 0 | 0 | 109 | 341 | 359 |
| STORAGE | 3001. | 3281 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 3425 | 2710 | 2192 | 2192 | 2192 | 2192 | 2301 | 2642 | 3001 |
| ELEV FTMSL | 1350.0 | 1353.5 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1355.2 | 1346.0 | 1337.5 | 1337.5 | 1337.5 | 1337.5 | 1339.5 | 1345.0 | 1350.0 |
| DISCH KCFS | 9.879 | 9.0 | 14.0 | 21.7 | 21.7 | 24.9 | 26.3 | 27.6 | 27.4 | 26.6 | 18.6 | 6.8 | 7.6 | 7.5 | 11.6 | 11.3 | 9.9 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 75 | 119 | 184 | 183 | 210 | 222 | 233 | 231 | 216 | 140 | 50 | 56 | 55 | 86 | 86 | 79 |
| PEAK POW MW | | 350 | 356 | 356 | 356 | 356 | 356 | 356 | 356 | 324 | 284 | 285 | 285 | 285 | 294 | 319 | 339 |
| ENERGY GWH | 1357.8 | 26.9 | 19.9 | 39.6 | 132.0 | 156.4 | 159.6 | 173.1 | 172.0 | 155.3 | 104.3 | 17.9 | 9.4 | 10.5 | 63.8 | 64.0 | 53.0 |
| --GAVINS POINT-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1309 | 87 | 41 | 52 | 131 | 142 | 147 | 87 | 65 | 82 | 109 | 53 | 25 | 28 | 76 | 76 | 109 |
| DEPLETION | 114 | 0 | 0 | 0 | 5 | 19 | 24 | 39 | 10 | -5 | 2 | 5 | 2 | 3 | 10 | 1 | |
| CHAN STOR | -1 | 2 | -10 | -15 | 0 | -6 | -3 | -3 | 0 | 2 | 15 | 22 | -2 | 0 | -8 | 1 | 3 |
| EVAPORATION | 39 | | | | | | | 2 | 8 | 10 | 9 | 3 | 1 | 1 | 5 | | |
| REG INFLOW | 14876 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1734 | 1659 | 1254 | 268 | 125 | 143 | 769 | 769 | 659 |
| RELEASE | 14876 | 357 | 226 | 425 | 1416 | 1648 | 1684 | 1740 | 1722 | 1636 | 1254 | 268 | 125 | 143 | 769 | 769 | 694 |
| STOR CHANGE | | | | | | | | | 12 | 23 | | | | | | | -35 |
| STORAGE | 327. | 327 | 327 | 327 | 327 | 327 | 327 | 327 | 339 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 |
| ELEV FTMSL | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.0 | 1206.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1207.5 | 1206.0 |
| DISCH KCFS | 12.500 | 12.0 | 16.3 | 23.8 | 23.8 | 26.8 | 28.3 | 28.3 | 28.0 | 27.5 | 20.4 | 9.0 | 9.0 | 9.0 | 12.5 | 12.5 | 12.5 |
| POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 42 | 57 | 82 | 82 | 91 | 96 | 96 | 96 | 96 | 72 | 32 | 32 | 32 | 44 | 44 | 44 |
| PEAK POW MW | | 114 | 114 | 114 | 114 | 114 | 114 | 114 | 115 | 117 | 117 | 117 | 117 | 117 | 78 | 78 | 76 |
| ENERGY GWH | 622.4 | 15.1 | 9.5 | 17.6 | 58.7 | 68.0 | 69.3 | 71.6 | 71.3 | 68.8 | 53.5 | 11.6 | 5.4 | 6.2 | 33.0 | 33.0 | 29.6 |
| --GAVINS POINT - SIOUX CITY-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 1123 | 140 | 65 | 84 | 144 | 193 | 104 | 112 | 64 | 49 | 48 | 28 | 13 | 15 | 8 | 24 | 32 |
| DEPLETION | 305 | 8 | 4 | 5 | 26 | 38 | 34 | 42 | 42 | 28 | 13 | 8 | 4 | 4 | 16 | 17 | 17 |
| REGULATED FLOW AT SIOUX CITY | | | | | | | | | | | | | | | | | |
| KAF | 15694 | 489 | 288 | 504 | 1534 | 1803 | 1754 | 1810 | 1744 | 1657 | 1289 | 288 | 134 | 154 | 761 | 776 | 709 |
| KCFS | | 16.4 | 20.7 | 28.2 | 25.8 | 29.3 | 29.5 | 29.4 | 28.4 | 27.9 | 21.0 | 9.7 | 9.7 | 9.7 | 12.4 | 12.6 | 12.8 |
| --TOTAL-- | | | | | | | | | | | | | | | | | |
| NAT INFLOW | 19500 | 1216 | 567 | 729 | 1849 | 2866 | 4777 | 2197 | 896 | 708 | 963 | 427 | 199 | 228 | 426 | 546 | 905 |
| DEPLETION | 3166 | 25 | 12 | 15 | 165 | 649 | 1721 | 1441 | 430 | -229 | -188 | -194 | -90 | -103 | -220 | -183 | -85 |
| CHAN STOR | -1 | 74 | -10 | -15 | -35 | -30 | -21 | 3 | 0 | 37 | 49 | 22 | -2 | 0 | -62 | -15 | 3 |
| EVAPORATION | 1496 | | | | | | | 102 | 314 | 387 | 331 | 94 | 44 | 50 | 173 | | |
| STORAGE | 37203. | 37979 | 38237 | 38433 | 38548 | 38932 | 40213 | 39060 | 37468 | 36398 | 35977 | 36238 | 36347 | 36474 | 36124 | 36062 | 36345 |
| SYSTEM POWER | | | | | | | | | | | | | | | | | |
| AVE POWER MW | | 570 | 724 | 771 | 840 | 981 | 1040 | 1091 | 1087 | 825 | 608 | 418 | 439 | 436 | 650 | 722 | 682 |
| PEAK POW MW | | 2132 | 2131 | 2134 | 2136 | 2140 | 2162 | 2138 | 2108 | 2100 | 2063 | 2070 | 2072 | 2075 | 2039 | 2059 | 2070 |
| ENERGY GWH | 7030.5 | 205.1 | 121.6 | 166.6 | 604.5 | 729.5 | 748.9 | 811.4 | 808.8 | 594.3 | 452.3 | 150.6 | 73.7 | 83.7 | 483.6 | 537.4 | 458.4 |
| DAILY GWH | | 13.7 | 17.4 | 18.5 | 20.2 | 23.5 | 25.0 | 26.2 | 26.1 | 19.8 | 14.6 | 10.0 | 10.5 | 10.5 | 15.6 | 17.3 | 16.4 |
| | INI-SUM | 15MAR | 22MAR | 31MAR | 30APR | 31MAY | 30JUN | 31JUL | 31AUG | 30SEP | 31OCT | 15NOV | 22NOV | 30NOV | 31DEC | 31JAN | 28FEB |