US Army Corps
of Engineers

Northwestern Division
Missouri River Basin
Water Management Division

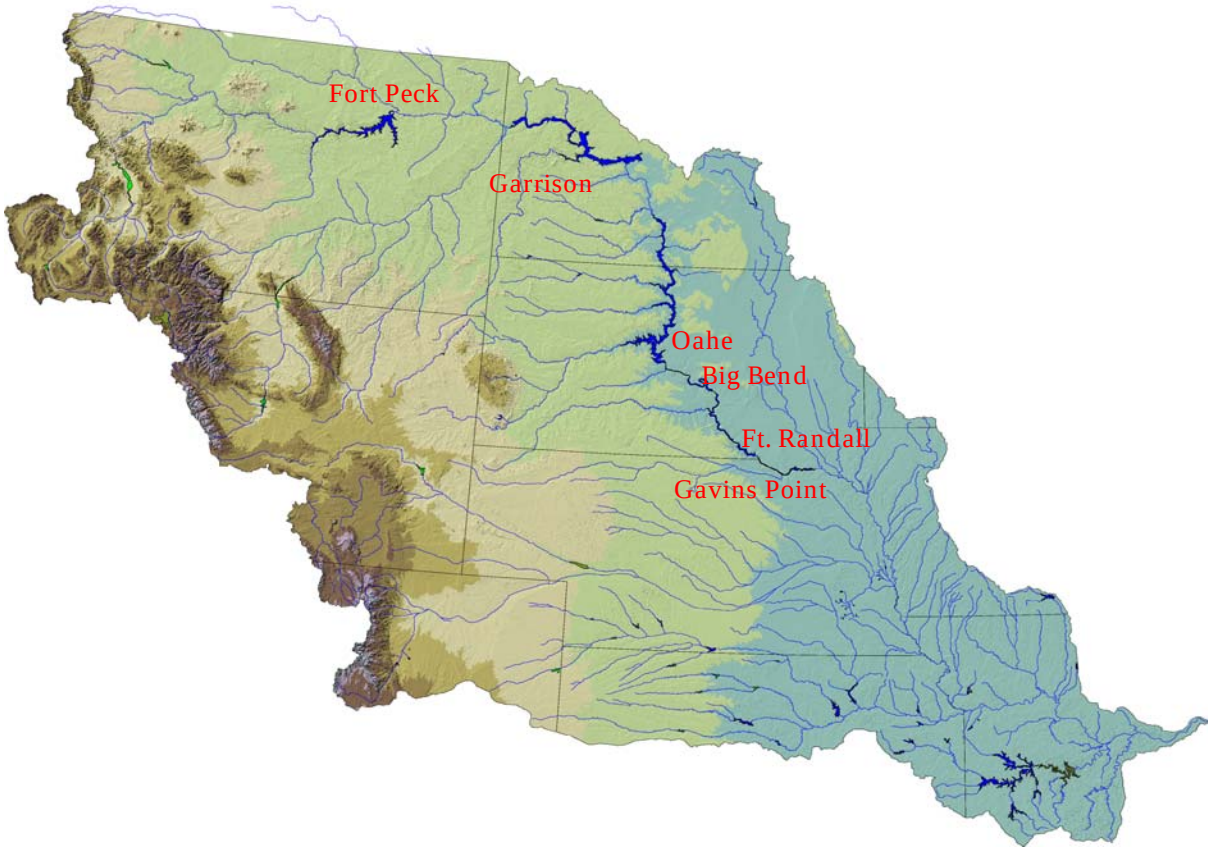
Final

AOP

2010-2011

Missouri River Mainstem System

2010-2011 Annual Operating Plan



Annual Operating Plan Process
58 Years Serving the Missouri River Basin

December 2010

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

REPLY TO
ATTENTION OF

December 15, 2010

Division Commander

Dear Stakeholders and Concerned Citizens:

This Annual Operating Plan (AOP) presents the Corps of Engineers' regulation of the Missouri River Mainstem Reservoir System through December 2011. The AOP is based upon water management guidelines designed to meet the reservoir regulation objectives of the existing Missouri River Master Water Control Manual (Master Manual) updated in March 2006.

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 the Congressionally-authorized project purposes. Management of the reservoir system is provided by my staff at the Missouri River Basin Water Management Division, Northwestern Division, U.S. Army Corps of Engineers, located in Omaha, Nebraska.

A draft of this AOP was made available to the public in September 2010. A report summarizing Draft AOP meeting comments, including copies of all the comment letters received is available upon request.

Runoff into the Missouri River basin was much above normal in 2009 and 2010, refilling the reservoirs after the extended drought from 2000 through 2007. Evacuation of this year's stored flood water will continue through the winter with all flood storage expected to be available prior to the 2011 runoff season. With the mainstem reservoir system at its desired March 1, 2011 starting storage level, the AOP study results predict good service to all authorized purposes in 2011. Water conservation measures will continue to be a consideration to ensure service to all project purposes should drought conditions return. The AOP indicates the implementation of a bimodal spring pulse (March and May) from Gavins Point Dam in 2011 under all runoff scenarios, downstream flow conditions permitting. These pulses are consistent with those outlined in the 2003 Amended Biological Opinion and the 2006 Master Manual.

We realize that the benefits provided by the reservoir system are vitally important to the Nation and the people who live and work in the Basin. We believe that the continued implementation of the revised 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,

John R. McMahon, P.E.
Brigadier General, US Army
Division Commander

MISSOURI RIVER MAINSTEM RESERVOIR SYSTEM

Annual Operating Plan
2010 - 2011

TABLES

PLATES

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
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
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
2010 – 2011

I. FOREWORD

This Annual Operating Plan (AOP) presents pertinent information and plans for regulating the Missouri River Mainstem Reservoir System (System) through December 2011 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 dams 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 is directed by the Missouri River Basin Water Management Division, 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***.

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 during periods of extended drought to maintain minimum river or reservoir levels to keep intakes operational, and adjustments in reservoir releases or reservoir levels 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 Calendar Year 2009 Regulation," dated September 2010. Both reports are currently available at the "Reports and Publications" link on our web site 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 Calendar Year 2010 Regulation" will be available at the same site in April of 2011.

II. PURPOSE AND SCOPE

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 meeting is 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 (THPO's), State Historic Preservation Officers (SHPO's), 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 AOP's 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 10, 2010, was sent to the Tribes offering consultation on the 2010-2011 AOP. Meeting times and locations of the six 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 AOP's. 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 2010 spring public meetings were held at the following locations and dates: April 13 at South Sioux City, NE, and Fort Peck, Montana; April 14 at Bismarck, North Dakota and Mobridge, South Dakota; April 15 at Jefferson City, Missouri and St. Joseph,

Missouri. The attendees were given an update regarding the outlook for 2010 runoff and projected System regulation for the remainder of 2010. Six fall public meetings on the Draft 2010-2011 AOP were held: October 19 in Fort Peck, Montana, and Bismarck, North Dakota; October 20 in Pierre, South Dakota and South Sioux City, Nebraska; and October 21 in St. Joseph, Missouri and Jefferson City, Missouri.

In the spring of 2011, 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 2010-2011 AOP.

III. MAINSTEM MASTER MANUAL AND ESA CONSULTATIONS

The Missouri River Mainstem Reservoir System Master Water Control Manual (Master Manual) presents the water control plan and operational objectives for the integrated regulation of the System. First published in 1960 and subsequently revised during the 1970's, the Master Manual was revised in March 2004 to include more stringent drought conservation measures. The 2003 Amendment to the 2000 Biological Opinion (2003 Amended BiOp) presented the USFWS' opinion that the regulation of the System would jeopardize the continued existence of the endangered pallid sturgeon. The USFWS provided a Reasonable and Prudent Alternative (RPA) to avoid jeopardy to the pallid sturgeon that included a provision for the Corps to develop a plan to implement a bimodal 'spring pulse' from Gavins Point Dam. Working with the USFWS, Tribes, states and basin stakeholders, the Corps developed technical criteria for the bimodal spring pulse releases. In March 2006 the Master Manual was revised to include technical criteria for a spring pulse.

Current regulation of the System in accordance with the Master Manual to serve authorized project purposes is dependent on successful implementation of the 2003 Amended BiOp. Implementation of the RPA elements is accomplished through the Missouri River Recovery Program (MRRP) which includes the following elements: habitat construction including emergent sandbar habitat and shallow water habitat, flow modifications, propagation/hatchery support, research, monitoring and evaluation, and adaptive management. This AOP identifies flow modifications at Garrison, Fort Randall and Gavins Point for the benefit of the interior least tern and the piping plover, and the Gavins Point spring pulse for the benefit of the endangered pallid sturgeon. In addition, the ongoing construction and rehabilitation of emergent sandbar habitat construction is key to the continued operational flexibility of the System, especially in light of the return to more normal reservoirs levels and releases which has greatly reduced the amount of available emergent sandbar habitat for the terns and plovers. In the fall of 2010 and spring of 2011 up to 100 acres of emergent sandbar habitat may be constructed in the headwaters of the Gavins Point reservoir and in the river reach below the dam. The habitat will be constructed by traditional means

as well as through the use of sand-filled geotextile tubes below Gavins Point Dam. The tubes are used to slow down the water causing sand to deposit and form sandbars downstream of the structures. This habitat construction in combination with other ongoing efforts to minimize incidental take, including but not limited to improving public awareness, better predation control plans, and not meeting flow targets in reaches without commercial navigation, is expected to result in a greater likelihood of bird productivity. Additional information on other efforts undertaken through the Missouri River Recovery Program to meet the requirements of the 2003 Amended BiOp can be found in the Annual Report on the Biological Opinion which can be found on the "MRRP Documents" page of the Recovery Program website at: www.moriverrecovery.org.

IV. FUTURE RUNOFF: AUGUST 2010 - DECEMBER 2011

Runoff into the six System reservoirs is typically low and relatively stable during the August-to-February period. The August 1 calendar year runoff forecast is used as input to the Basic reservoir regulation simulation in the AOP studies for the period August 2010 to February 2011. The August 1 runoff forecast for 2010 was 37.9 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 and Lower Basic simulations, which are based on 120 percent and 80 percent of the August 1 runoff forecast, respectively.

Simulations for the March 1, 2011 to February 29, 2012 time period use five statistically derived inflow scenarios based on an analysis of historic water supply. The report detailing the development of these inflow scenarios was updated in July 2008 to include 9 additional years of inflow data that now extends from 1898 to 2006. Using statistically derived inflow scenarios provides a good range of simulation for dry, average, and wet conditions, and eliminates the need to forecast future precipitation, which is very difficult.

The five statistically derived inflows are identified as the Upper Decile, Upper Quartile, Median, Lower Quartile and Lower Decile runoff conditions. Upper Decile runoff (34.3 MAF) has a 1 in 10 chance of being exceeded, Upper Quartile (30.3 MAF) has a 1 in 4 chance of being exceeded, and Median (24.4 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 (16.2 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 Upper Decile and Upper Quartile simulations extend from the end of the Upper Basic simulation through February 2012. 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 2012.

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 I,*** where water supply conditions are quantified for the period August 2010 through February 2012. The natural water supply for calendar year (CY) 2009 totaled 33.5 MAF.

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

	Natural 1/	Post-1949 Depletions	Net 2/
August 2010 through February 2011 (Basic Runoff Scenario)			
Basic	9,100	600	9,700
120% Basic	10,900	600	11,500
80% Basic	7,300	500	7,800
Runoff Year March 2011 through February 2012 (Statistical Analysis of Past Records)			
Upper Decile	34,300	-2,300	32,000
Upper Quartile	30,300	-2,300	28,000
Median	24,400	-2,500	21,900
Lower Quartile	19,300	-2,500	16,800
Lower Decile	16,200	-2,400	13,800

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.

V. ANNUAL OPERATING PLAN FOR 2010-2011

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 will 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 2010-2011 AOP includes 13 years of regulation at Fort Peck (1940) as the sole Mainstem project, plus 57 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 and the high runoff period from 1993 – 1999 during which five of the seven years experienced runoff greater than Upper Quartile including the record runoff of 49.0 MAF in 1997. 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. 2010-2011 AOP Simulations. AOP simulations for the five runoff scenarios are shown in the final section of this AOP as studies 4 through 8. The return of System storage to normal levels during 2010 allowed the System to provide improved service to all authorized purposes. In summary, the studies provide the following: full service flow support throughout a full length navigation season under all runoff scenarios; lower than normal winter releases for Lower Quartile and Lower Decile runoff, normal winter releases under Median runoff, and above normal winter releases for Upper Decile and Upper Quartile runoff; March and May spring pulses from Gavins Point dam; 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 Quartile and Upper Decile runoff though flood water evacuation is required; emphasis on Garrison for a steady to rising reservoir level during the forage fish spawn; and reservoir releases and pool levels sufficient to keep all intakes operational under all runoff scenarios. While likely not the case for the 2010-2011 runoff year, water conservation measures will 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, reducing flows to minimum levels to support various authorized purposes, 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 March 1 and May 1 System storage is above the Gavins Point spring pulse precludes of 40.0 MAF. The peak magnitude of the March pulse is 5,000 cfs over navigation flows. Based on the technical criteria, the peak magnitude of the May pulse would be 20,000 cfs under the Upper Decile and Upper Quartile runoff scenarios, 16,000 for Median runoff and 12,000 cfs for Lower Quartile and Lower Decile runoff. The actual peak magnitude of the May pulse will be determined based on the actual System storage and the May 1 runoff forecast. The Master Manual technical criteria include safeguards to minimize the risk of flooding associated with the spring pulses. Both spring pulses may be reduced or eliminated due to the downstream flow limits, shown on ***Plate 3***, which are well below the channel capacity of the Missouri River. These flow limits are identical to the most restrictive flood control constraints presented in the previous Master Manual and provide a similar level of flood protection. An additional safeguard is the incorporation of observed and anticipated precipitation into the daily river forecast to provide greater assurance that flows will remain below the downstream flow limits during the duration of the spring pulses. For simulation purposes, the magnitude of the May pulse for Median and above runoff was limited to 10,000 cfs due to the downstream flow limits. Water for the spring pulses will be withdrawn from one or more of the upper three reservoirs and/or Fort Randall depending on releases required to maintain steady to rising pools during the forage fish spawn and other considerations including impacts to historical and cultural sites and the need to evacuate stored flood waters. Prior to implementing the May pulse, the Corps will coordinate with the affected stakeholders. The Corps will also work closely with the USFWS to insure the planned implementation of the spring pulses meet the intent of the 2003 Amended BiOp.

The reach of the Missouri River downstream of the Platte River experiences a more normalized hydrograph than the reach between Gavins Point and the Platte. As a result, the USFWS has indicated that reducing the spring pulses downstream of the Platte River through reductions in Corps tributary reservoir projects still meets the intent of the 2003 Amended BiOp. If the releases at these downstream Corps tributary reservoirs can be reduced without undue increased risk to other areas, it may be possible to reduce the potential negative impacts on the lower Missouri River. This type of regulation was implemented in conjunction with the March 2008 and May 2009 spring pulses. However, this type of regulation is only feasible when releases are scheduled from certain downstream Corps' tributary reservoirs, most likely due to

recently captured runoff. Because of its higher magnitude, it is unlikely that the May pulse can be completely eliminated.

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 2011. Full service navigation flows or more are provided all runoff conditions throughout the navigation season. Application of the July 1 System storage check (see ***Plate 3***) indicate that a full length navigation season would be provided for all five runoff conditions. Upper Quartile and Upper Decile simulations reach the desired 56.8 MAF System storage level on March 1, 2012.

For modeling purposes in this AOP, the Steady Release – Flow to Target (SR-FTT) regulation scenario for Gavins Point dam is shown during the 2011 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 adding the May spring pulse hydrograph to the long-term average release (see ***Plate 3***) based on the service level, followed by cycling between the May and July table values for the remainder of the month to reflect an every third day peaking cycle from Gavins Point. 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 Quartile and Upper Decile runoff simulations follow the Master Manual, with much above normal runoff requiring release increases early in the year to evacuate floodwater from the reservoirs. Although these modeled Gavins Point releases represent our best estimate of required releases during 2011, 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.

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 Quartile and Upper Decile. Under those two runoff scenarios, releases were based on flood water evacuation. Based on the September 1 storage checks, Gavins Point winter modeled releases were 20,000 cfs during the 2010-2011 winter season for all runoff scenarios, and from 12,000 cfs to 20,000 cfs during the 2011-2012 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 2011 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. Releases in the Lower Quartile and Lower Decile simulations are adjusted to maintain steady-to-rising pool levels at Garrison. The Lower Quartile and Lower Decile simulations show the Oahe pool dropping during April, May and June. Fort Peck rises under Lower Quartile conditions and stays nearly steady under Lower Decile.

Two additional modified reservoir regulation plans, the Fort Peck "mini-test" and unbalancing the upper three reservoirs, have been shown in previous AOPs, but have not been implemented due to low reservoir levels. Due to the large variability of reservoir levels in recent years, the unbalancing of the three reservoirs to benefit reservoir fisheries and the endangered interior least tern and threatened piping plover will not be implemented 2011. Additionally, experience has shown that storing water in the annual flood control zone, particularly at Oahe, as the current criteria requires in order to implement unbalancing is undesirable due to flood control impacts. The Corps will work with each of the appropriate state agencies in 2011 to determine a modified version of unbalancing that may be implemented for future AOP's that does not adversely impact flood control. For the purposes of this AOP, the upper three reservoirs are shown in a balanced condition for all runoff scenarios. This balancing is computed based on the percent of the carryover multiple-use pool. With regard to the Fort Peck mini-test, a priority for pallid sturgeon recovery has been placed on the Lower Yellowstone Project at Intake, Montana. The Fort Peck mini-test and full test flows will be deferred until the efficacy of the Lower Yellowstone Project has been assessed. The groundbreaking for this project took place in August 2010.

Actual System regulation from January 1 through July 31, 2010 and the simulated regulating plans for each project through CY 2011 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 for Fort Peck, Garrison, Oahe, and Gavins Point the 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 2009 through July 2010. ***Plate 13*** presents past and simulated gross average monthly power generation and gross peaking capability for the System.

C. Regulation Plan for the Balance of the 2010 Navigation Season and Fall of 2010. The regulation of the System for the period of August though November 2010 is presented in the following paragraphs.

Fort Peck Dam. Releases averaged 6,400 cfs during August and the first half of September. When irrigation ceased in mid-September they were reduced to 6,000 cfs. The releases were held near that level through November. The Fort Peck pool remained essentially steady through the period and ended November near 2235.5 ft msl. The record low pool elevation of 2196.2 feet msl was set in March 2007. The previous record low pool elevation was 2208.7 feet msl set in April 1991.

Garrison Dam. Releases averaged 16,300 in August. At the end of August, the remaining threatened least terns and endangered piping plovers fledged in the reach downstream of Garrison Dam. Flows were then increased to 27,000 cfs in September, 30,000 cfs in October, and 31,000 cfs at the beginning of November to evacuate water from the exclusive and annual flood control pool zones. Releases were maintained at that rate until near the end of November. Releases were reduced to 22,000 cfs in late November in anticipation of the December freeze-in downstream of Garrison between Washburn and Bismarck, North Dakota. The Garrison pool steadily dropped through the fall and was at 1842.4 feet msl at the end of November. The record low pool elevation of 1805.8 feet msl was set in May 2005. The previous record low pool elevation was 1815.0 feet msl set in May 1991.

Oahe Dam. Releases averaged 32,100 cfs in August and 39,200 cfs in September to evacuate water from the annual flood control pool. October and November releases averaged 38,100 cfs and 37,800 cfs, respectively to accommodate the fall drawdown of the Fort Randall pool. The Oahe pool ended November at elevation 1606.5 feet msl. The record low Oahe pool elevation of 1570.2 feet msl was set in August 2006. The previous record low pool elevation was 1580.7 feet msl set in November 1989.

Big Bend Dam. Releases paralleled those from Oahe. Big Bend generally fluctuated between 1420.0 feet msl and 1421.0 feet msl for weekly cycling during high power load periods.

Fort Randall Dam. Releases averaged 40,900 cfs in August, 44,800 cfs in September, 47,100 cfs in October, and 44,000 cfs in November to facilitate the annual

drawdown of Fort Randall and to back up the releases from Gavins Point Dam. The fall pool draw down of Fort Randall started after Labor Day in early September and was carried over into early December due to the 10-day extension of the navigation season. Releases will be reduced after the navigation season ends in early December to the level required to back up Gavins Point winter releases.

Gavins Point Dam. Releases were scheduled above full service navigation levels to evacuate water from the reservoir system through early December. A full length navigation season, plus a 10-day extension, was provided in accordance with the technical criteria for the July 1 System storage check presented in the Master Manual. In accordance with the Missouri River 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 zone by March 1 the following season. The last day of flow support for the commercial navigation season ranged from December 1 at Sioux City to December 10 at the mouth near St. Louis. Releases will be reduced by approximately 2,000 to 3,000 cfs per day in early December until they reach the winter release rate. If conditions allow, a more gradual release reduction schedule may be implemented for the benefit of various environmental resources in the river reaches. The Gavins Point pool level was raised 1.5 feet to elevation 1207.5 feet msl in September. The pool level will remain near that elevation during the fall and winter months.

D. Regulation Plan for Winter 2010-2011. The September 1 System storage check is used to determine the winter release rate from Gavins Point dam. A winter release of 12,000 cfs is scheduled if System storage is less than 55 MAF on September 1; 17,000 cfs is scheduled when System storage is above 58 MAF; and the release is prorated for System storages between 55 and 58 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. The planned winter System release for 2010-2011 is 20,000 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.

Fort Peck Dam. Releases are expected to average 8,500 cfs in December and 9,000 cfs in January and February to serve winter power loads and to drawdown the lake to the base of the annual flood control pool. The Fort Peck pool level is expected to decline about 1.1 feet from near elevation 1835.1 feet msl at the end of November to near elevation 2234.0 feet msl by March 1. The pool is expected to rise to elevation 2234.4 feet msl by March 31.

Garrison Dam. Releases are scheduled to be 22,000 cfs in December increasing to 26,000 cfs for January and February to serve winter power loads and to drawdown the reservoir to the base of the annual flood control pool. The December release rate will likely be reduced prior to the time of freeze-in to prevent ice induced flooding at the time of freeze-in. These temporary reductions in the releases may be scheduled to prevent exceedence of a 13-foot stage at the Bismarck gage. Flood stage is 16 feet. Average winter release rates for Garrison are 20,300 cfs in December, 22,800 cfs in January and 24,000 cfs in February. The Garrison pool level is expected to decline about 5.6 feet from near elevation 1843.1 feet msl at the end of November to near elevation 1837.5 feet msl by March 1, at the base of the annual flood control storage zone. The pool is expected to rise to elevation 1838.1 feet msl by March 31.

Oahe Dam. Releases for the winter season will provide backup for the Fort Randall and Gavins Point releases plus fill 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 about 23,500 cfs. Daily releases will vary widely to best meet power loads. Peak 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 problems develop downstream of Oahe Dam. This potential reduction has been coordinated with the Western Area Power Administration. The Oahe pool level is expected to slowly decline from 1606.8 feet msl at the end of November to 1606.3 feet msl at the end of December before starting to rise to elevation 1607.5 feet msl by the beginning of March, the base of the annual flood control storage zone. The pool is expected to rise to elevation 1607.7 feet msl by the end of March.

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

Fort Randall Dam. Releases will average about 18,000 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 1337.5 feet msl to near elevation 1350.0 feet msl, the seasonal base of flood control, by March 1. However, if the plains snowpack flood potential downstream of Oahe Dam is quite low, the Fort Randall pool level will be raised to near 1353.0 feet msl by March 1. It is likely that a pool level as high as 1355.0 feet msl could be reached by the end of the winter period on March 31 if runoff conditions permit. 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 Dam. 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 msl until late February when it will be lowered to elevation 1206.0 feet msl 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 56.8 million acre-feet by March 1, 2011, the beginning of next year's runoff season.

E. Regulation During the 2011 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 by April 1, 2011, 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 2011 navigation season there is no commercial navigation scheduled to use the upper reaches of the navigation channel, we will consider eliminating navigation flow support for targets in those reaches to conserve water in the System, provide additional flood control, and/or minimize incidental take of the protected species during the nesting season.

Navigation flow support for the 2011 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 2011 navigation season for all runoff scenarios. Following the July 1 System storage check, full service would continue to be provided for all runoff scenarios. The normal 8-month navigation season is provided for all runoff scenarios as shown in ***Table II***.

TABLE II
NAVIGATION SERVICE SUPPORT
FOR THE 2011 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.*	34.3	57.8	65.0	+3.8	+20	0**
U.Q.*	30.3	57.6	63.8	0	+12	0**
Med *	24.4	57.4	61.4	0	0	0
L.Q.*	19.3	57.3	58.4	0	0	0
L.D.*	16.2	57.2	57.3	0	0	0

*Includes both March and May Spring Pulses
**Includes 10-day extension for Upper Quartile and Upper Decile

As previously stated, the planned regulation for the 2011 nesting season below Gavins Point dam will be Steady Release – Flow to Target (SR-FTT) for median runoff or below. The initial steady release, which has ranged from 18,000 cfs to 27,000 cfs over the last five 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 peaking cycle of 2 days down and 1 day up following the May pulse 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 and conserving water in the upper three reservoirs, if required. Gavins Point releases for the Upper Quartile and Upper Decile 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 in late August. In addition to the intra-day pattern, Fort Randall releases may also be cycled with 2 days of low releases and 1 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.

As discussed previously, System storage will be above the storage precludes for both spring pulses under all runoff scenarios modeled.

Gavins Point releases may be quite variable during the 2011 navigation season but are expected to range from 22,000 to 52,000 cfs. 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 Kansas Reservoir System have not been included 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.*** Sufficient storage space exists in the System to control flood inflows under all scenarios simulated for this AOP.

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 System 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 2011 forage fish spawn if runoff is below median. The studies show that inflows are sufficient to maintain steady to rising pools at Garrison and Fort Peck from April through June for the Lower Quartile runoff scenario; Oahe pool levels may fall during both lower runoff scenarios. This will be accomplished by setting releases at Fort Peck and Garrison at a level that would 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. If the drought re-emerges, 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.

As discussed in the previous section, the 2010-2011 AOP will not include provisions for unbalancing the Fort Peck, Garrison, and Oahe reservoirs to benefit the reservoir fishery and endangered species, but unbalancing will be considered within the carryover multiple use zone in future years.

Fort Peck Dam. The repetitive daily pattern of releases from Fort Peck Dam 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 2011 nesting season will not be restricted by the repetitive daily pattern unless habitat conditions or nesting patterns

warrant a change. Overall habitat should be less than in 2010 as flows during the nesting season will be higher.

If flood 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 should 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, but appears possible under all the runoff scenarios except the Lower Decile where a slight decline in the reservoir level is indicated during April. The Fort Peck "mini-test" will not be run pending an evaluation of the results of the Yellowstone River Intake Diversion fish passage structure.

Garrison Dam. Daily average releases from Garrison will be much higher in 2011 than what was experienced in 2010 during the tern and plover nesting season under all runoff scenarios. 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 during the 2011 nesting season will be higher than was experienced during the last eleven years and will result in less available habitat. 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.

With the higher Garrison reservoir levels in 2009 and 2010, the volume of cold water habitat showed good improvement. As a result, the plywood that was installed in 2005 on the intake trash racks was removed in October 2009. During 2011, cold-water habitat in Garrison should be adequate for all runoff scenarios.

If runoff is not sufficient to keep all the pool levels rising during the fish spawn in 2011, the Corps will, to the extent reasonably possible while serving other Congressionally authorized project purposes, set releases to result in a steady to rising pool at Garrison from April 20 to May 20. Adjustments to Garrison's releases, however, may be restricted when the terns and plovers begin nesting in May. A rising pool at Garrison during the fish spawn in April and May will be dependent upon the daily inflow pattern to the reservoir but appears possible for all runoff simulations.

Oahe Dam. Releases in the spring and summer will back up those from Gavins Point Dam. The pool level should be steady to rising in the spring during the fish spawn under median and above runoff scenarios. Depending on the timing and distribution of runoff, a level or rising pool at Oahe is not likely under the two lower runoff scenarios.

Fort Randall Dam. To the extent reasonably possible, Fort Randall will be regulated to provide for a pool elevation near 1355 feet msl 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 msl 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 during the 2011 nesting season 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. Fort Randall zero releases 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 Area Power Administration.

Gavins Point Dam. March and May spring pulses from Gavins Point Dam for the benefit of the endangered pallid sturgeon will be implemented under all runoff scenarios in 2011, downstream conditions permitting. The Master Manual technical criteria for the pulses are presented in Plate 3. Details of the spring pulses included in the AOP simulations are provided in Chapter V, Section B, entitled "**2010-2011 AOP Simulations**".

Based on 2003 through 2009 nesting season results with the SR-FTT regulation and planned habitat development activities, it is anticipated that sufficient habitat will be available above the planned release rates for Median or below runoff to provide for successful nesting. All reasonable measures to minimize the loss of nesting T&E bird species will be used. These measures include, but are not limited to, such things as a relatively high initial steady release during the peak of nest initiation, the use of the Kansas River basin reservoirs, moving nests to higher ground when possible, 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. It is anticipated that for Upper Decile and Upper Quartile runoff scenarios a SR scenario will be implemented due to the need to evacuate flood water. A SR-FTT release scenario will be implemented for Median and below runoff scenarios. A full description of these two release scenarios can be found in the Master Manual.

The Gavins Point pool will be regulated near 1206.0 feet msl in the spring and early summer, with minor day-to-day variations due to inflows 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 the Gavins Point project, 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 Dam and Gavins Point Dam 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. The pool will be increased to elevation 1207.5 feet msl 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 for the Operation and Management of the Missouri River Main Stem System (PA), 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 improved significantly in 2010 and are currently 3 to 15 feet higher than one year ago, but continuing exposure of cultural sites along the shorelines is still possible. Actions to avoid, minimize or mitigate adverse impacts and expected results of the actions are covered under Chapter VI of this AOP. ***Plate 14*** shows the locations of the Tribal Reservations.

Fort Peck Dam. Depending on runoff in the Missouri River basin, System regulation during 2011 could result in a Fort Peck pool elevation variation from a high of 2245 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 Dam. 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 1848 and 1828 feet msl during 2011. Based on a review of existing information, approximately 111 known sites could be affected during this period.

Oahe Dam. At the Oahe reservoir, the System regulation under the Upper and Lower Decile runoff scenarios could result in pool elevations ranging from 1615 to 1593 feet msl (see ***Plate 10*** and the studies included at the end of this report). Based on a review of existing information, approximately 217 known sites could be affected during this period.

Big Bend Dam. System regulation will be adjusted to maintain the Big Bend pool level in the normal 1420 to 1421 feet msl range during 2011. Short-term increases above 1421 due to local rainfall may also occur. Based on a review of existing information, approximately 4 known sites could be affected during this period.

Fort Randall Dam. 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 2011. 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 32 known sites could be affected during this period.

Gavins Point Dam. System regulation will be adjusted to maintain the Gavins Point pool level in the normal 1206 to 1207.5 feet msl range during 2010. Short-term increases above 1207.5 feet msl may occur due to local rainfall. Based on a review of existing information, no known sites could be affected during this period.

VI. SUMMARY OF RESULTS EXPECTED IN 2011

With regulation of the System in accordance with the 2010-2011 AOP outlined in the preceding pages, the following results can be expected. Table III summarizes the critical decision points throughout the year for all runoff conditions.

Table III
Summary of 2010-2011 AOP Studies

Decision Points	2010-2011 Runoff Condition				
	Upper Decile	**Upper Quartile**	**Median**	**Lower Quartile**	**Lower Decile**
March 1 System Storage	56.8 MAF	56.8 MAF	56.8 MAF	56.8 MAF	56.8 MAF
March Spring Pulse?	Yes	Yes	Yes	Yes	Yes
Pulse Magnitude	5 kcfs	5 kcfs	5 kcfs	5 kcfs	5 kcfs
March 23-31 GP Release	28.9 kcfs	28.9 kcfs	28.9 kcfs	32.0 kcfs	32.0 kcfs
March 15 System Storage	57.8 MAF	57.6 MAF	57.4 MAF	57.3 MAF	57.2 MAF
Spring Service Level	full service	full service	full service	full service	full service
May 1 System Storage	60.0 MAF	59.5 MAF	58.3 MAF	57.2 MAF	56.8 MAF
May Spring Pulse?	Yes	Yes	Yes	Yes	Yes
Pulse Magnitude*	20.0 (10) kcfs	20.0 (10) kcfs	16.0 (10.0) kcfs	12.0 (9.7) kcfs	12.0 (9.7) kcfs
May Cycling	None	28.0/31.6 kcfs	28.0/31.6 kcfs	31.3/34.3 kcfs	31.3/34.3 kcfs
May GP Release	36.5 kcfs	30.7 kcfs	30.7kcfs	33.9 kcfs	33.9 kcfs
Fish Spawn Rise (Apr-Jun)					
FTPK Pool Elev Change	+9.1 feet	+7.5 feet	+4.6 feet	+2.8 feet	+0.2 feet
GARR Pool Elev Change	+6.1 feet	+5.5 feet	+5.1 feet	+4.2 feet	+3.7 feet
OAHE Pool Elev Change	+6.9 feet	+6.3 feet	+3.0 feet	-3.5 feet	-4.1 feet
July 1 System Storage	65.0 MAF	63.8 MAF	61.4 MAF	58.4 MAF	57.4 MAF
Sum-Fall Service Level (kcfs)	Full Service	Full Service	Full Service	Full Service	Full Service
Nav Season Length	10 Day extension	10 Day extension	0 Days shortening	0 Days shortening	0 Days shortening
September 1 System Storage	63.1 MAF	62.4 MAF	59.8 MAF	55.8 MAF	54.1 MAF
Winter 2011-12 GP Release	20.0 kcfs	20.0 kcfs	17.0 kcfs	13.3 kcfs	12.5 kcfs
February 28 System Storage	56.8 MAF	56.8 MAF	56.1 MAF	51.2 MAF	48.8 MAF
End-Year Pool Balance	Balanced	Balanced	Balanced	Balanced	Balanced
Percent Pool	100%	100%	98%	85%	79%

* Pulse magnitudes are the calculated magnitude per technical criteria (Plate 3) and simulated magnitude due to the downstream flow limits.

A. Flood Control. All runoff scenarios studied will begin the March 1, 2011 runoff season at the desired 56.8 MAF base of the annual flood control and multiple use zone. Therefore, the entire System flood control zone will be available to store surplus runoff. The System will be available to significantly reduce peak discharges and store a significant volume of water for all floods that may originate above the System.

Being at the base of the annual flood control and multiple use zone will also provide full support for all of the other multiple purposes of the System.

B. Water Supply and Water Quality Control. Problems at intakes located in the river reaches and Mainstem 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; however above normal runoff in 2008 through 2010 has eliminated concern over many of these intakes. Gains in the Oahe pool level required modification of the Standing Rock Sioux Tribe's temporary intake at Fort Yates to protect it from the rising water levels. The Bureau of Reclamation (BOR) installed the temporary intake after the primary intake failed in November 2003 leaving the community without water for several days. If the drought re-emerges, 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 2011 would be at least 20 feet higher than the record lows set in the current drought. Although not below the critical shut-down elevations for any intake, return to lower levels would require extra monitoring to ensure the continued operation of the intakes.

Above normal Gavins Point releases are being scheduled in the winter of 2010-2011. Under the 2010-2011 runoff scenarios, all water supply and water quality requirements on the Missouri River both below Gavins Point Dam and between System reservoirs should be met for all flow conditions studied. Winter releases for 2011-2012 will be determined based on the September 1, 2011 System storage check. As shown in Table III, 2011-2012 winter releases of 20,000 cfs would be made for a Upper Decile and Upper Quartile runoff scenarios; 17,000 cfs under a Median runoff scenario; and 13,300 cfs and 12,500 cfs under Lower Quartile and Lower Decile runoff scenarios, respectively. Should the 2010-2011 runoff be in the Lower Quartile or Lower Decile range, planned winter release rates 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. However, we believe 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. It may be necessary at times to increase Gavins Point releases to provide adequate downstream flows due to the forecast of excessive river ice formation or if ice jams or blockages form with temporarily restrict flow. Based on past experiences, these events are expected to occur infrequently and be of short duration.

During non-navigation periods in the spring and fall from 2004 through 2007, System releases were scheduled as low as 9,000 cfs provided that enough downstream tributary flow existed to allow for continued operation of downstream water intakes. If a non-navigation year would occur in the future, summer releases (May thru 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 all 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 power plant'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 power plant 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 throughout the System and along the lower river reach 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 for those intake operators whom had issues or difficulty with access during the past drought years, adjustments should continue to be made during this more normal release period to improve access and flexibility when drought returns to the basin.

C. Irrigation. 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. Tributary irrigation water usage is fully accounted for in the estimates of water supply.

D. Navigation. Service to navigation in 2011 will be at full service flow support from the beginning of the navigation season through the July 1 storage check for all runoff scenarios. In addition, all runoff scenarios indicate at least full service and a full navigation season based on the July 1 storage check. Although the AOP simulations provide a comparison of typical flow support under varying runoff conditions, the

actual rate of flow support for the 2011 navigation season will be based on actual System storage on March 15 and July 1, 2011.

The lower three runoff simulations show a normal 8-month navigation season length and full service flows during 2011. The upper two runoff scenarios indicate a 10-day extension to the navigation season and flows above full service navigation flow support. The anticipated service level and season length for all runoff conditions simulated are shown in ***Table II***.

E. Power. ***Table IV and Table V*** give the estimated monthly System load requirements and hydropower supply of the Eastern Division, Pick-Sloan Missouri Basin Program (P-S MBP), from August 2010 through December 2011. 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 median runoff, annual generation in 2011 is estimated to be 9.9 million MWh, 106 percent of normal.

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. Improved runoff resulted in higher pool levels and better recreation access at the upper three reservoirs during 2010. Recreation access is expected to be at normal levels in 2011. The last two out-of-service boat ramps at Fort Peck became accessible during the summer of 2010. If Lower Quartile or Lower Decile runoff were to occur in 2011, 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 2011 on fish and wildlife are included in Chapter V, Section F, entitled, "Regulation Activities for T&E Species and Fish Propagation Enhancement."

G. Historic and Cultural Properties. As mentioned in Chapter V of this AOP, the regulation of the System during 2010 and 2011 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 affects 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 "Draft Five Year Plan, dated February 2005" (see https://www.nwo.usace.army.mil/CR/) 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 2010 and 2011. 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 "Draft Monitoring and Enforcement Plan, dated April 2005" (see https://www.nwo.usace.army.mil/CR/) 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 2010-2011 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. Training for the monitoring teams was held in June 2006, July 2007, March 2008, April 2008, July 2008, May 2009 and again in June 2010.

Second, mitigation or protection of sites that are being adversely impacted continues. During the reporting period for the 2009 Annual Report by the Corps on the implementation of the Programmatic Agreement eight sites were either completed, started, or in the design phase. The annual report is available at https://www.nwo.usace.army.mil/CR/. In addition the Corps has awarded a contract to develop an erosion model that will compare modeling data against actual erosion data, collected by the monitoring team, to assist in the prioritization of sites for protection. Work on the erosion model is continuing.

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

2010	Estimated Committed Sales*	Expected C of E Capability 120%	Basic	80%	Expected Bureau Capability** 120%	Basic	80%	Expected Total System Capability 120%	Basic	80%
Aug	2152	2372	2370	2372	211	210	208	2583	2580	2580
Sep	2152	2373	2373	2376	210	209	205	2583	2582	2581
Oct	2152	2349	2352	2355	211	211	206	2560	2563	2561
Nov	2099	2286	2304	2308	209	210	206	2495	2514	2514
Dec	2099	2289	2295	2312	206	206	203	2495	2501	2515
2011										
Jan	2099	2311	2314	2318	202	201	201	2513	2515	2519
Feb	2099	2320	2320	2320	197	199	199	2517	2519	2519

		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	2099	2333	2329	2324	2320	2318	194	194	195	199	195	2527	2523	2519	2519	2513
Apr	2124	2350	2344	2330	2313	2310	194	194	194	197	193	2544	2538	2524	2510	2503
May	2177	2365	2360	2334	2307	2303	200	200	203	201	194	2565	2560	2537	2508	2497
Jun	2177	2401	2392	2369	2325	2309	213	213	213	206	195	2614	2605	2582	2531	2504
Jul	2177	2390	2384	2365	2314	2292	213	213	213	206	204	2603	2597	2578	2520	2496
Aug	2177	2376	2371	2354	2289	2269	210	210	211	204	201	2586	2581	2565	2493	2470
Sep	2177	2364	2364	2336	2276	2251	210	209	211	205	202	2574	2573	2547	2481	2453
Oct	2177	2334	2336	2316	2254	2227	209	209	212	206	203	2543	2545	2528	2460	2430
Nov	2120	2280	2289	2278	2212	2184	207	207	209	205	203	2487	2496	2487	2417	2387
Dec	2120	2244	2251	2242	2178	2149	202	204	206	203	200	2446	2455	2448	2381	2349

* 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 V
ENERGY GENERATION AND SALES
(Million kWh at plant)

2010	Estimated Committed Sales*	Expected C of E Generation 120%	Basic	80%	Expected Bureau Generation ** 120%	Basic	80%	Expected Total System Generation 120%	Basic	80%
Aug	844	1169	1038	955	83	66	60	1252	1104	1015
Sep	725	1279	1150	946	78	63	57	1357	1213	1003
Oct	725	1258	1118	904	77	64	56	1335	1182	960
Nov	791	1214	1086	891	80	78	59	1294	1164	950
Dec	899	866	786	743	82	80	60	948	866	803
2011										
Jan	912	829	802	781	82	78	60	911	880	841
Feb	883	731	709	692	73	69	54	804	778	746

		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	815	682	679	682	687	692	80	80	75	58	58	762	759	757	745	750
Apr	753	785	737	748	784	812	79	79	72	55	55	864	816	820	839	867
May	699	1064	963	950	991	985	118	110	79	54	56	1182	1073	1029	1045	1041
Jun	759	1239	1163	946	1014	994	129	120	87	53	56	1368	1283	1033	1067	1050
Jul	839	1461	1305	1022	1089	1065	158	127	81	56	51	1619	1432	1103	1145	1116
Aug	843	1459	1303	1058	1086	1061	100	95	73	56	50	1559	1398	1131	1142	1111
Sep	725	1253	1205	915	947	923	93	87	70	54	48	1346	1292	985	1001	971
Oct	725	1230	1076	732	770	764	86	83	71	54	48	1316	1159	803	824	812
Nov	790	1191	1049	658	670	658	89	84	82	63	49	1280	1133	740	733	707
Dec	899	866	818	670	595	571	91	86	83	64	50	957	904	753	659	621
CY TOT		12790	11858	9892	10106	9998	1178	1106	920	681	635	13968	12964	10812	10787	10633

* 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.

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 2010-2011 on cultural sites are included in the Chapter V, section G., entitled, "Regulation Activities for Historic and Cultural Properties."

H. System Storage. If August 1, 2010 Basic runoff forecast verifies, System storage will decline to 57.1 MAF by the close of CY 2010. This would be 23.7 MAF higher than the all-time record low storage of 33.9 MAF set on February 9, 2007 and nearly 2.9 MAF higher than last year's storage of 54.3 MAF. This end-of-year storage is 3.6 MAF more than the 1967 to 2009 average. The record low storage during the 1988-1992 drought was 40.8 MAF in January 1991. 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, 2011 is presented in ***Table VI*** for the runoff scenarios simulated.

I. Summary of Water Use by Functions. Anticipated water use in CY 2010, under the regulation plan with the Basic forecast of water supply is shown in ***Table VII***. Actual water use data for CY 2009 are included for information and comparison. Under the reservoir regulation simulations in this AOP, estimated water use in CY 2011 also is shown in ***Table VII.***

TABLE VI
ANTICIPATED DECEMBER 31, 2011 SYSTEM STORAGE

Water Supply Condition	Total (12/31/11)	Carryover Storage Remaining 1/	Unfilled Carryover Storage 2/	Total Change CY 2011
	(Volumes in 1,000 Acre-Feet)			
Upper Decile	56,900	38,900	0	100
Upper Quartile	57,200	38,900	0	300
Median	56,200	38,300	600	-900
Lower Quartile	51,300	33,400	5,500	-6,600
Lower Decile	49,000	31,100	7,800	-8,100

1/ Net usable storage above 17.9 MAF System minimum pool level established for power, recreation, irrigation diversions, and other purposes.

2/ System base of annual flood control zone containing 56.8 MAF.

TABLE VII
MISSOURI RIVER MAINSTEM SYSTEM
WATER USE FOR CALENDAR YEARS 2009, 2010, AND 2011 ABOVE SIOUX CITY, IOWA
in Million Acre-Feet (MAF)

		CY 2009 Actual	CY 2010 Basic Simulation	Simulations for Calendar Year 2011 Upper Decile	Upper Quartile	Median	Lower Quartile	Lower Decile
Upstream Depletions	(1)							
Irrigation, Tributary Reservoir Evaporation & Other Uses		2.4	1.9					
Tributary Reservoir Storage Change		0.0	0.1					
Total Upstream Depletions		2.4	2.0	2.4	2.4	2.6	2.6	2.4
System Reservoir Evaporation	(2)	3.0	2.6	1.2	1.2	1.8	2.1	2.0
Sioux City Flows								
Navigation Season								
Unregulated Flood Inflows Between Gavins Point & Sioux City	(3)	0.1	0.8					
Navigation Service Requirement	(4)	12.8	17.8	17.2	16.6	15.9	16.3	16.0
Supplementary Releases								
T&E Species	(5)	1.9	1.3	0.4	0.4	0.4	0.3	0.2
Flood Evacuation	(6)	0.0	5.9	8.4	4.8	0.0	0.0	0.0
Non-navigation Season								
Flows		3.0	3.5	4.2	4.2	4.6	4.2	4.2
Flood Evacuation Releases	(7)	0.0	0.5	0.5	0.4	0.0	0.0	0.0
System Storage Change		10.3	2.9	0.0	0.3	-0.9	-6.4	-8.5
Total		33.5	37.3	34.3	30.3	24.4	19.3	16.2
Project Releases								
Fort Peck		3.8	4.0	8.5	7.9	6.3	6.1	6.2
Garrison		10.1	13.4	21.1	19.5	16.0	16.0	15.3
Oahe		12.3	17.0	24.3	21.5	17.7	19.0	19.0
Big Bend		11.6	17.1	24.2	21.4	17.6	18.9	18.9
Fort Randall		13.0	19.2	25.6	22.5	18.3	19.1	19.0
Gavins Point		14.8	21.6	27.7	24.4	19.7	20.3	20.1

(1) Tributary uses above the 1949 level of development including agricultural depletions and tributary storage effects.
(2) Net evaporation is shown for 2011.
(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 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.

VII. TENTATIVE PROJECTION OF REGULATION THROUGH FEBRUARY 2017

The 5-year extensions to the AOP (March 2012 to March 2017) 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 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, magnitudes of March and May spring pulses, March 1 reservoir unbalancing, end of year System storage, and the winter release rate for the extensions are shown on ***Table VII***. The criteria considered as each year of the extensions was modeled are listed, along with the results, in ***Tables VIII through X*** 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 (24.4 MAF) from March 2012 through February 2017. The March 1, 2012 System storage would be 56.1 MAF and would drop to 53.2 MAF by March 1, 2017, 3.6 MAF below the desired March 1 storage of 56.8 MAF, the base of the annual flood control and multiple use pool. The navigation service level would range from full service to 100 cfs below full service for the study period of 2012 to 2016. There would be full navigation seasons for the study period of 2012 through 2016. Winter releases would range from 17,000 cfs in the winter of 2012-2013 to 14,700 cfs in winter 2016-2017. March and May spring pulses would occur each year, with the magnitude of the May pulse ranging from 10,000 cfs in 2012 to 10,100 cfs in 2016. The May pulses in the study period of 2012 to 2016 would be limited in order to not exceed downstream flow limits during the pulse. For the entire study period, the carryover multiple use storage in Fort Peck, Garrison, and Oahe was balanced on March 1 each year.

TABLE VIII
NAVIGATION SERVICE SUPPORT, SPRING PULSES, UNBALANCING
AOP EXTENSION STUDIES

	2012	2013	2014	2015	2016
MEDIAN					
Annual Runoff Volume (MAF)	24.4	24.4	24.4	24.4	24.4
Spring Pulse					
March (kcfs)	5.0	5.0	5.0	5.0	5.0
May (kcfs)	10.0*	10.0*	10.0*	10.0*	10.1*
Flow Level Below Full Service					
Spring (kcfs)	Full	Full	Full	Full	Full-0.1
Summer/Fall (kcfs)	Full	Full	Full	Full	Full
Season Length	8 months	8 months	8 months	8 months	8 months
Reservoir Unbalancing (ft)					
Fort Peck	0	0	0	0	0
Garrison	0	0	0	0	0
Oahe	0	0	0	0	0
Dec 31 Storage (MAF)	55.5	54.8	54.1	53.6	53.2
Winter Release (kcfs)	17.0	17.0	16.3	15.3	14.7
Special Information					
LOWER QUARTILE					
Annual Runoff Volume (MAF)	19.7	20.7	21.5	22.8	24.4
Spring Pulse					
March (kcfs)	5.0	5.0	5.0	5.0	5.0
May (kcfs)	11.8	11.9	12.3	13.2	14.6
Flow Level Below Full Service					
Spring (kcfs)	Full-2.7	Full-6.0	Full -6.0	Full -6.0	Full -6.0
Summer/Fall (kcfs)	Full -3.3	Full -5.4	Full -6.0	Full -5.6	Full -4.2
Season Length	8 mnths	8 mnths-2 days	8 mnths-7 days	8 mnths-4 days	8 mnths
Reservoir Unbalancing (ft)					
Fort Peck	0	0	0	0	0
Garrison	0	0	0	0	0
Oahe	0	0	0	0	0
Dec 31 Storage (MAF)	47.6	46.4	46.1	46.7	48.4
Winter Release (kcfs)	12.5	12.5	12.5	12.5	12.5
LOWER DECILE					
Annual Runoff Volume (MAF)	16.8	17.1	18.7	19.2	19.4
Spring Pulse					
March (kcfs)	5.0	5.0	5.0	0	0
May (kcfs)	11.0	10.1	9.5	9.1	0
Flow Level Below Full Service					
Spring (kcfs)	Full-5.6	Full -6.0	Full -6.0	Full -6.0	Full -6.0
Summer/Fall (kcfs)	Full -5.8	Full -6.0	Full -6.0	Full -6.0	Full -6.0
Season Length	8 mnths-5 days	8 mnths-30 days	8 mnths-30 days	8 mnths-30 days	8 mnths-30 days
Reservoir Unbalancing (ft)					
Fort Peck	0	0	0	0	0
Garrison	0	0	0	0	0
Oahe	0	0	0	0	0
Dec 31 Storage (MAF)	44.5	41.4	39.7	38.6	37.7
Winter Release (kcfs)	12.5	12.5	12.5	12.5	12.5

* Limited by Downstream Flood-Control Limits.

Table IX Median Extension Studies - Criteria Considered in the Modeling Process							
Study Number			**9**	**10**	**11**	**12**	**13**
	Units	**Criteria**	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**	**2016-2017**
March 1 Storage	*MAF*	*40*	55.4	54.7	54.1	53.6	53.2
- March Spring Pulse?	*N/A*		Yes	Yes	Yes	Yes	Yes
March 15 Storage	*MAF*	*31/49/54.5*	56.8	56.1	55.4	54.8	54.4
- Service Level	*N/A or kcfs*	*No Sea/Min/Full Thresholds*	Full	Full	Full	Full	Full -0.1
- 3rd Period March GP Q	*kcfs*		28.9	28.9	28.9	28.9	28.8
- April Gavins Point Q	*kcfs*		26.7	26.7	26.7	26.7	26.6
May 1 Storage	*MAF*	*40*	57.7	57.0	56.3	55.7	55.4
- May Spring Pulse?	*N/A*		Yes	Yes	Yes	Yes	Yes
*- Pulse Magnitude**	*kcfs*		16.0 (10)	16.0 (10)	16.0 (10)	16.0 (10)	16.0 (10.1)
- Gavins Point Cycling Qs	*kcfs*		28.0/31.6	28.0/31.6	28.0/31.6	28.0/31.6	27.9/31.5
- May Gavins Point Q	*kcfs*		30.7	30.7	30.7	30.7	30.6
- June Gavins Point Q	*kcfs*		31.6	31.6	31.6	31.6	31.6
July 1 Storage	*MAF*	*50.5/57*	60.7	60.0	59.3	58.7	58.3
- 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*	60.7	60.0	59.3	58.7	58.3
- 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*		28.2	28.2	28.1	28.0	28.0
September 1 Storage	*MAF*	*55/58*	59.1	58.3	57.6	57.0	56.6
- Winter Gavins Point Q	*kcfs*	*12/17 Thresholds*	17.0	17.0	16.3	15.3	14.7
End-of-Year Reservoir Storage	*MAF*		55.4	54.7	54.1	53.6	53.2
- Percent Full	*N/A*		96%	94%	93%	92%	90%
Balance/Unbalance	*N/A*	*Bal <2227/1827/1600 ft msl*	Balanced	Balanced	Balanced	Balanced	Balanced
Peck Rise 3/31-5/31	*N/A*		Yes	Yes	Yes	Yes	Yes
Garr 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
** Pulse magnitudes are the calculated magnitude per technical criteria and simulated magnitude due to the downstream flow limits*							

Table X Lower Quartile Extension Studies - Criteria Considered in the Modeling Process							
Study Number			**14**	**15**	**16**	**17**	**18**
	Units	Criteria	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**	**2016-2017**
March 1 Storage	*MAF*	*40*	51.2	47.7	46.6	46.4	47.0
- March Spring Pulse?	*N/A*		Yes	Yes	Yes	Yes	Yes
March 15 Storage	*MAF*	*31/49/54.5*	52.0	48.6	47.5	47.4	48.1
- Service Level	*N/A or kcfs*	*No Sea/Min/Full Thresholds*	Full - 2.7	Min Service	Min Service	Min Service	Min Service
- 3rd Period March GP Q	*kcfs*		29.3	26.0	26.0	26.0	26.0
- April Gavins Point Q	*kcfs*		27.1	23.8	23.8	23.8	23.8
May 1 Storage	*MAF*	*40*	52.1	49.2	48.2	48.3	49.4
- May Spring Pulse?	*N/A*		Yes	Yes	Yes	Yes	Yes
*- Pulse Magnitude**	*kcfs*		11.8	11.9	12.3	13.2	14.6
- Gavins Point Cycling Qs	*kcfs*		28.6/31.6	25.3/28.3	25.3/28.3	25.3/28.3	25.3/28.3
- May Gavins Point Q	*kcfs*		31.6	28.3	28.4	28.7	29.4
- June Gavins Point Q	*kcfs*		31.6	28.3	28.3	28.3	28.3
July 1 Storage	*MAF*	*50.5/57*	53.4	51.2	50.4	50.9	52.4
- Service Level	*N/A*	*Min/Full Thresholds*	Full - 3.3	Full - 5.4	Min Service	Full - 5.6	Full - 4.2
- July Gavins Point Q	*kcfs*		31.0	28.9	28.3	28.7	30.1
- Aug Gavins Point Q	*kcfs*		30.7	28.6	28.0	28.4	29.8
- Sept Gavins Point Q	*kcfs*		30.2	28.1	27.5	27.9	29.3
July 1 Storage	*MAF*	*36.5/41&46.8/51.5*	53.4	51.2	50.4	50.9	52.4
- Season Length Shortening	*days*	*61/31&31/0 Thresholds*	0	2	7	4	0
- Oct Gavins Point Q	*kcfs*		29.8	27.7	27.1	27.5	28.9
- Nov Gavins Point Q	*kcfs*		25.2	22.1	19.6	21.5	24.1
September 1 Storage	*MAF*	*55/58*	51.2	49.5	48.9	49.5	51.0
- Winter Gavins Point Q	*kcfs*	*12/17 Thresholds*	12.5	12.5	12.5	12.5	12.5
End-of-Year Reservoir Storage	*MAF*		47.7	46.6	46.4	47.0	48.4
- Percent Full	*N/A*		76%	73%	72%	74%	77%
Balance/Unbalance	*N/A*	*Bal <2227/1827/1600 ft msl*	Balance	Balance	Balance	Balance	Balance
Peck Rise 3/31-5/31	*N/A*		Yes	Yes	Yes	Yes	Yes
Garr Rise 3/31-5/31	*N/A*		No	Yes	Yes	Yes	Yes
Oahe Rise 3/31-5/31	*N/A*		Yes	No	Yes	Yes	Yes
Favored Reservoir - Fish Spawn	*N/A*		FP/OA	GA	FP/OA	GA	FP/OA
** Pulse magnitudes are the calculated magnitude per technical criteria and simulated magnitude due to the downstream flow limits*							

Table XI							
Lower Decile Extension Studies - Criteria Considered in the Modeling Process							
Study Number			**19**	**20**	**21**	**22**	**23**
	Units	**Criteria**	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**	**2016-2017**
March 1 Storage	*MAF*	*40*	48.7	44.4	41.3	39.7	38.7
- March Spring Pulse?	*N/A*		Yes	Yes	Yes	No	No
March 15 Storage	*MAF*	*31/49/54.5*	49.4	45.1	42.1	40.6	39.5
- Service Level	*N/A or kcfs*	*No Sea/Min/Full Thresholds*	Full - 5.6	Min Service	Min Service	Min Service	Min Service
- 3rd Period March GP Q	*kcfs*		26.4	26.0	26.0	23.8	23.8
- April Gavins Point Q	*kcfs*		24.2	23.8	23.8	23.8	23.8
May 1 Storage	*MAF*	*40*	49.5	45.3	42.5	41.2	40.0
- May Spring Pulse?	*N/A*		Yes	Yes	Yes	Yes	No
- Pulse Magnitude	*kcfs*		11.0	10.1	9.5	9.2	0.0
- 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*		28.3	27.9	27.8	27.8	25.9
- June Gavins Point Q	*kcfs*		28.7	28.3	28.3	28.3	28.3
July 1 Storage	*MAF*	*50.5/57*	50.7	46.3	44.1	42.9	41.9
- Service Level	*N/A*	*Min/Full Thresholds*	Full - 5.8	Min Service	Min Service	Min Service	Min Service
- July Gavins Point Q	*kcfs*		28.5	28.3	28.3	28.3	28.3
- Aug Gavins Point Q	*kcfs*		28.2	28.0	28.0	28.0	28.0
- Sept Gavins Point Q	*kcfs*		27.7	27.5	27.5	27.5	27.5
July 1 Storage	*MAF*	*36.5/41&46.8/51.5*	50.7	46.3	44.1	42.9	41.9
- Season Length Shortening	*days*	*61/31&31/0 Thresholds*	5	30	30	30	30
- Oct Gavins Point Q	*kcfs*		27.3	23.9	23.9	23.9	23.9
- Nov Gavins Point Q	*kcfs*		19.5	9.0	9.0	9.0	9.0
September 1 Storage	*MAF*	*55/58*	48.1	43.8	41.8	40.7	39.7
- Winter Gavins Point Q	*kcfs*	*12/17 Thresholds*	12.5	12.5	12.5	12.5	12.5
End-of-Year Reservoir Storage	*MAF*		44.4	41.3	39.7	38.7	37.8
- Percent Full	*N/A*		67%	58%	54%	51%	49%
Balance/Unbalance	*N/A*	*Bal <2227/1827/1600 ft msl*	Balance	Balance	Balance	Balance	Balance
Peck Rise 3/31-5/31	*N/A*		Yes	No	Yes	Yes	Yes
Garr Rise 3/31-5/31	*N/A*		No	Yes	No	Yes	Yes
Oahe Rise 3/31-5/31	*N/A*		Yes	No	Yes	Yes	Yes
Favored Reservoir - Fish Spawn	*N/A*		FP/OA	GA	FP/OA	GA	FP/OA
** Pulse magnitudes are the calculated magnitude per technical criteria and simulated magnitude due to the downstream flow limits*							

B. Lower Quartile Runoff. Studies 14 through 18 show the results of Lower Quartile runoff extensions. System storage on March 1, 2012 would be 51.2 MAF and fall to 48.4 MAF by March 1, 2017. Navigation service levels would range between 2,700 cfs below full service to minimum service for the simulation period 2012 to 2016. The navigation season is shortened no days in 2012, 2 days in 2013, 7 days in 2014, 4 days in 2015, and no shortening in 2016. A 12,500-cfs average winter release is shown for the entire study period. Spring pulses would occur every March and May from 2012 through 2016. Under Lower Quartile runoff, the carryover multiple use storage in the upper three reservoirs would be balanced each March 1.

C. Lower Decile Runoff. Studies 19 through 23 show the results of Lower Decile runoff extensions. System storage would be 48.7 MAF on March 1, 2012 and gradually decrease to 37.8 MAF on March 1, 2017. Navigation service levels would be 5,600 cfs below full service at the start of the 2012 season and then drop to 5,800 cfs below full service for the second half of the season. All remaining extension years would have minimum navigation service levels throughout the season. The navigation season would be shortened 5 days in 2012 and 30 days in 2013 through 2016. There are March spring pulses in 2012, 2013, and 2014, May spring pulses in 2012, 2013, 2014, and 2015, and 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 2012 through February 2017. 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 2012 through February 2017.

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MISSOURI RIVER BASIN

PLATE 1

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 241,000 acres	1854 msl 380,000 acres	1620 msl 374,000 acres
27	Max. normal op. pool elev. & area	2246 msl 234,000 acres	1850 msl 364,000 acres	1617 msl 360,000 acres
28	Base flood control elev & area	2234 msl 210,000 acres	1837.5 msl 307,000 acres	1607.5 msl 312,000 acres
29	Min. operating pool elev. & area	2160 msl 89,000 acres	1775 msl 128,000 acres	1540 msl 117,000 acres
	Storage allocation & capacity			
30	Exclusive flood control	2250-2246 971,000 a.f.	1854-1850 1,489,000 a.f.	1620-1617 1,102,000 a.f.
31	Flood control & multiple use	2246-2234 2,704,000 a.f.	1850-1837.5 4,222,000 a.f.	1617-1607.5 3,201,000 a.f.
32	Carryover multiple use	2234-2160 10,700,000 a.f.	1837.5-1775 13,130,000 a.f.	1607.5-1540 13,461,000 a.f.
33	Permanent	2160-2030 4,088,000 a.f.	1775-1673 4,980,000 a.f.	1540-1415 5,373,000 a.f.
34	Gross	2250-2030 18,463,000 a.f.	1854-1673 23,821,000 a.f.	1620-1415 23,137,000 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	17,700 a.f. 1030 yrs.	25,900 a.f. 920 yrs.	19,800 a.f. 1170 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	1670-1680 15,000- 60,000 cfs	1423-1428 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., 25' 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)	1,052	2,250	2,621
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.	Remarks
21 miles upstream Chamberlain, SD	Near Lake Andes, SD	Near Yankton, SD		1	(1) Includes 4,280 square miles of non-contributing areas.
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	(2) Includes 1,350 square miles of non-contributing areas.
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	(3) With pool at base of flood control.
28,900	30,000 1,100	32,000 2,000		6	
440,000 (April 1952)	447,000 (April 1952)	480,000 (April 1952)		7	(4) Storage first available for regulation of flows.
1959	1946	1952		8	(5) Damming height is height from low water to maximum operating pool. Maximum height is from average streambed to top of dam.
1964	1953	1955		9	
1440	1395	1234		10	
10,570 (including spillway)	10,700 (including spillway)	8,700 (including spillway)	71,596	11	(6) Based on latest available storage data.
78	140	45	863 feet	12	
95	165	74		13	(7) River regulation is attained by flows over low-crested spillway and through turbines.
1200, 700	4300, 1250	850, 450		14	
Pierre shale & Niobrara chalk	Niobrara chalk	Niobrara chalk & Carlile shale		15	(8) Length from upstream face of outlet or to spiral case.
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	(9) Based on 8th year (1961) of drought drawdown (From study 8-83-1985).
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	(10) Affected by level of Lake Francis case. Applicable to pool at elevation 1350.
1385	1346	1180		21	
376 gated	1000 gated	664 gated		22	(11) Spillway crest.
8 - 40' x 38' Tainter	21 - 40' x 29' Tainter	14 - 40' x 30' Tainter		23	(12) 1967-2009 Average
390,000 at elev 1433.6	620,000 at elev 1379.3	584,000 at elev 1221.4		24	(13) Source: Annual Report on Civil Works Activities of the Corps of Engineers. Extract Report Fiscal Year 1999.
270,000	508,000	345,000		25	
1423 msl 61,000 acres	1375 msl 102,000 acres	1210 msl 30,000 acres	1,188,000 acres	26	(14) Based on Study 8-83-1985
1422 msl 60,000 acres	1365 msl 95,000 acres	1208 msl 27,000 acres	1,140,000 acres	27	
1420 msl 57,000 acres	1350 msl 77,000 acres	1204.5 msl 23,000 acres	986,000 acres	28	
1415 msl 51,000 acres	1320 msl 38,000 acres	1204.5 msl 23,000 acres	446,000 acres	29	
1423-1422 60,000 a.f.	1375-1365 985,000 a.f.	1210-1208 57,000 a.f.	4,664,000 a.f.	30	
1422-1420 117,000 a.f.	1365-1350 1,309,000 a.f.	1208-1204.5 86,000 a.f.	11,639,000 a.f.	31	
	1350-1320 1,607,000 a.f.		38,898,000 a.f.	32	
1420-1345 1,621,000 a.f.	1320-1240 1,517,000 a.f.	1204.5-1160 307,000 a.f.	17,886,000 a.f.	33	
1423-1345 1,798,000 a.f.	1375-1240 5,418,000 a.f.	1210-1160 450,000 a.f.	73,087,000 a.f.	34	
November 1963	January 1953	August 1955		35	
25 March 1964	24 November 1953	22 December 1955		36	
5,300 a.f. 430 yrs.	18,400 a.f. 250 yrs.	2,600 a.f. 180 yrs.	89,700 a.f.	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 1228-1239 5,000-60,000 cfs	1155-1163 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	
3 - 67,276, 5 - 58,500	40,000	44,100		51	
494,320	320,000	132,300	2,501,200 kw	52	
497,000	293,000	74,000	1,967,000 kw	53	Corps of Engineers, U.S. Army
969	1,727	727	9,345 million kWh	54	Compiled by
October 1964 - July 1966	March 1954 - January 1956	September 1956 - January 1957	July 1943 - July 1966	55	Northwestern Division
$107,498,000	$199,066,000	$49,617,000	$1,166,404,000	56	Missouri River Region August 2010

Plate 2

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)

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

RESERVOIR UNBALANCING SCHEDULE

	Fort Peck		Garrison		Oahe	
Year	*March 1*	*Rest of Year*	*March 1*	*Rest of Year*	*March 1*	*Rest of Year*
1	High	Float	Low	Hold Peak	Raise & hold during spawn	Float
2	Raise & hold during spawn	Float	High	Float	Low	Hold peak
3	Low	Hold peak	Raise & hold during spawn	Float	High	Float

Notes: **Float year:** Normal regulation, then unbalance 1 foot during low pool years or 3 feet when System storage is near 57.0 MAF on March 1.

Low year: Begin low, then hold peak the remainder of the year.

High year: Begin high, raise and hold pool during spawn, then float.

MRNRC RECOMMENDED RESERVOIR ELEVATION GUIDELINES FOR UNBALANCING

	Fort Peck	Garrison	Oahe
Implement unbalancing if March 1 pool is above this level.	2234 feet msl	1837.5 feet msl	1607.5 feet msl
Implement unbalancing if March 1 pool level is in this range **and** the pool is expected to raise more than 3 feet after March 1.	2227-2234 feet msl	1827-1837.5 feet msl	1600-1607.5 feet msl
Scheduling Criteria	Avoid pool level decline during spawn period which ranges from April 15 – May 30	Schedule after spawn period of April 20 – May 20	Schedule after spawn period of April 8 – May 15

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

TECHNICAL CRITERIA FOR SPRING PULSES FROM GAVINS POINT DAM

Criteria Applicable to Both the March and May Spring Pulses

Flood Control Constraints	No change from current levels

Criteria Applicable to the March Spring Pulse

Drought Preclude	40.0 MAF or below measured on March 1.
Drought Proration of Pulse Magnitude*	None, 5 kcfs added to navigation releases, but no greater than 35 kcfs.
Initiation of Pulse	Extend the stepped System release increases that precede the beginning of the navigation season.
Rate of Rise before Peak	Approximately 5 kcfs for 1 day.
Duration of Peak	Two days.
Rate of Fall after Peak	Drop over 5 days to navigation target release.

Criteria Applicable to Time Period Between the Bimodal Pulses

Release	Existing Master Manual Criteria

Criteria Applicable to the May Spring Pulse

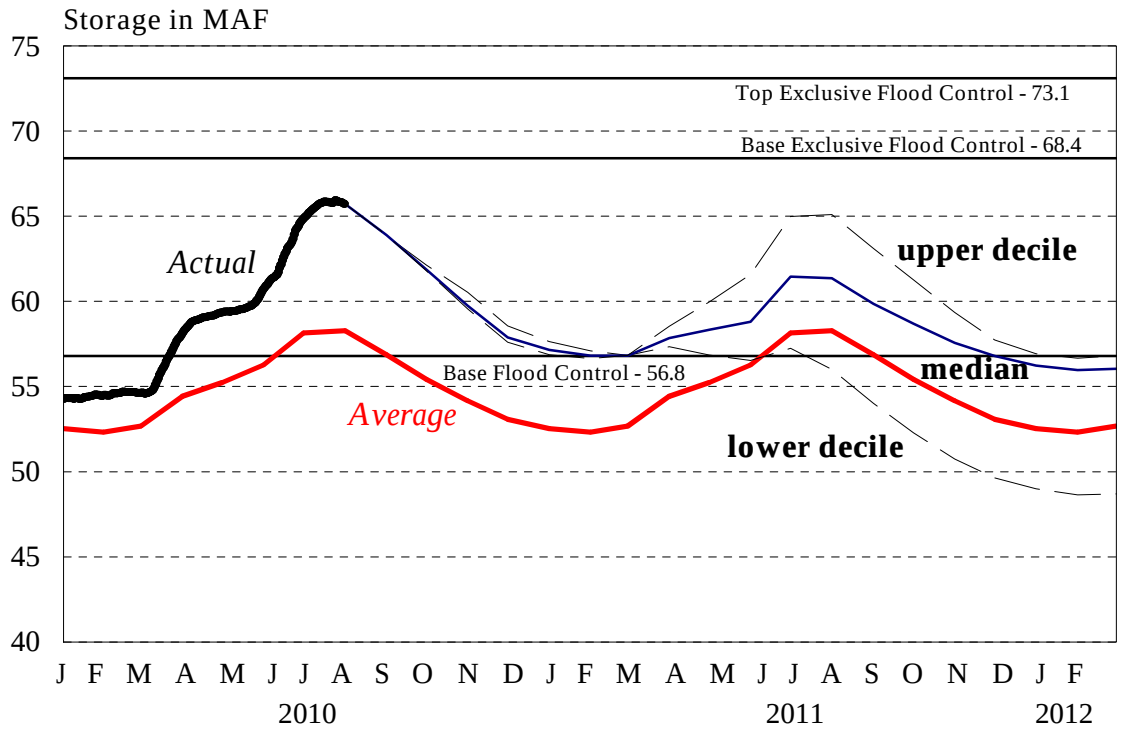
Drought Preclude	40.0 MAF or below measured on May 1.
Proration of Pulse Magnitude Based On System Storage*	Prorated from 16 kcfs based on a May 1 System Storage check; 100% at 54.5 MAF; straight line interpolation to 75% at 40.0 MAF.
Proration of Pulse Magnitude Based On Projected Runoff*	After the proration of the spring pulse magnitude for System Storage, the resultant magnitude would be further adjusted either up or down based on the May CY runoff forecast; 100% for Median; straight-line interpolation to 125% at Upper Quartile runoff; 125% for runoff above Upper Quartile; straight-line interpolation to 75% at Lower Quartile runoff; 75% for runoff below Lower Quartile.
Initiation of Pulse	Between May 1 to May 19, depending on Missouri River water temperature immediately below Gavins Point Dam. If possible, pulse will be initiated after the second daily occurrence of a 16 degree Celsius water temperature; however, the decision will be informed by the potential for 'take' of Threatened and Endangered bird species.
Rate of Rise before Peak	Approximately 6 kcfs per day.
Duration of Peak	Two days.
Rate of Fall after Peak	Approximately 30% drop over 2 days followed by a proportional reduction in releases back to the existing Master Manual criteria over an 8-day period.

Spring Pulse Downstream Flow Limits

Omaha	41,000 cfs
Nebraska City	47,000 cfs
Kansas City	71,000 cfs

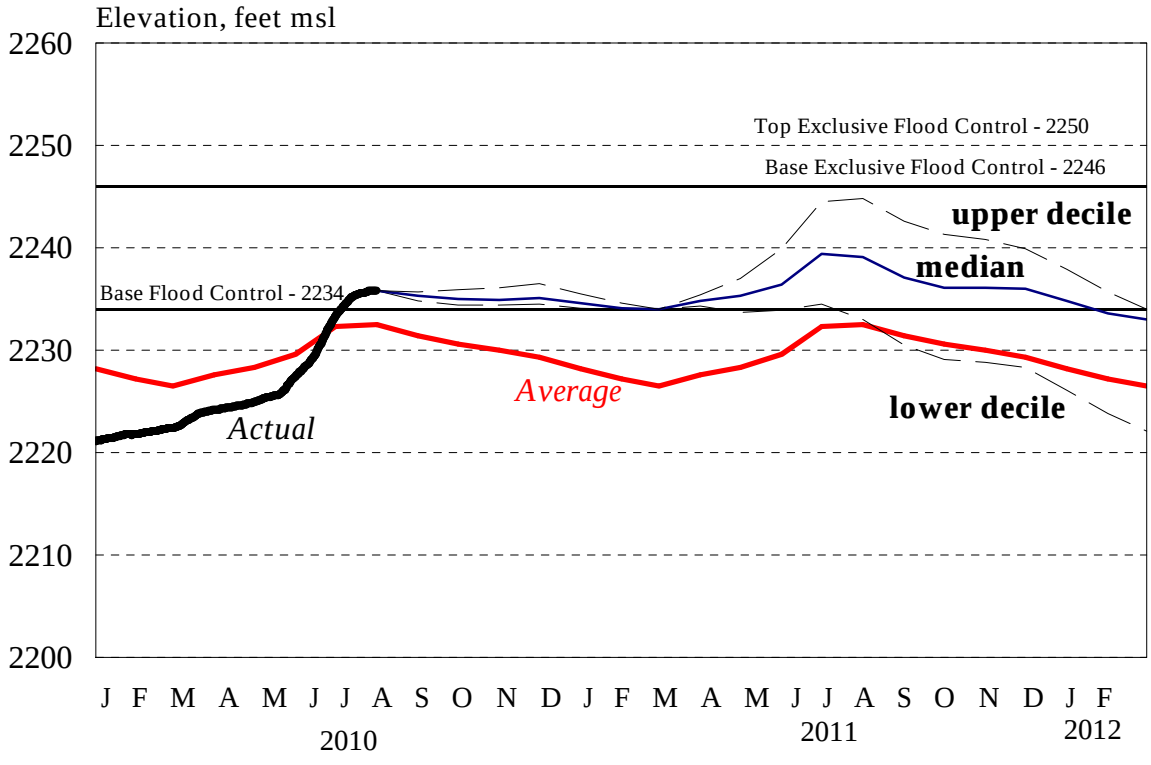
* Spring pulse magnitudes will be determined by taking the difference between pre-pulse Gavins Point releases and the peak pulse Missouri River flows measured just downstream of the mouth of the James River.

System Storage
2010-2011 AOP



Average: 1967-2009

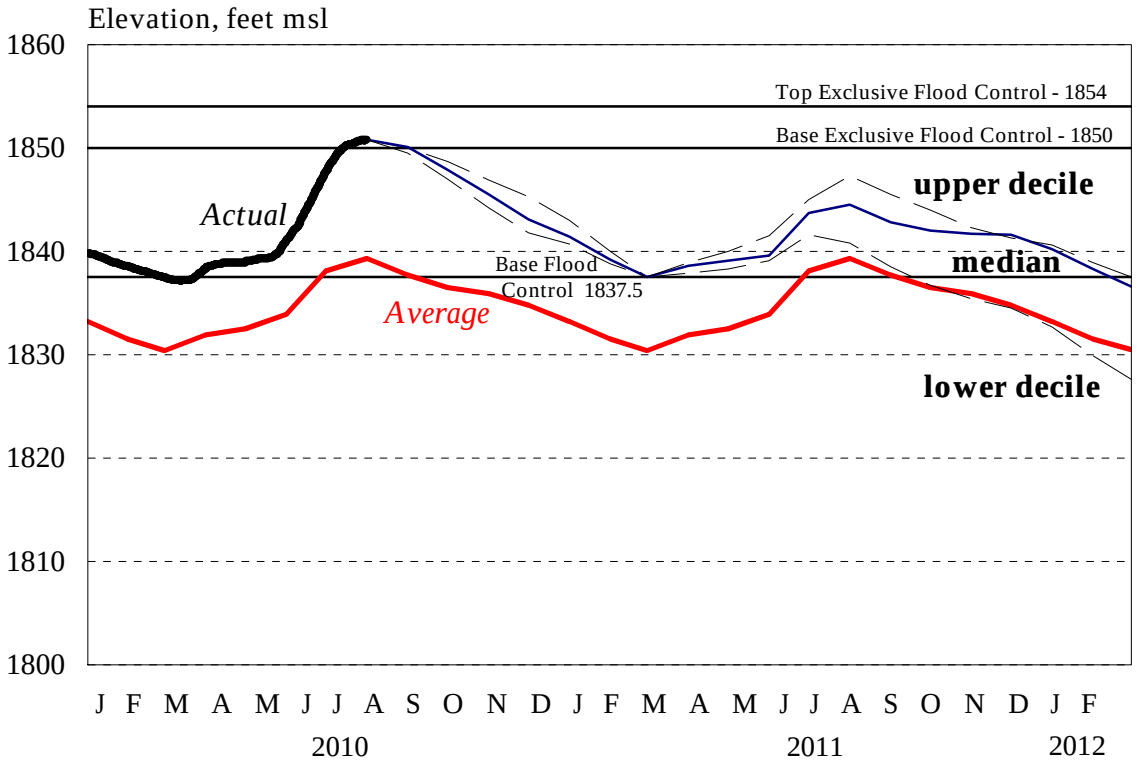
Fort Peck
2010-2011 AOP



Average: 1967-2009

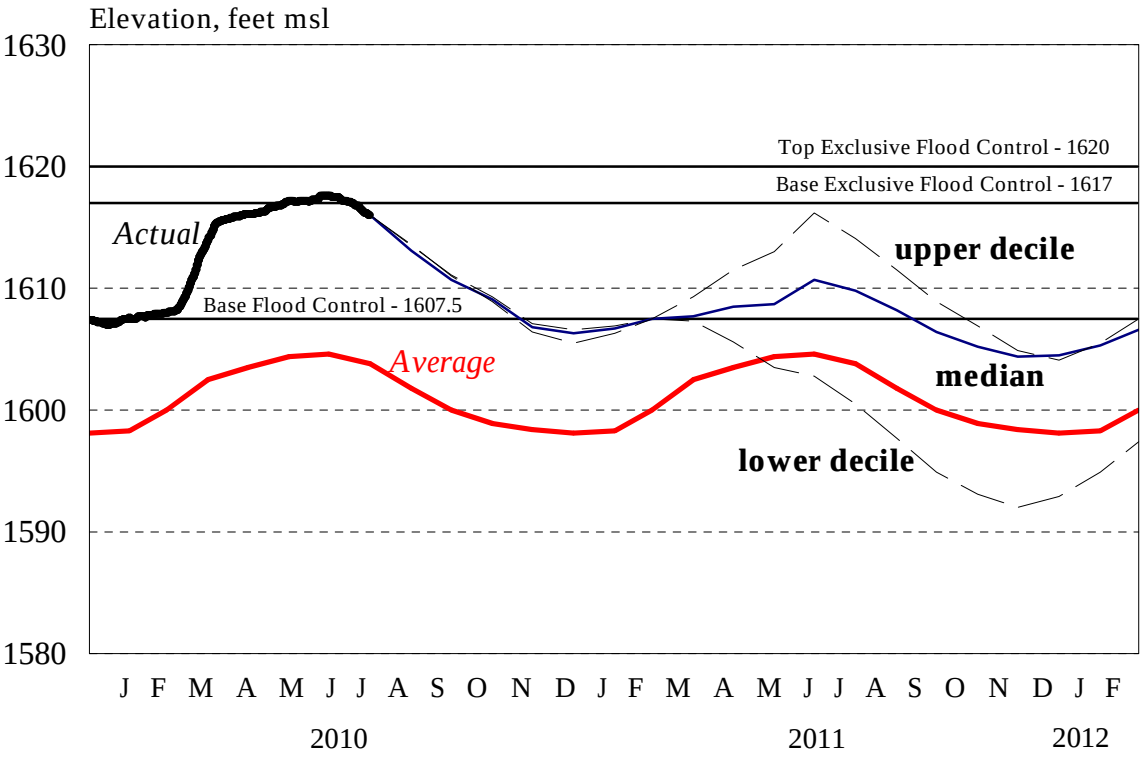
Plate 4

Garrison
2010-2011 AOP



Average: 1967-2009

Oahe
2010-2011 AOP



Average: 1967-2009

Plate 5

System Storage

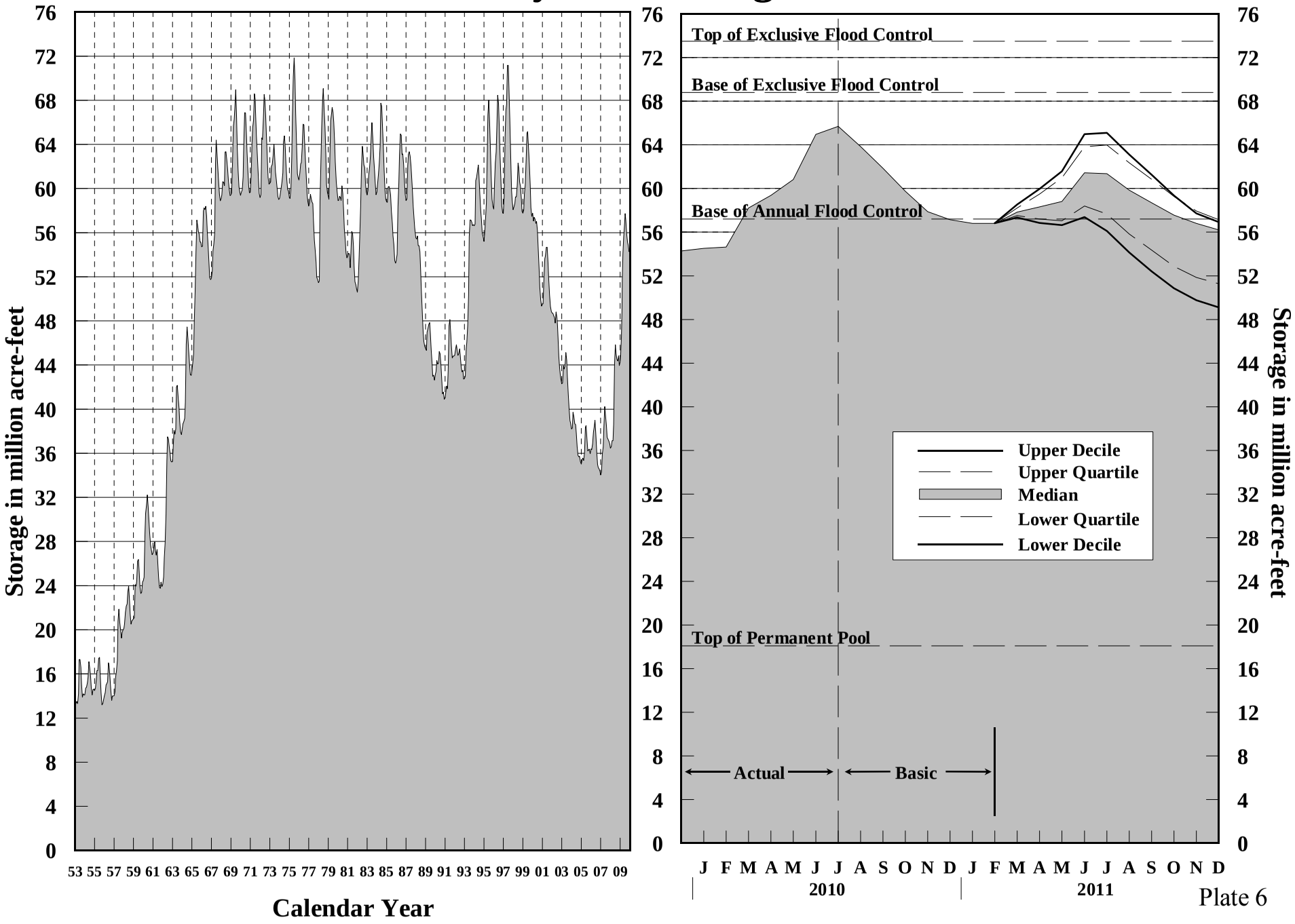


Plate 6

Gavins Point Releases

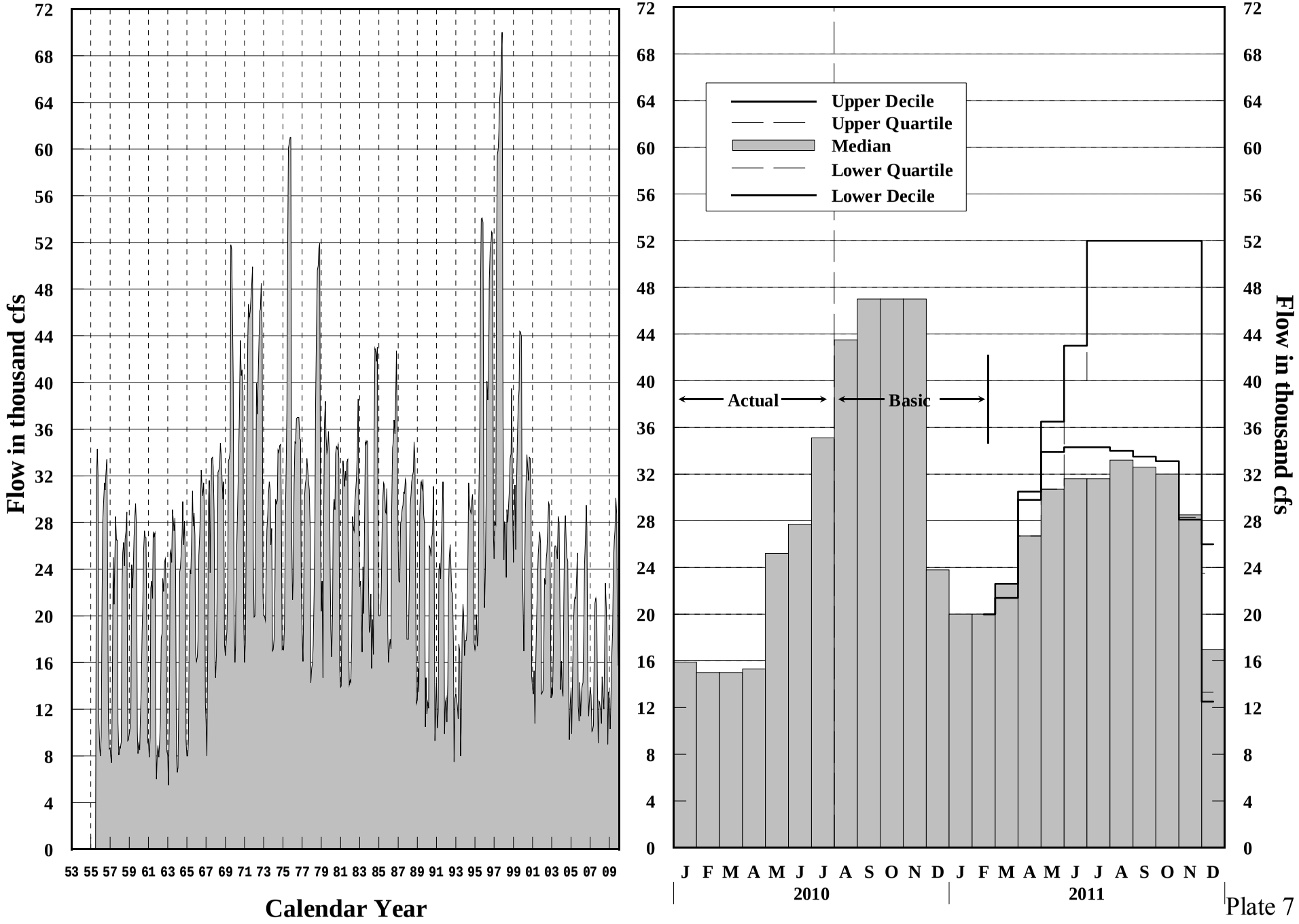
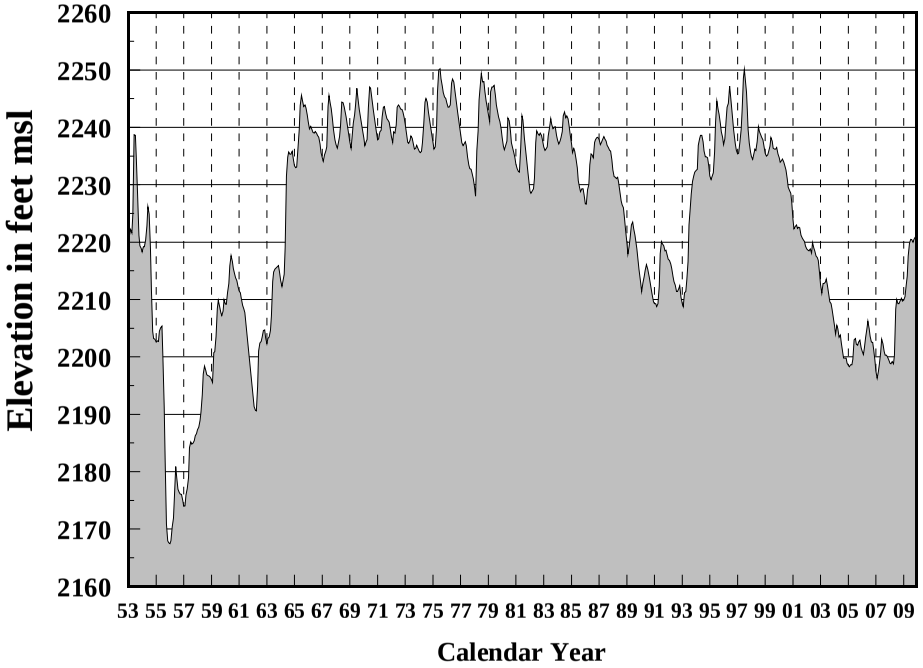
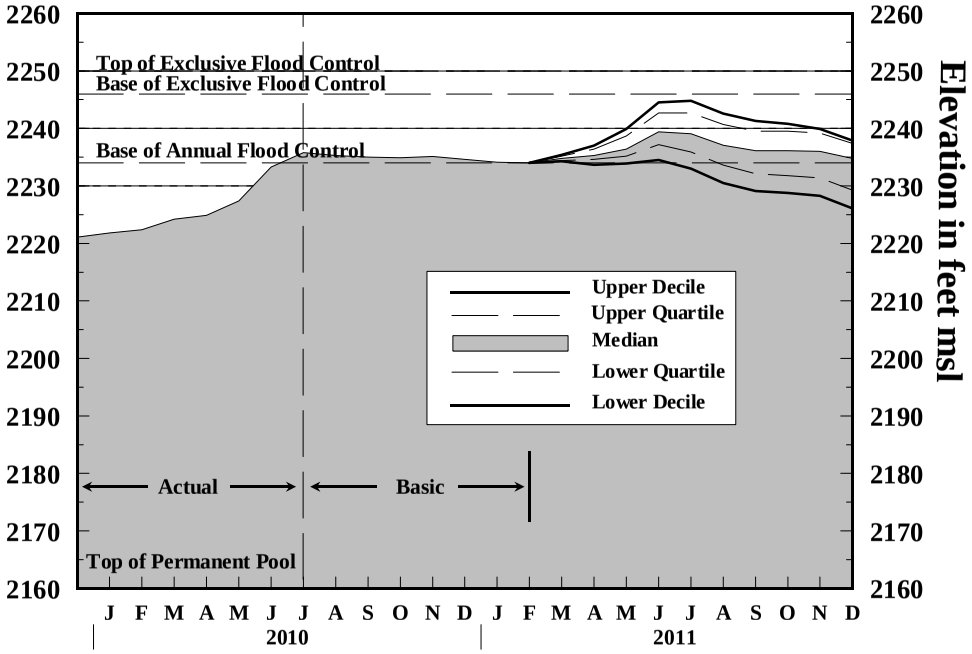
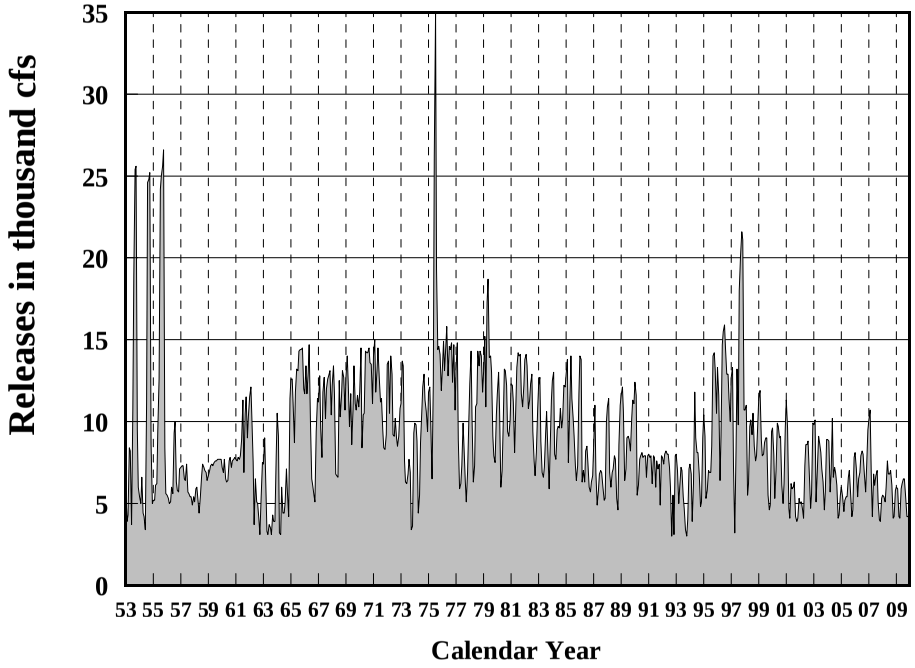


Plate 7

Fort Peck
Elevations and Releases







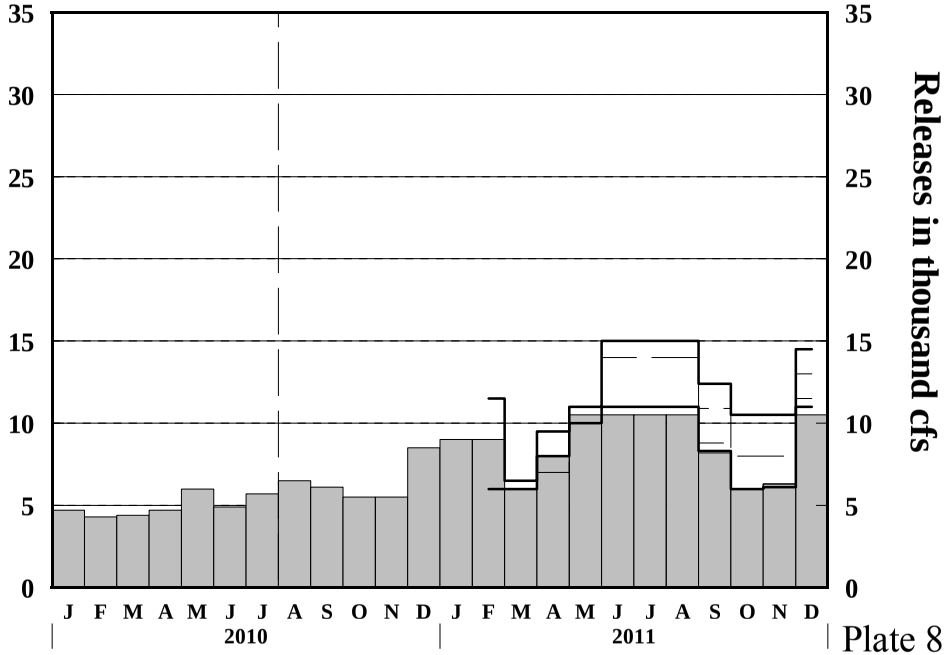
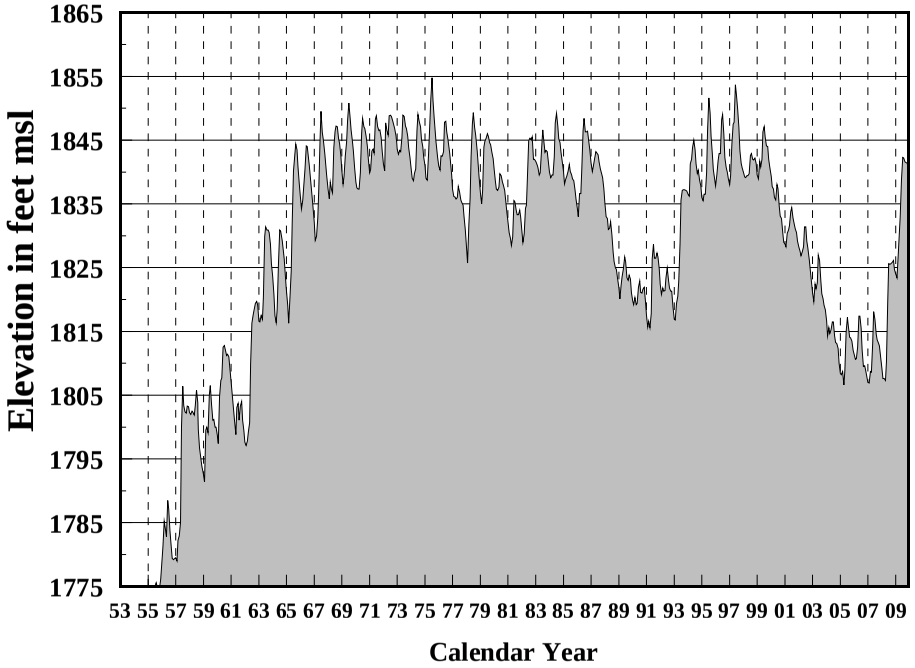
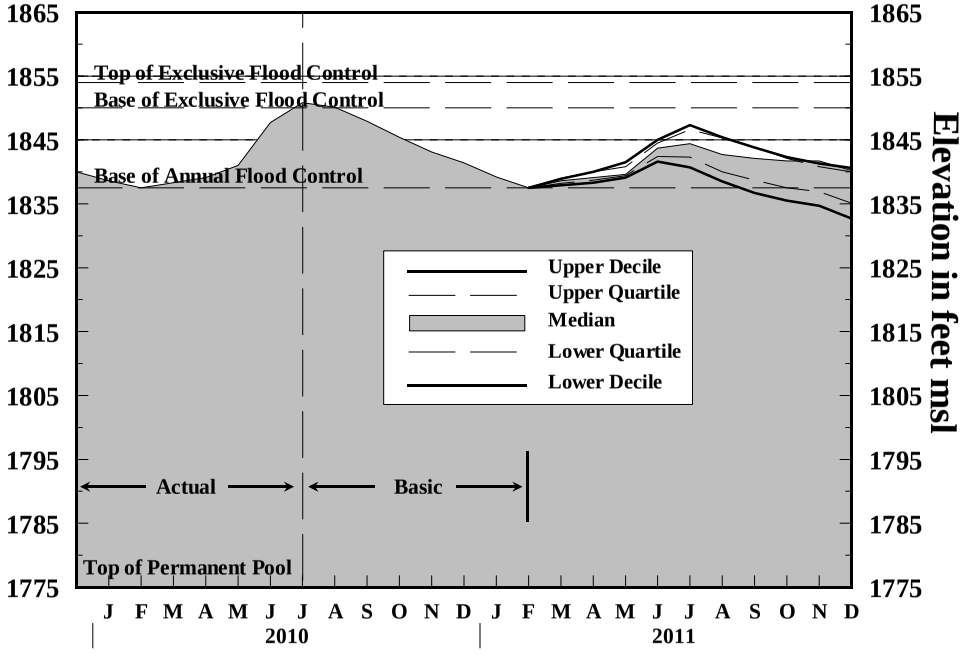
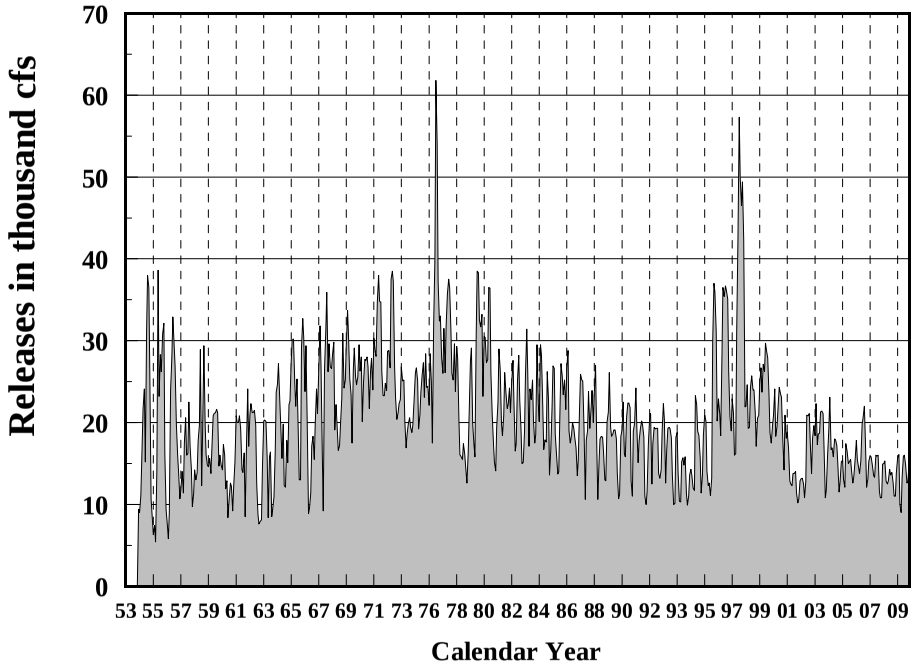


Plate 8

Garrison
Elevations and Releases







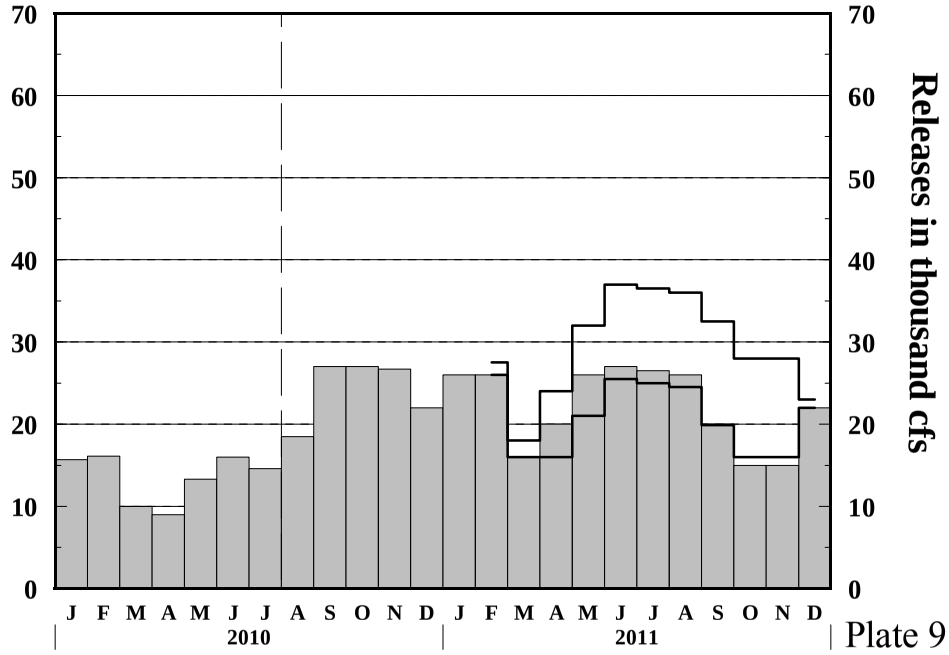
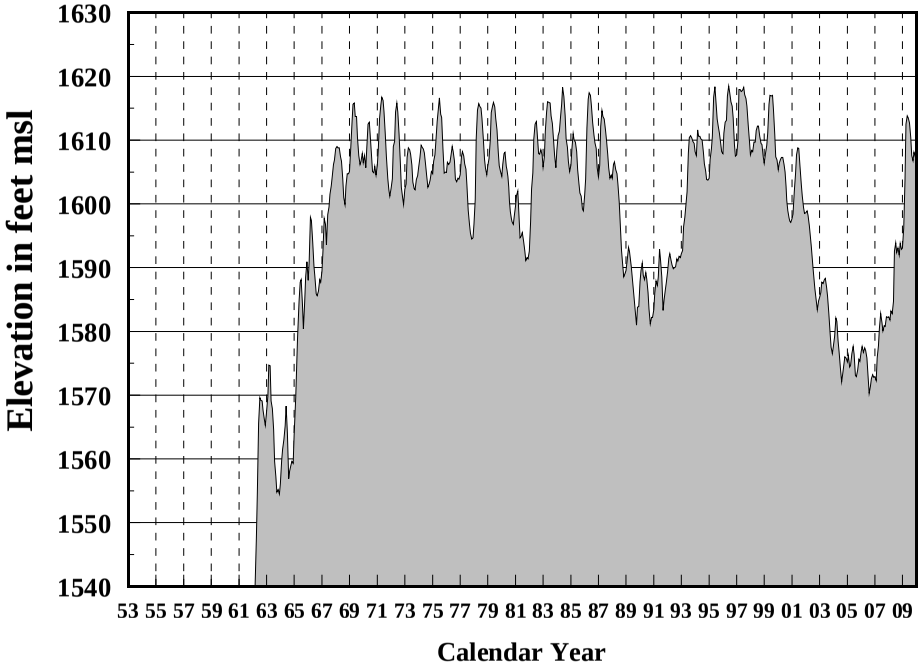
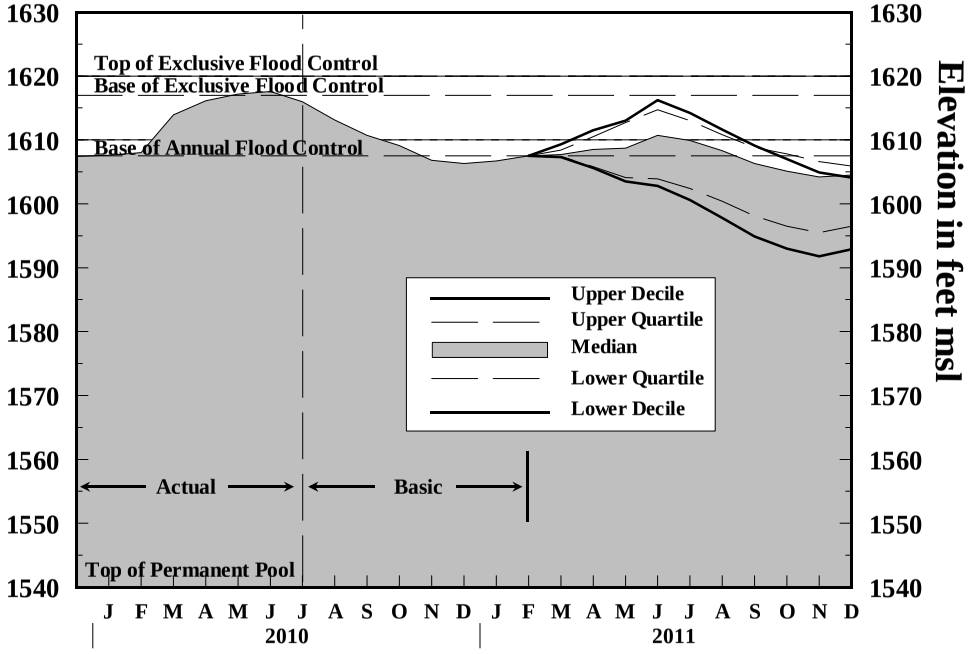


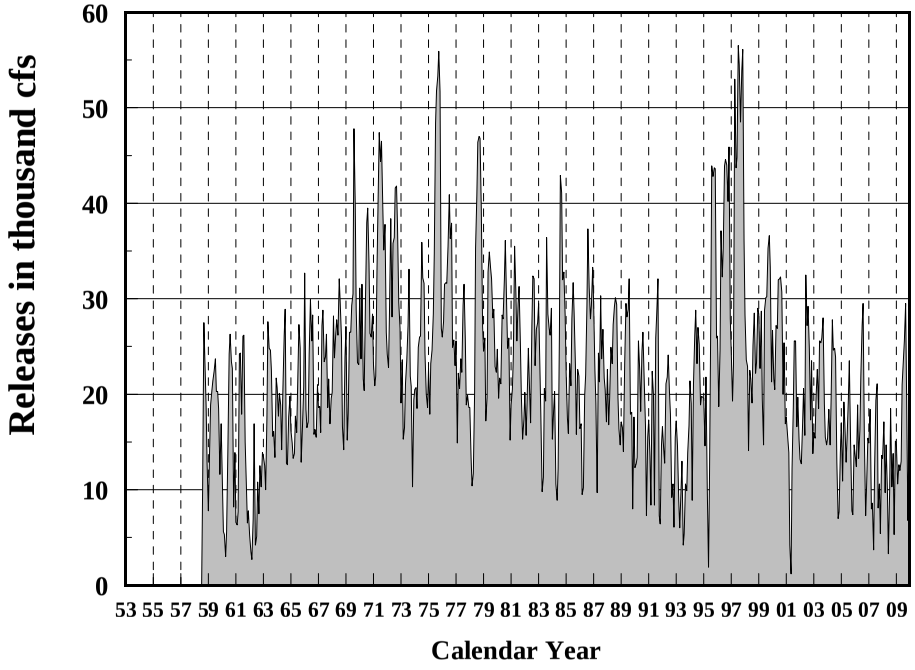
Plate 9

Oahe

Elevations and Releases







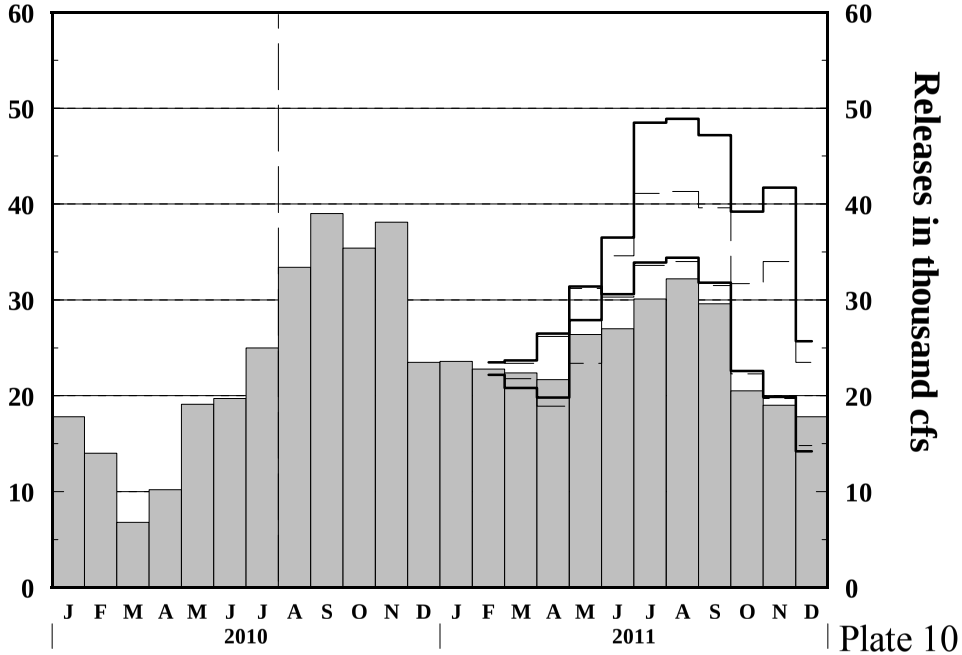
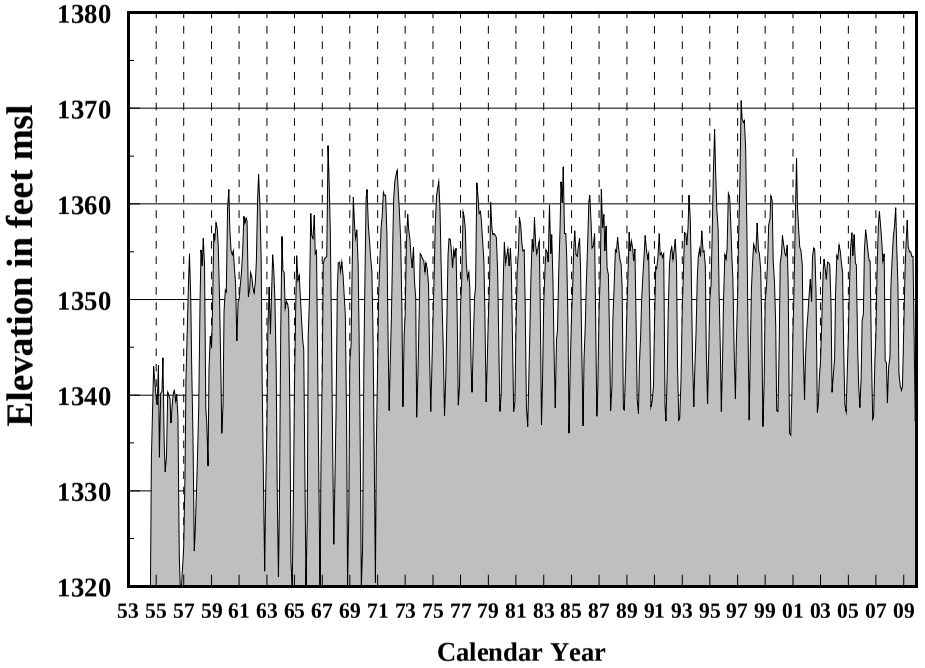
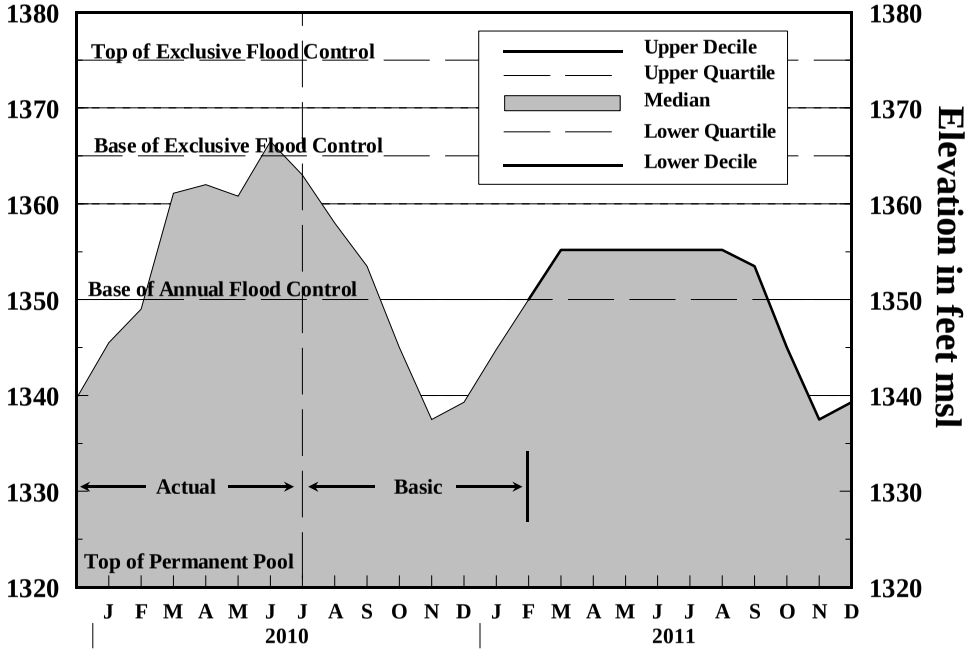
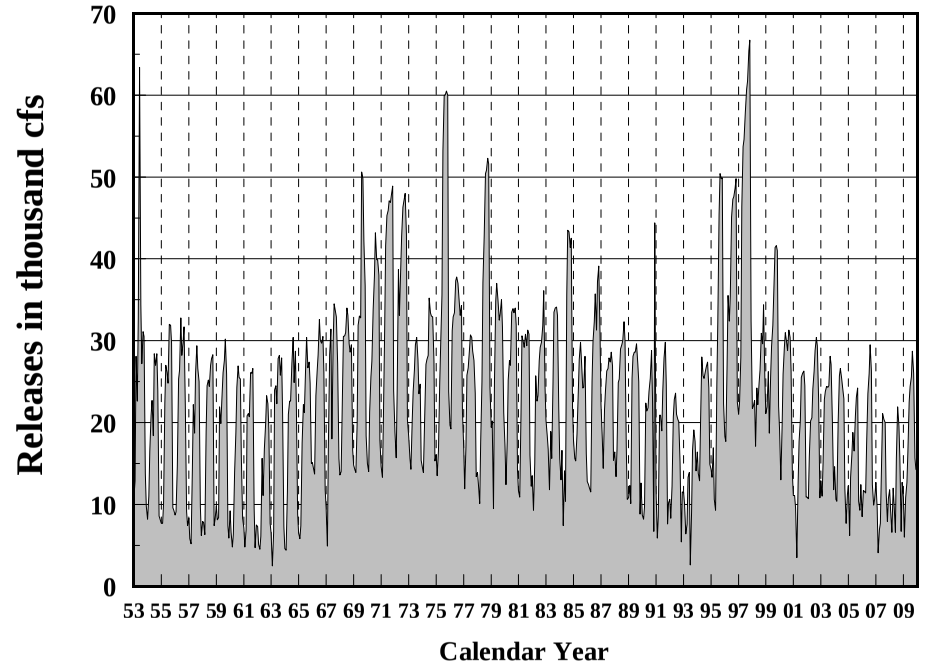


Plate 10

Fort Randall
Elevations and Releases







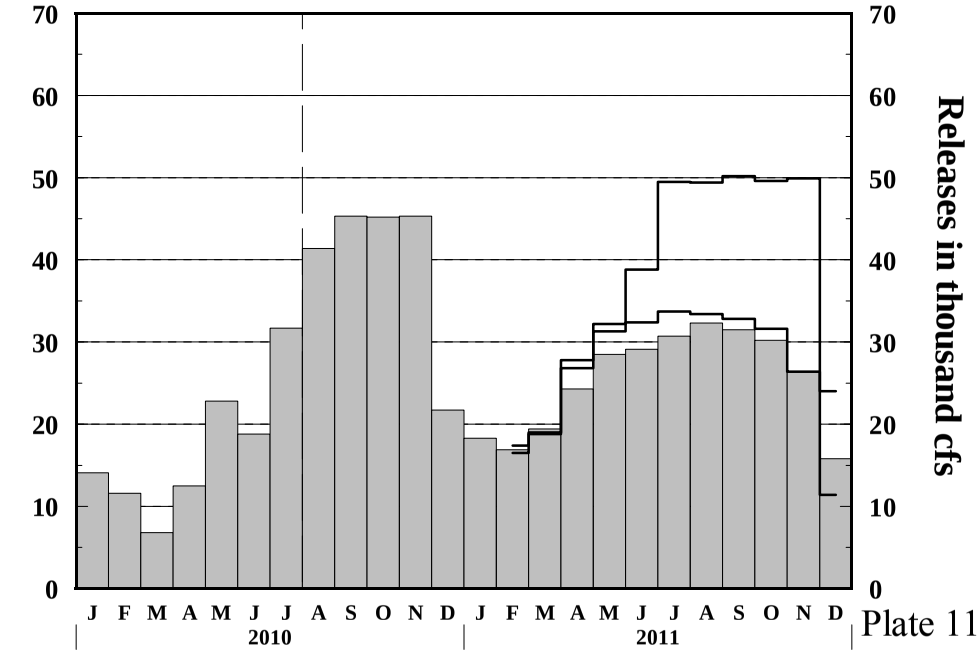
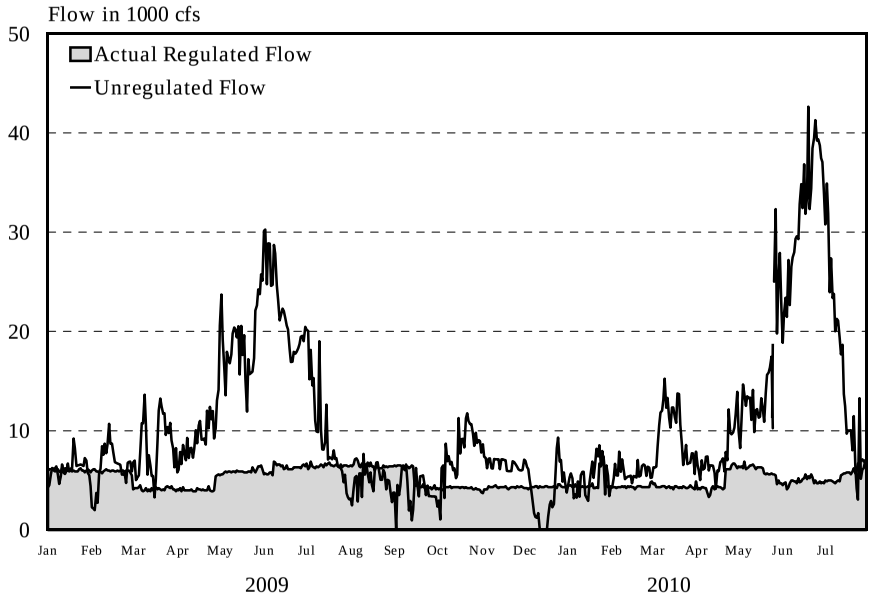


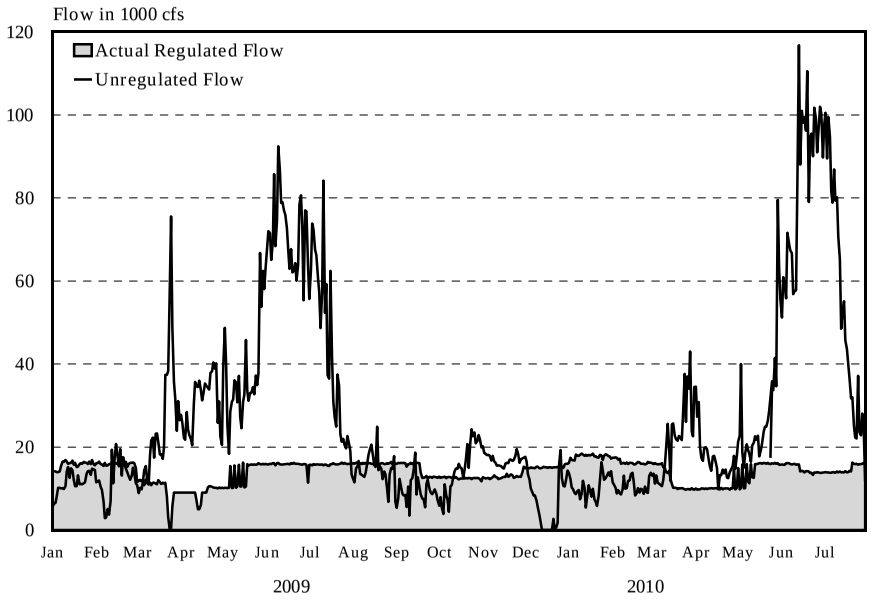
Plate 11

Reservoir Release and Unregulated Flow

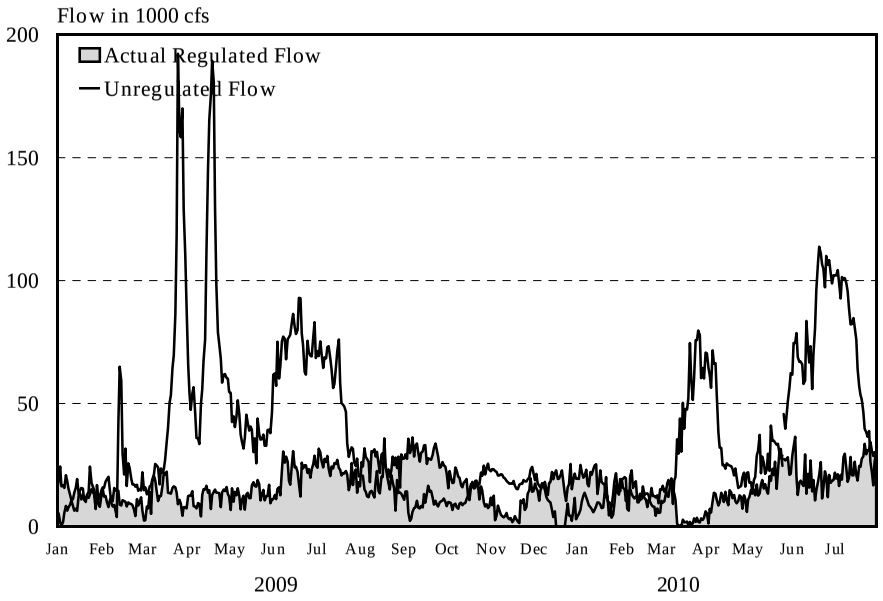
Fort Peck



Garrison



Oahe



Gavins Point

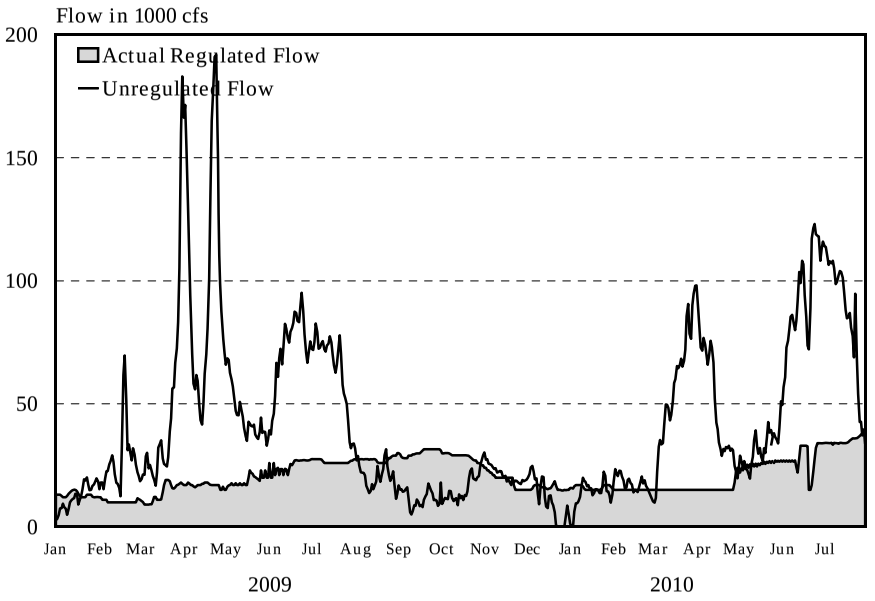


Plate 12

System Gross Capability and Average Monthly Generation

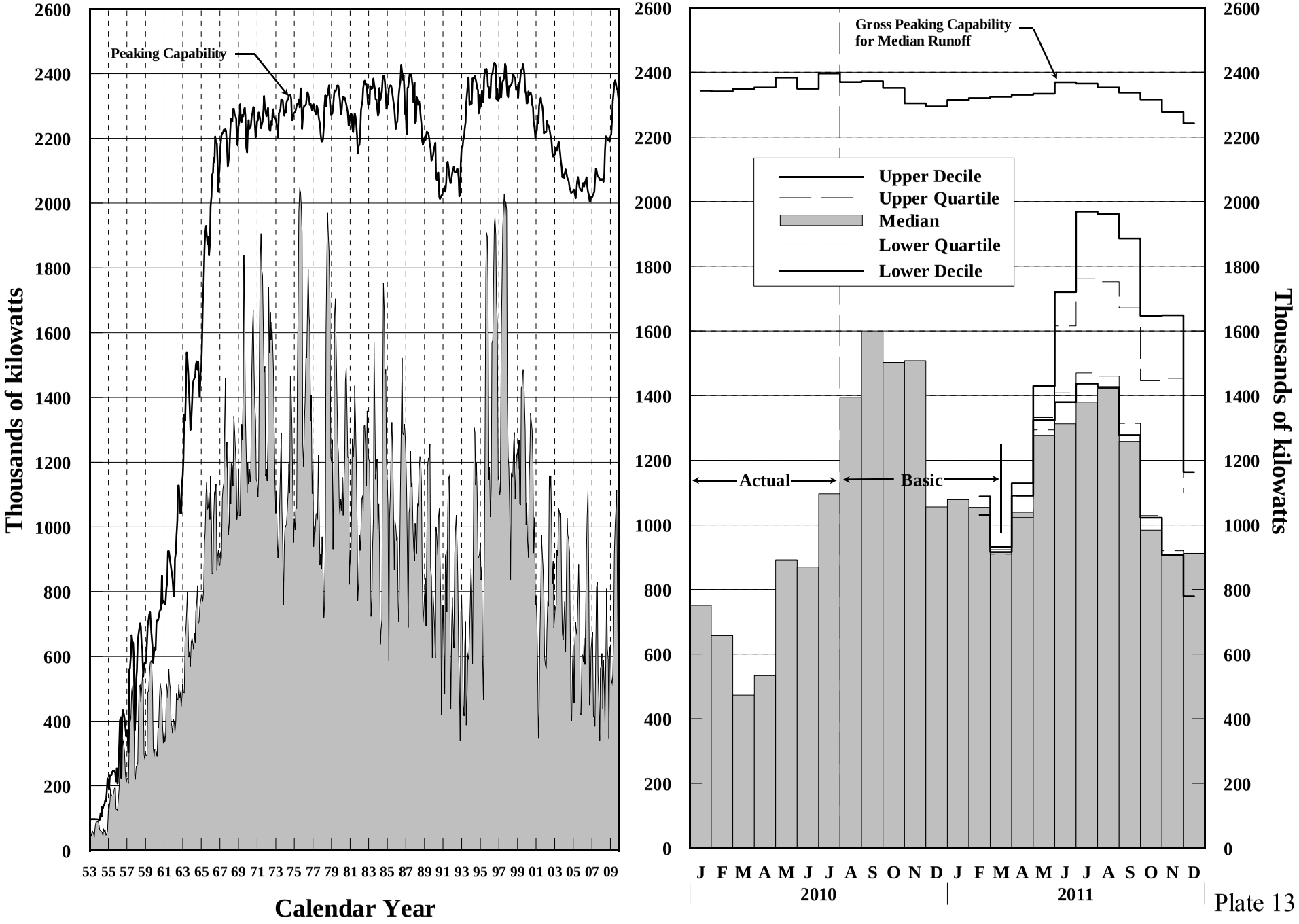


Plate 13

Tentative Five Year Extensions of 2010-2011 AOP

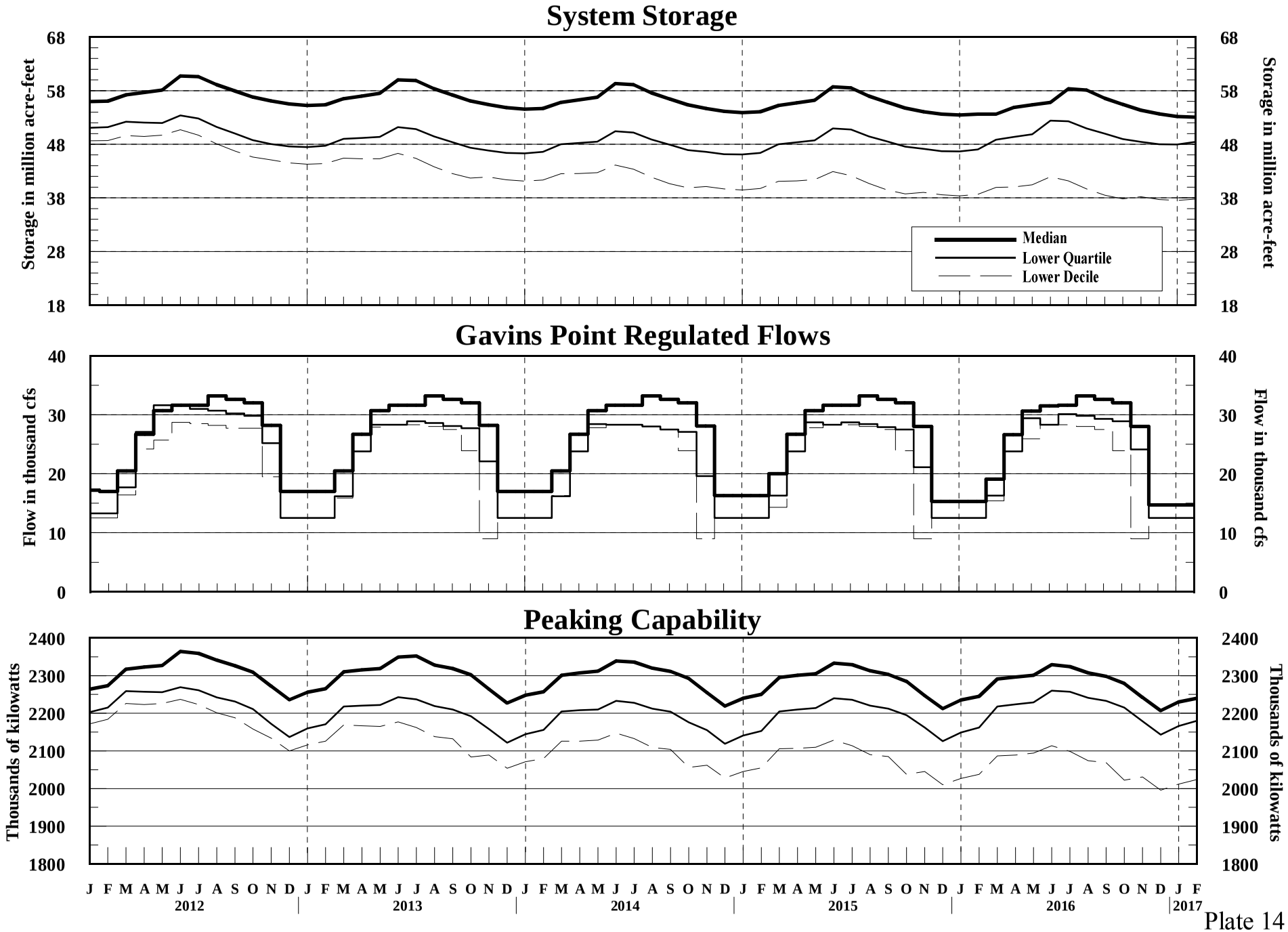


Plate 14

Tentative Five Year Extensions of 2010-2011 AOP

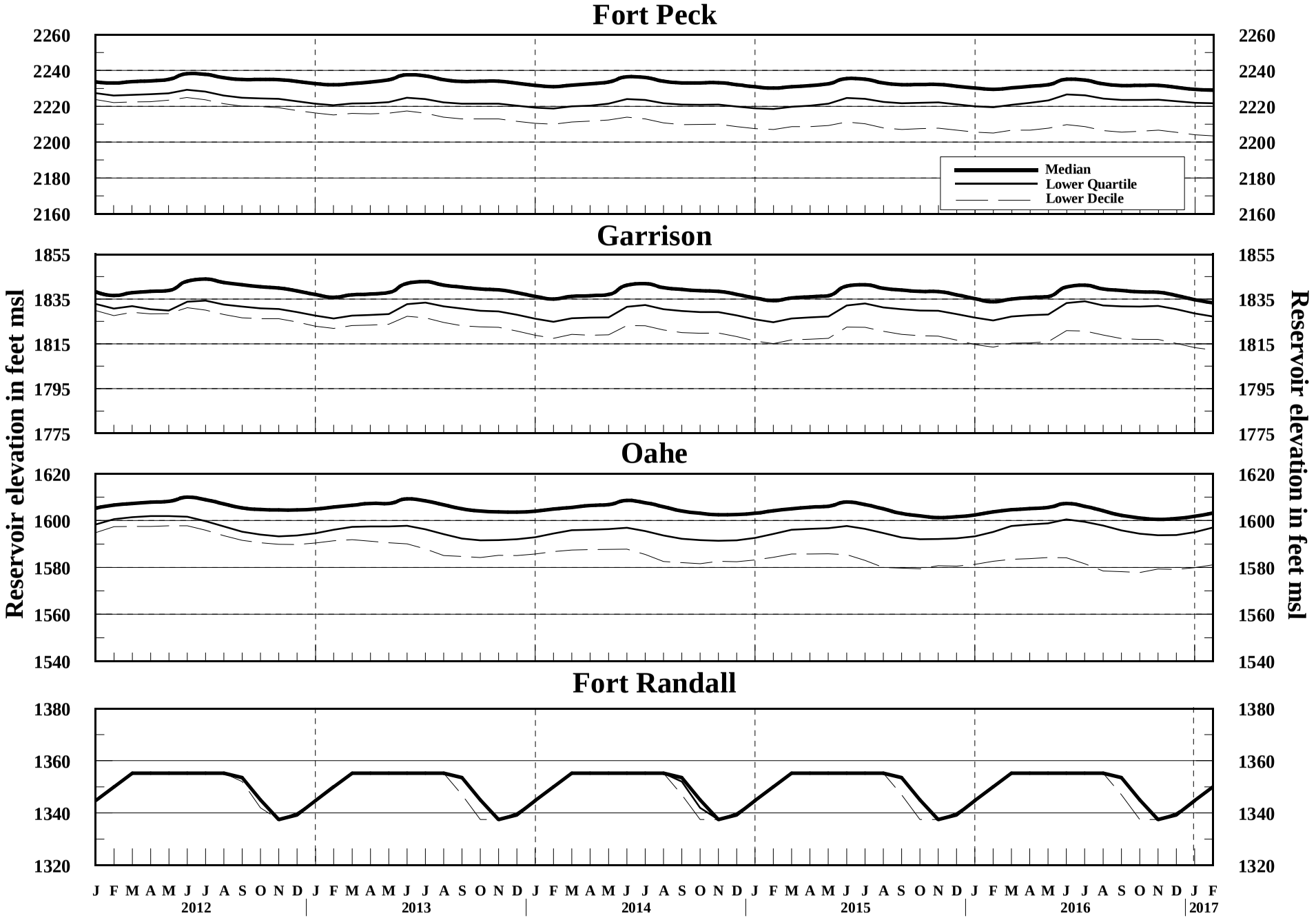
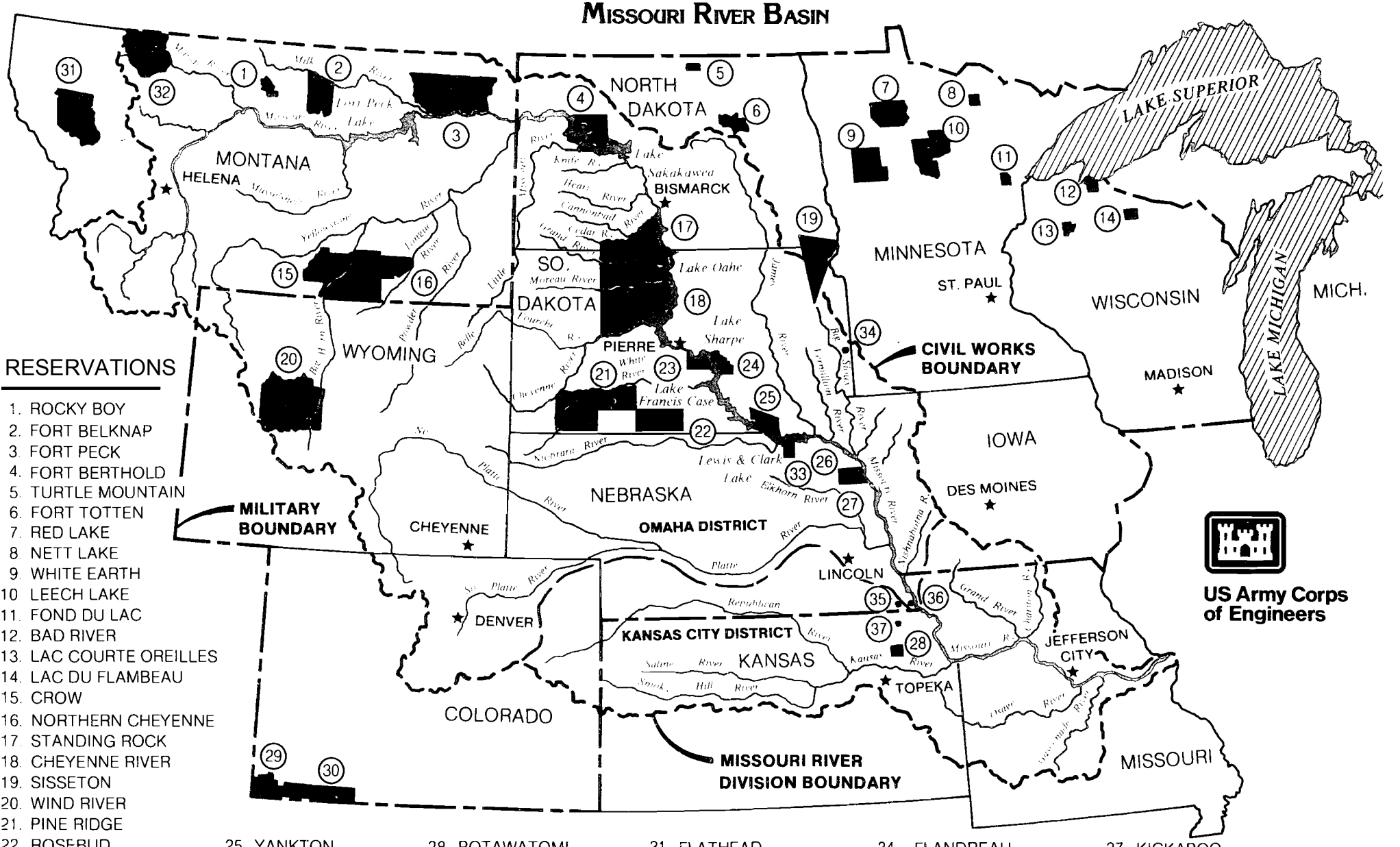


Plate 15

AMERICAN INDIAN RESERVATIONS

MISSOURI RIVER BASIN



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

For illustrative purposes. No legal boundaries are implied.

TIME OF STUDY 13:39:23 EXTENDED NAV SEASON STUDY NO 1

VALUES IN 1000 AF EXCEPT AS INDICATED

	31JUL10		2010						2011	
	INI-SUM	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--										
NAT INFLOW	2517	402	345	385	192	90	102	329	312	360
DEPLETION	-524	31	-58	-30	-41	-19	-22	-128	-152	-106
EVAPORATION	427	87	109	95	43	20	23	50		
MOD INFLOW	2614	284	294	320	189	88	101	407	464	466
RELEASE	3001	400	360	338	164	76	87	523	553	500
STOR CHANGE	-387	-115	-66	-18	26	12	14	-115	-89	-34
STORAGE	15172	15057	14991	14972	14998	15010	15024	14908	14819	14785
ELEV FTMSL	2235.8	2235.3	2235.0	2234.9	2235.0	2235.0	2235.1	2234.6	2234.1	2234.0
DISCH KCFS	5.7	6.5	6.1	5.5	5.5	5.5	5.5	8.5	9.0	9.0
POWER										
AVE POWER MW		89	83	75	75	75	75	116	123	123
PEAK POW MW		163	163	163	163	163	163	163	162	162
ENERGY GWH	496.3	66.3	59.6	56.0	27.1	12.7	14.5	86.4	91.3	82.4
--GARRISON--										
NAT INFLOW	2951	696	470	523	199	93	106	247	261	356
DEPLETION	-486	95	-126	-12	-109	-51	-58	-99	-76	-50
CHAN STOR	-32	-7	4	5		0	0	-29	-5	
EVAPORATION	537	113	140	120	53	24	28	59		
REG INFLOW	5870	881	820	759	419	196	224	780	886	906
RELEASE	10392	1138	1608	1660	803	375	413	1353	1599	1444
STOR CHANGE	-4522	-257	-788	-901	-385	-179	-189	-572	-713	-538
STORAGE	22629	22372	21585	20683	20299	20119	19931	19358	18645	18107
ELEV FTMSL	1850.8	1850.1	1847.9	1845.4	1844.2	1843.7	1843.1	1841.4	1839.2	1837.5
DISCH KCFS	14.6	18.5	27.0	27.0	27.0	27.0	26.0	22.0	26.0	26.0
POWER										
AVE POWER MW		246	355	350	347	345	332	280	327	324
PEAK POW MW		504	502	500	499	499	498	482	474	468
ENERGY GWH	1614.7	182.8	255.5	260.6	124.9	58.0	63.7	208.0	243.6	217.5
--OAHE--										
NAT INFLOW	489	130	120	70	34	16	18		12	90
DEPLETION	200	109	27	-9	2	1	1	15	21	33
CHAN STOR	-42	-14	-32	0			4	16	-16	
EVAPORATION	503	108	131	111	49	23	26	55		
REG INFLOW	10135	1037	1538	1628	786	367	408	1299	1574	1501
RELEASE	12977	2052	2319	2176	1043	520	702	1444	1453	1268
STOR CHANGE	-2842	-1016	-782	-548	-258	-153	-294	-146	121	233
STORAGE	21673	20657	19876	19328	19070	18917	18623	18477	18598	18831
ELEV FTMSL	1616.0	1613.1	1610.7	1609.1	1608.3	1607.8	1606.8	1606.3	1606.7	1607.5
DISCH KCFS	25.0	33.4	39.0	35.4	35.1	37.5	44.2	23.5	23.6	22.8
POWER										
AVE POWER MW		445	512	461	453	482	566	302	303	294
PEAK POW MW		737	725	716	712	709	704	702	704	708
ENERGY GWH	2042.8	331.0	368.5	342.6	163.2	81.0	108.6	224.4	225.6	197.7
--BIG BEND--										
EVAPORATION	97	20	25	22	10	5	5	11		
REG INFLOW	12880	2033	2294	2154	1033	516	696	1433	1453	1268
RELEASE	12900	2053	2294	2154	1033	516	696	1433	1453	1268
STORAGE	1641	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL	1420.3	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	23.1	33.4	38.6	35.0	34.7	37.1	43.9	23.3	23.6	22.8
POWER										
AVE POWER MW		152	183	171	173	184	217	117	116	109
PEAK POW MW		486	517	538	538	538	538	538	538	529
ENERGY GWH	752.8	113.2	131.4	126.9	62.1	30.9	41.6	86.9	86.1	73.5
--FORT RANDALL--										
NAT INFLOW	230	80	48	8	4	2	2	12	25	49
DEPLETION	34	15	7	1	1	0	1	3	3	3
EVAPORATION	111	27	32	25	9	4	4	10		
REG INFLOW	12987	2091	2303	2136	1027	513	693	1435	1475	1314
RELEASE	14113	2546	2694	2780	1348	629	719	1334	1125	940
STOR CHANGE	-1127	-455	-390	-643	-321	-116	-26	101	350	374
STORAGE	4248	3793	3403	2760	2438	2322	2296	2397	2747	3121
ELEV FTMSL	1363.0	1358.0	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	31.7	41.4	45.3	45.2	45.3	45.3	45.3	21.7	18.3	16.9
POWER										
AVE POWER MW		350	350	330	306	292	286	159	139	135
PEAK POW MW		365	350	319	296	287	285	293	319	339
ENERGY GWH	1283.5	260.0	252.2	245.5	110.2	49.1	55.0	118.0	103.1	90.4
--GAVINS POINT--										
NAT INFLOW	882	175	139	120	59	28	31	100	100	130
DEPLETION	28	10	-5	2	5	2	3	10	1	
CHAN STOR	27	-19	-7	0	0	0	0	44	6	3
EVAPORATION	34	7	9	8	3	2	2	4		
REG INFLOW	14960	2686	2822	2890	1398	653	746	1463	1230	1073
RELEASE	14962	2675	2797	2890	1398	653	746	1463	1230	1111
STOR CHANGE	-2	11	25							-38
STORAGE	344	355	380	380	380	380	380	380	380	342
ELEV FTMSL	1206.1	1206.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS	35.1	43.5	47.0	47.0	47.0	47.0	47.0	23.8	20.0	20.0
POWER										
AVE POWER MW		114	115	116	116	116	116	84	71	70
PEAK POW MW		114	116	116	116	116	116	117	117	114
ENERGY GWH	498.7	84.9	82.7	86.1	41.6	19.4	22.2	62.2	52.5	47.0
--GAVINS POINT - SIOUX CITY--										
NAT INFLOW	2047	850	425	300	100	47	53	140	40	92
DEPLETION	123	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY										
KAF	16886	3489	3198	3180	1492	696	796	1590	1256	1189
KCFS		56.7	53.7	51.7	50.2	50.2	50.2	25.9	20.4	21.4
--TOTAL--										
NAT INFLOW	9116	2333	1547	1406	588	274	313	828	750	1077
DEPLETION	-625	296	-131	-38	-136	-63	-72	-186	-189	-106
CHAN STOR	-46	-40	-35	5	0	0	3	33	-15	3
EVAPORATION	1709	360	446	380	168	77	88	189		
STORAGE	65707	63855	61855	59744	58806	58370	57875	57142	56811	56808
SYSTEM POWER										
AVE POWER MW		1395	1597	1502	1470	1495	1592	1056	1078	1054
PEAK POW MW		2370	2373	2352	2324	2312	2304	2295	2314	2320
ENERGY GWH	6688.8	1038.2	1150.0	1117.8	529.3	251.2	305.6	785.9	802.2	708.6
DAILY GWH		33.5	38.3	36.1	35.3	35.9	38.2	25.4	25.9	25.3

INI-SUM 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

31JUL10			2010						2011
INI-SUM	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--									
NAT INFLOW 3020	482	414	462	231	108	123	395	374	432
DEPLETION -473	34	-74	-69	-19	-9	-10	-108	-130	-89
EVAPORATION 292	65	82	72	17	8	9	38		
MOD INFLOW 3201	383	406	459	232	108	124	465	504	521
RELEASE 3581	400	373	400	193	90	103	676	707	639
STOR CHANGE -381	-17	33	59	38	18	20	-211	-203	-118
STORAGE 15172	15155	15188	15247	15285	15303	15323	15112	14909	14791
ELEV FTMSL 2235.8	2235.7	2235.9	2236.1	2236.3	2236.4	2236.5	2235.5	2234.6	2234.0
DISCH KCFS 5.7	6.5	6.3	6.5	6.5	6.5	6.5	11.0	11.5	11.5
POWER									
AVE POWER MW	89	86	89	89	89	89	149	154	153
PEAK POW MW	163	164	164	164	164	164	163	163	162
ENERGY GWH 587.1	66.3	61.9	66.4	32.1	15.0	17.2	110.6	114.5	103.1
--GARRISON--									
NAT INFLOW 3541	835	564	628	239	112	127	296	313	427
DEPLETION -486	107	-129	-3	-112	-52	-60	-106	-82	-49
CHAN STOR -56	-7	2	-2				-44	-5	
EVAPORATION 363	85	105	89	21	10	11	44		
REG INFLOW 7189	1036	964	940	524	245	280	991	1097	1115
RELEASE 11705	1537	1846	1906	922	430	492	1353	1691	1527
STOR CHANGE -4516	-502	-882	-967	-399	-186	-212	-362	-594	-413
STORAGE 22629	22127	21245	20279	19880	19694	19482	19120	18526	18113
ELEV FTMSL 1850.8	1849.5	1847.0	1844.2	1843.0	1842.4	1841.8	1840.7	1838.8	1837.5
DISCH KCFS 14.6	25.0	31.0	31.0	31.0	31.0	31.0	22.0	27.5	27.5
POWER									
AVE POWER MW	331	405	399	395	393	392	278	345	342
PEAK POW MW	503	501	499	498	491	483	479	473	468
ENERGY GWH 1811.7	245.9	291.7	297.1	142.3	66.1	75.3	207.0	256.7	229.6
--OAHE--									
NAT INFLOW 586	156	144	84	40	19	21		14	108
DEPLETION 200	109	27	-9	2	1	1	15	21	33
CHAN STOR -46	-37	-22	0				36	-22	
EVAPORATION 345	82	100	84	20	9	10	41		
REG INFLOW 11700	1465	1841	1915	941	439	502	1333	1662	1602
RELEASE 14536	2304	2716	2597	1240	612	807	1606	1422	1232
STOR CHANGE -2836	-839	-875	-682	-299	-173	-305	-273	240	370
STORAGE 21673	20834	19959	19277	18978	18805	18500	18227	18467	18837
ELEV FTMSL 1616.0	1613.6	1611.0	1608.9	1608.0	1607.4	1606.4	1605.5	1606.3	1607.5
DISCH KCFS 25.0	37.5	45.6	42.2	41.7	44.1	50.8	26.1	23.1	22.2
POWER									
AVE POWER MW	499	599	549	537	565	638	334	296	286
PEAK POW MW	740	726	715	710	707	702	697	702	708
ENERGY GWH 2282.6	371.6	431.5	408.2	193.3	95.0	122.4	248.5	220.1	191.9
--BIG BEND--									
EVAPORATION 66	15	19	16	4	2	2	9		
REG INFLOW 14470	2289	2697	2581	1236	610	805	1597	1422	1232
RELEASE 14490	2309	2697	2581	1236	610	805	1597	1422	1232
STORAGE 1641	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL 1420.3	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS 23.1	37.6	45.3	42.0	41.5	44.0	50.7	26.0	23.1	22.2
POWER									
AVE POWER MW	171	214	204	205	217	250	130	113	106
PEAK POW MW	486	517	538	538	538	538	538	538	529
ENERGY GWH 844.1	127.4	154.4	151.6	74.0	36.5	47.9	96.7	84.3	71.4
--FORT RANDALL--									
NAT INFLOW 277	96	58	10	5	2	3	14	30	59
DEPLETION 34	15	7	1	1	0	1	3	3	3
EVAPORATION 77	20	24	18	4	2	2	7		
REG INFLOW 14658	2370	2724	2572	1236	611	804	1604	1449	1288
RELEASE 15783	2825	3115	3215	1557	727	830	1502	1099	914
STOR CHANGE -1125	-455	-390	-643	-321	-116	-26	102	350	374
STORAGE 4248	3793	3403	2760	2439	2323	2297	2399	2749	3123
ELEV FTMSL 1363.0	1358.0	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS 31.7	45.9	52.3	52.3	52.3	52.3	52.3	24.4	17.9	16.5
POWER									
AVE POWER MW	367	357	336	307	291	285	178	135	131
PEAK POW MW	365	350	318	295	286	284	294	319	339
ENERGY GWH 1315.3	273.3	257.1	249.6	110.4	48.8	54.7	132.6	100.7	88.0
--GAVINS POINT--									
NAT INFLOW 1059	210	167	144	71	33	38	120	120	156
DEPLETION 28	10	-5	2	5	2	3	10	1	
CHAN STOR 27	-27	-12	0	0	0	0	52	12	3
EVAPORATION 23	5	6	6	1	1	1	3		
REG INFLOW 16818	2993	3268	3351	1622	757	865	1660	1230	1073
RELEASE 16820	2982	3243	3351	1622	757	865	1660	1230	1111
STOR CHANGE -2	11	25							-38
STORAGE 344	355	380	380	380	380	380	380	380	342
ELEV FTMSL 1206.1	1206.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS 35.1	48.5	54.5	54.5	54.5	54.5	54.5	27.0	20.0	20.0
POWER									
AVE POWER MW	113	114	115	115	115	115	95	71	70
PEAK POW MW	114	115	115	115	115	115	117	117	114
ENERGY GWH 504.7	84.2	82.2	85.6	41.4	19.3	22.1	70.4	52.5	47.0
--GAVINS POINT - SIOUX CITY--									
NAT INFLOW 2456	1020	510	360	120	56	64	168	48	110
DEPLETION 123	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY									
KAF 19153	3966	3729	3701	1736	810	926	1815	1264	1207
KCFS	64.5	62.7	60.2	58.3	58.3	58.3	29.5	20.6	21.7
--TOTAL--									
NAT INFLOW 10939	2799	1857	1688	706	329	376	993	899	1292
DEPLETION -574	311	-150	-68	-117	-54	-62	-173	-173	-88
CHAN STOR -73	-72	-32	-2	0	0	-1	47	-15	3
EVAPORATION 1166	271	336	286	66	31	35	142		
STORAGE 65707	63885	61796	59563	58583	58126	57603	56859	56652	56828
SYSTEM POWER									
AVE POWER MW	1571	1776	1691	1648	1671	1769	1164	1114	1088
PEAK POW MW	2372	2373	2349	2320	2301	2286	2289	2311	2320
ENERGY GWH 7345.4	1168.8	1278.9	1258.4	593.5	280.7	339.6	865.8	828.8	731.0
DAILY GWH	37.7	42.6	40.6	39.6	40.1	42.4	27.9	26.7	26.1

TIME OF STUDY 14:37:54 EXTENDED NAV SEASON STUDY NO 3

VALUES IN 1000 AF EXCEPT AS INDICATED

31JUL10			2010					2011	
INI-SUM	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--									
NAT INFLOW 2014	322	276	308	154	72	82	263	250	288
DEPLETION -411	19	-83	-58	-30	-14	-16	-88	-86	-56
EVAPORATION 531	108	136	118	54	25	29	62		
MOD INFLOW 1894	195	223	248	129	60	69	289	336	344
RELEASE 2277	400	314	246	119	56	71	369	369	333
STOR CHANGE -383	-205	-91	2	10	5	-2	-80	-33	11
STORAGE 15172	14967	14877	14878	14889	14894	14891	14811	14778	14789
ELEV FTMSL 2235.8	2234.8	2234.4	2234.4	2234.5	2234.5	2234.5	2234.1	2234.0	2234.0
DISCH KCFS 5.7	6.5	5.3	4.0	4.0	4.0	4.5	6.0	6.0	6.0
POWER									
AVE POWER MW	89	72	55	55	55	62	82	82	82
PEAK POW MW	163	163	163	163	163	163	162	162	162
ENERGY GWH 376.6	66.2	52.0	40.7	19.7	9.2	11.8	61.0	60.9	55.0
--GARRISON--									
NAT INFLOW 2361	557	376	418	159	74	85	198	209	285
DEPLETION -512	32	-160	-19	-100	-47	-53	-77	-54	-34
CHAN STOR -3	-7	11	12			-5	-14		
EVAPORATION 683	142	177	152	68	32	36	76		
REG INFLOW 4464	775	685	543	310	145	169	553	632	652
RELEASE 8980	1076	1150	1199	580	271	309	1353	1599	1444
STOR CHANGE -4517	-301	-465	-656	-270	-126	-141	-800	-967	-792
STORAGE 22629	22328	21863	21207	20937	20811	20670	19871	18904	18112
ELEV FTMSL 1850.8	1850.0	1848.7	1846.9	1846.1	1845.7	1845.3	1843.0	1840.0	1837.5
DISCH KCFS 14.6	17.5	19.3	19.5	19.5	19.5	19.5	22.0	26.0	26.0
POWER									
AVE POWER MW	232	255	255	254	253	252	282	329	324
PEAK POW MW	504	503	501	501	500	500	498	477	468
ENERGY GWH 1401.6	173.0	183.6	190.0	91.3	42.5	48.5	210.1	244.7	218.1
--OAHE--									
NAT INFLOW 392	104	96	56	27	13	14		10	72
DEPLETION 200	109	27	-9	2	1	1	15	21	33
CHAN STOR -44	-10	-7	-1				-10	-16	
EVAPORATION 636	136	166	141	62	29	32	70		
REG INFLOW 8493	924	1046	1123	543	254	290	1258	1572	1483
RELEASE 11329	1800	1861	1693	809	411	576	1395	1480	1304
STOR CHANGE -2837	-876	-815	-570	-266	-157	-286	-137	92	179
STORAGE 21673	20797	19982	19412	19146	18989	18703	18566	18658	18836
ELEV FTMSL 1616.0	1613.5	1611.1	1609.3	1608.5	1608.0	1607.1	1606.6	1606.9	1607.5
DISCH KCFS 25.0	29.3	31.3	27.5	27.2	29.6	36.3	22.7	24.1	23.5
POWER									
AVE POWER MW	391	412	360	353	382	467	292	309	303
PEAK POW MW	739	727	718	713	710	706	703	705	708
ENERGY GWH 1787.2	291.0	297.0	267.6	127.1	64.3	89.6	217.1	230.1	203.4
--BIG BEND--									
EVAPORATION 121	25	31	27	12	6	7	14		
REG INFLOW 11208	1776	1830	1666	797	405	570	1381	1480	1304
RELEASE 11228	1796	1830	1666	797	405	570	1381	1480	1304
STORAGE 1641	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL 1420.3	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS 23.1	29.2	30.8	27.1	26.8	29.2	35.9	22.5	24.1	23.5
POWER									
AVE POWER MW	133	146	132	134	146	178	113	118	113
PEAK POW MW	486	517	538	538	538	538	538	538	529
ENERGY GWH 656.5	99.1	104.9	98.5	48.2	24.4	34.2	83.8	87.7	75.6
--FORT RANDALL--									
NAT INFLOW 183	64	38	6	3	1	2	10	20	39
DEPLETION 34	15	7	1	1	0	1	3	3	3
EVAPORATION 139	34	40	31	12	5	5	12		
REG INFLOW 11239	1811	1821	1640	787	401	565	1377	1497	1340
RELEASE 12365	2266	2211	2283	1108	517	591	1276	1147	966
STOR CHANGE -1126	-455	-390	-643	-321	-116	-26	101	350	374
STORAGE 4248	3793	3403	2760	2438	2322	2296	2398	2748	3122
ELEV FTMSL 1363.0	1358.0	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS 31.7	36.9	37.2	37.1	37.2	37.2	37.2	20.7	18.7	17.4
POWER									
AVE POWER MW	323	313	296	278	267	263	152	141	138
PEAK POW MW	365	350	319	296	287	285	293	319	339
ENERGY GWH 1192.4	240.1	225.4	220.3	100.3	44.9	50.5	112.9	105.1	92.9
--GAVINS POINT--									
NAT INFLOW 705	140	111	96	47	22	25	80	80	104
DEPLETION 28	10	-5	2	5	2	3	10	1	
CHAN STOR 26	-10	-1	0	0	0	0	31	4	2
EVAPORATION 42	8	11	10	4	2	2	5		
REG INFLOW 13026	2378	2316	2367	1145	535	611	1371	1230	1073
RELEASE 13028	2367	2291	2367	1145	535	611	1371	1230	1111
STOR CHANGE -2	11	25							-38
STORAGE 344	355	380	380	380	380	380	380	380	342
ELEV FTMSL 1206.1	1206.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS 35.1	38.5	38.5	38.5	38.5	38.5	38.5	22.3	20.0	20.0
POWER									
AVE POWER MW	115	116	117	117	117	117	78	71	70
PEAK POW MW	115	117	117	117	117	117	117	117	114
ENERGY GWH 497.3	85.2	83.4	86.8	42.0	19.6	22.4	58.4	52.5	47.0
--GAVINS POINT - SIOUX CITY--									
NAT INFLOW 1638	680	340	240	80	37	43	112	32	74
DEPLETION 123	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY									
KAF 14543	3011	2607	2597	1219	569	650	1470	1248	1171
KCFS	49.0	43.8	42.2	41.0	41.0	41.0	23.9	20.3	21.1
--TOTAL--									
NAT INFLOW 7293	1867	1237	1124	470	219	250	663	601	862
DEPLETION -538	221	-190	-73	-116	-54	-62	-124	-101	-40
CHAN STOR -20	-28	4	11	0	0	-5	8	-12	2
EVAPORATION 2152	452	560	479	212	98	111	239		
STORAGE 65707	63862	62126	60258	59411	59017	58562	57647	57089	56823
SYSTEM POWER									
AVE POWER MW	1283	1314	1215	1190	1220	1339	999	1050	1030
PEAK POW MW	2372	2376	2355	2327	2315	2308	2312	2318	2320
ENERGY GWH 5911.7	954.7	946.3	904.0	428.5	204.9	257.1	743.2	781.0	692.0
DAILY GWH	30.8	31.5	29.2	28.6	29.3	32.1	24.0	25.2	24.7

INI-SUM 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

28FEB11		2011										2012			
INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																
NAT INFLOW 9500	315	147	189	790	1590	2465	1205	450	375	525	208	97	111	345	295	395
DEPLETION 192	-24	-11	-14	-23	260	513	205	-46	-139	-83	-29	-14	-15	-129	-152	-107
EVAPORATION 334							23	71	89	77	18	8	10	39		
MOD INFLOW 8974	338	158	203	813	1330	1952	977	425	425	531	218	102	117	435	447	502
RELEASE 8977	193	90	116	476	676	893	922	922	740	646	312	146	167	892	922	863
STOR CHANGE -3	145	68	87	337	654	1059	55	-498	-315	-114	-94	-44	-50	-457	-475	-361
STORAGE 14791	14936	15004	15091	15428	16081	17141	17196	16698	16383	16269	16175	16131	16081	15624	15149	14788
ELEV FTMSL 2234.0	2234.7	2235.0	2235.4	2237.0	2239.9	2244.5	2244.8	2242.6	2241.3	2240.8	2240.4	2240.2	2239.9	2237.9	2235.7	2234.0
DISCH KCFS 11.5	6.5	6.5	6.5	8.0	11.0	15.0	15.0	15.0	12.4	10.5	10.5	10.5	10.5	14.5	15.0	15.0
POWER																
AVE POWER MW	89	89	89	110	150	168	170	169	168	145	145	145	145	166	164	163
PEAK POW MW	163	163	163	164	167	170	170	168	168	167	167	167	167	165	163	162
ENERGY GWH 1321.5	32.0	14.9	19.2	79.0	111.7	120.9	126.3	125.8	121.0	108.0	52.2	24.3	27.8	123.2	122.0	113.1
--GARRISON--																
NAT INFLOW 14000	528	246	316	1355	1840	3425	2715	835	570	645	258	120	137	270	325	415
DEPLETION 979	4	2	3	18	59	874	589	99	-132	14	-120	-56	-64	-126	-110	-75
CHAN STOR -34	50			-15	-29	-39			24	19				-39	-5	
EVAPORATION 377							26	81	101	86	20	9	11	44		
REG INFLOW 21586	766	334	430	1798	2428	3405	3023	1577	1366	1209	670	313	357	1205	1352	1353
RELEASE 21589	536	250	321	1428	1968	2202	2214	2214	1906	1752	848	396	452	1414	1906	1783
STOR CHANGE -3	231	84	108	370	460	1203	809	-637	-540	-543	-178	-83	-95	-209	-554	-430
STORAGE 18113	18344	18428	18537	18907	19367	20570	21379	20743	20203	19660	19482	19399	19304	19094	18541	18110
ELEV FTMSL 1837.5	1838.3	1838.5	1838.9	1840.0	1841.5	1845.0	1847.3	1845.5	1844.0	1842.3	1841.8	1841.6	1841.3	1840.6	1838.9	1837.5
DISCH KCFS 27.5	18.0	18.0	18.0	24.0	32.0	37.0	36.0	36.0	32.0	28.5	28.5	28.5	28.5	23.0	31.0	31.0
POWER																
AVE POWER MW	224	225	225	301	403	460	458	459	411	363	361	360	360	291	388	385
PEAK POW MW	471	472	473	478	483	500	501	500	499	490	483	483	482	479	473	468
ENERGY GWH 3295.6	80.7	37.8	48.7	216.7	299.8	331.5	340.9	341.4	295.6	269.9	129.9	60.6	69.2	216.3	288.9	267.6
--OAHE--																
NAT INFLOW 3800	358	167	215	545	360	1265	215	110	150	95	108	50	57	-45	25	125
DEPLETION 681	24	11	14	49	71	145	173	116	28	-10	1	0	1	12	18	28
CHAN STOR -13	38			-23	-30	-19	4		15	14				22	-33	
EVAPORATION 361							26	79	96	81	19	9	10	40		
REG INFLOW 24334	908	406	522	1901	2226	3303	2233	2128	1946	1790	936	437	499	1339	1880	1880
RELEASE 24338	618	287	375	1176	1716	2169	2982	3004	2810	2412	1152	571	759	1578	1468	1261
STOR CHANGE -3	289	119	147	725	510	1134	-749	-876	-864	-622	-216	-134	-260	-239	412	619
STORAGE 18837	19127	19246	19393	20118	20629	21763	21014	20138	19274	18652	18436	18302	18042	17803	18215	18834
ELEV FTMSL 1607.5	1608.4	1608.8	1609.3	1611.5	1613.0	1616.2	1614.1	1611.5	1608.9	1606.9	1606.2	1605.8	1604.9	1604.1	1605.5	1607.5
DISCH KCFS 22.2	20.8	20.7	21.0	19.8	27.9	36.5	48.5	48.9	47.2	39.2	38.7	41.1	47.9	25.7	23.9	21.9
POWER																
AVE POWER MW	269	269	273	259	368	486	642	638	612	505	494	523	602	326	304	282
PEAK POW MW	713	715	717	729	737	753	742	729	715	705	701	699	694	690	697	708
ENERGY GWH 3824.8	96.9	45.1	59.0	186.5	274.1	349.6	477.7	474.6	440.5	375.4	178.0	87.9	115.5	242.3	225.8	196.0
--BIG BEND--																
EVAPORATION 71							5	15	19	16	4	2	2	9		
REG INFLOW 24267	618	287	375	1176	1716	2169	2977	2989	2792	2396	1148	569	757	1570	1468	1261
RELEASE 24267	618	287	375	1176	1716	2169	2977	2989	2792	2396	1148	569	757	1570	1468	1261
STORAGE 1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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 22.2	20.8	20.7	21.0	19.8	27.9	36.5	48.4	48.6	46.9	39.0	38.6	41.0	47.7	25.5	23.9	21.9
POWER																
AVE POWER MW	98	97	98	92	131	171	226	227	222	189	191	203	235	128	117	105
PEAK POW MW	517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH 1400.8	35.4	16.3	21.2	66.6	97.2	122.8	168.4	169.1	159.7	140.9	68.8	34.1	45.2	95.0	87.0	73.1
--FORT RANDALL--																
NAT INFLOW 1500	148	69	89	425	220	150	90	85	80	30	20	9	11	15		60
DEPLETION 80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION 81							6	19	24	18	4	2	2	7		
REG INFLOW 25608	764	355	462	1597	1927	2307	3043	3040	2841	2406	1163	576	765	1577	1465	1318
RELEASE 25607	472	221	462	1597	1927	2307	3043	3040	2987	3049	1484	692	791	1474	1115	944
STOR CHANGE 1	292	134		0		0	0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE 3123	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL 1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS 16.5	15.9	15.9	25.9	26.8	31.3	38.8	49.5	49.4	50.2	49.6	49.9	49.9	49.9	24.0	18.1	16.4
POWER																
AVE POWER MW	131	134	218	226	264	323	356	356	353	336	307	291	285	175	137	131
PEAK POW MW	351	356	356	356	356	356	356	356	350	318	295	286	284	294	319	339
ENERGY GWH 2279.3	47.2	22.6	47.2	162.9	196.1	232.2	264.7	264.7	254.0	250.0	110.6	48.9	54.8	130.2	102.2	90.9
--GAVINS POINT--																
NAT INFLOW 2300	121	56	73	225	345	290	215	185	135	155	70	33	37	90	105	165
DEPLETION 114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR -2	1	0	-19	-2	-9	-14	-21	0	-1	1	-1	0	0	48	11	3
EVAPORATION 24							2	5	6	6	1	1	1	3		
REG INFLOW 27766	595	278	516	1815	2244	2559	3197	3210	3119	3197	1547	722	825	1599	1230	1112
RELEASE 27766	595	278	516	1815	2244	2559	3197	3197	3094	3197	1547	722	825	1599	1230	1150
STOR CHANGE								13	25							-38
STORAGE 342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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 20.0	20.0	20.0	28.9	30.5	36.5	43.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	26.0	20.0	20.0
POWER																
AVE POWER MW	69	69	98	102	114	113	111	112	114	115	115	115	115	79	70	69
PEAK POW MW	114	114	114	114	114	113	111	113	115	115	115	115	115	78	78	76
ENERGY GWH 874.2	24.8	11.6	21.2	73.5	85.0	81.6	82.9	83.6	82.4	85.7	41.5	19.4	22.1	58.6	52.0	48.3
--GAVINS POINT - SIOUX CITY--																
NAT INFLOW 3200	165	77	99	515	915	395	265	210	155	80	48	22	25	60	35	135
DEPLETION 266	7	3	4	22	36	31	39	36	24	11	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																
KAF 30700	753	351	611	2308	3123	2923	3423	3371	3225	3266	1589	741	847	1646	1251	1271
KCFS	25.3	25.3	34.2	38.8	50.8	49.1	55.7	54.8	54.2	53.1	53.4	53.4	53.4	26.8	20.3	22.1
--TOTAL--																
NAT INFLOW 34300	1633	762	980	3855	5270	7990	4705	1875	1465	1530	710	331	379	735	785	1295
DEPLETION 2312	12	6	7	75	454	1599	1063	230	-217	-65	-136	-63	-73	-217	-226	-137
CHAN STOR -47	88	0	-19	-40	-68	-72	-17	0	38	34	-1	0	-1	34	-27	3
EVAPORATION 1249							86	271	334	285	66	31	35	142		
STORAGE 56828	57785	58190	58532	59965	61589	64985	65101	63104	61265	59342	58533	58156	57724	56922	56656	56819
SYSTEM POWER																
AVE POWER MW	881	883	1002	1091	1430	1720	1964	1961	1880	1653	1614	1637	1743	1163	1180	1134
PEAK POW MW	2328	2329	2333	2350	2365	2401	2390	2376	2364	2334	2300	2288	2280	2244	2269	2282
ENERGY GWH 12996.2	317.1	148.3	216.5	785.2	1063.9	1238.6	1460.9	1459.2	1353.3	1229.9	580.9	275.1	334.6	865.6	878.0	789.1
DAILY GWH	21.1	21.2	24.1	26.2	34.3	41.3	47.1	47.1	45.1	39.7	38.7	39.3	41.8	27.9	28.3	27.2

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 29FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB11	2011											2012				
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	8650	288	134	173	715	1445	2245	1100	410	340	480	188	88	100	315	270	360
DEPLETION	191	-24	-11	-14	-23	260	513	204	-62	-129	-89	-30	-14	-16	-123	-146	-105
EVAPORATION	329							22	70	87	75	18	8	10	39		
MOD INFLOW	8130	312	145	187	738	1185	1732	874	402	382	494	200	93	106	399	416	465
RELEASE	8130	193	90	116	476	676	833	861	861	649	492	238	111	127	799	830	777
STOR CHANGE	1	118	55	71	262	509	899	13	-459	-267	2	-38	-18	-20	-400	-414	-312
STORAGE	14791	14910	14965	15036	15298	15806	16705	16718	16259	15993	15995	15956	15938	15918	15518	15104	14792
ELEV FTMSL	2234.0	2234.6	2234.8	2235.2	2236.4	2238.7	2242.7	2242.7	2240.7	2239.5	2239.5	2239.4	2239.3	2239.2	2237.4	2235.5	2234.0
DISCH KCFS	11.5	6.5	6.5	6.5	8.0	11.0	14.0	14.0	14.0	10.9	8.0	8.0	8.0	8.0	13.0	13.5	13.5
POWER																	
AVE POWER MW		89	89	89	110	150	167	168	168	150	111	111	111	111	165	164	163
PEAK POW MW		163	163	163	164	166	168	168	167	166	166	166	166	166	165	163	162
ENERGY GWH	1254.9	32.0	14.9	19.2	78.9	111.3	120.2	125.3	124.8	107.9	82.5	39.9	18.6	21.3	123.0	121.9	113.2
--GARRISON--																	
NAT INFLOW	12800	484	226	290	1240	1685	3130	2480	760	520	590	235	110	125	245	300	380
DEPLETION	997	4	2	3	18	100	802	621	93	-133		-118	-55	-63	-117	-96	-64
CHAN STOR	-20	50			-15	-29	-29			30	28				-49	-5	0
EVAPORATION	376							25	81	100	86	20	9	11	43		
REG INFLOW	19536	723	314	404	1683	2232	3132	2694	1447	1231	1024	571	266	305	1069	1221	1221
RELEASE	19536	476	222	286	1369	1968	1904	1906	1906	1727	1629	788	368	421	1353	1660	1553
STOR CHANGE	1	247	92	118	315	264	1228	788	-459	-496	-606	-218	-101	-116	-284	-439	-333
STORAGE	18113	18360	18452	18570	18884	19149	20376	21165	20705	20210	19604	19386	19285	19169	18886	18447	18114
ELEV FTMSL	1837.5	1838.3	1838.6	1839.0	1840.0	1840.8	1844.5	1846.7	1845.4	1844.0	1842.2	1841.5	1841.2	1840.8	1840.0	1838.6	1837.5
DISCH KCFS	27.5	16.0	16.0	16.0	23.0	32.0	32.0	31.0	31.0	29.0	26.5	26.5	26.5	26.5	22.0	27.0	27.0
POWER																	
AVE POWER MW		200	200	201	289	402	406	399	400	372	338	335	335	335	278	338	335
PEAK POW MW		471	472	474	477	480	499	501	500	499	488	482	481	480	477	472	468
ENERGY GWH	2994.8	71.9	33.6	43.4	207.8	299.1	292.1	297.1	297.9	268.1	251.1	120.7	56.3	64.3	206.7	251.4	233.4
--OAHE--																	
NAT INFLOW	3100	302	141	181	520	305	1010	185	95	125	65	55	26	29	-65	10	115
DEPLETION	681	24	11	14	49	71	145	173	116	28	-10	1	0	1	12	18	28
CHAN STOR	3	46			-28	-35		4		8	10	0			18	-20	0
EVAPORATION	361							25	78	96	82	19	9	10	41		
REG INFLOW	21596	800	352	453	1812	2167	2769	1896	1807	1736	1633	823	384	439	1252	1632	1640
RELEASE	21596	648	301	392	1122	1441	2056	2530	2542	2359	1950	923	464	638	1445	1488	1297
STOR CHANGE	1	152	52	61	690	726	713	-633	-735	-623	-317	-100	-80	-199	-193	144	343
STORAGE	18837	18990	19041	19102	19792	20518	21231	20598	19863	19240	18922	18822	18742	18543	18350	18495	18838
ELEV FTMSL	1607.5	1608.0	1608.2	1608.4	1610.5	1612.7	1614.7	1612.9	1610.7	1608.8	1607.8	1607.5	1607.2	1606.6	1605.9	1606.4	1607.5
DISCH KCFS	22.2	21.8	21.7	22.0	18.9	23.4	34.6	41.1	41.3	39.6	31.7	31.0	33.4	40.2	23.5	24.2	22.5
POWER																	
AVE POWER MW		282	280	285	246	309	459	545	542	515	410	400	430	514	301	310	290
PEAK POW MW		710	711	712	724	735	746	736	725	715	709	708	706	703	699	702	708
ENERGY GWH	3403.0	101.4	47.1	61.5	177.3	229.7	330.2	405.6	403.3	370.7	304.9	143.9	72.2	98.7	224.2	230.5	201.9
--BIG BEND--																	
EVAPORATION	71							5	15	19	16	4	2	2	9		
REG INFLOW	21525	648	301	392	1122	1441	2056	2525	2527	2340	1934	920	463	636	1437	1488	1297
RELEASE	21525	648	301	392	1122	1441	2056	2525	2527	2340	1934	920	463	636	1437	1488	1297
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	22.2	21.8	21.7	22.0	18.9	23.4	34.6	41.1	41.1	39.3	31.4	30.9	33.3	40.1	23.4	24.2	22.5
POWER																	
AVE POWER MW		103	101	103	88	110	162	192	192	186	153	154	166	198	117	118	108
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	1243.9	37.2	17.0	22.2	63.6	81.6	116.4	142.9	143.0	134.1	114.1	55.4	27.8	38.1	87.1	88.2	75.2
--FORT RANDALL--																	
NAT INFLOW	1200	131	61	78	285	180	140	80	75	70	15	15	7	8	10	-5	50
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	81							6	19	24	18	4	2	2	7		
REG INFLOW	22565	777	361	469	1403	1612	2184	2581	2568	2380	1929	930	468	641	1438	1480	1344
RELEASE	22564	485	227	469	1403	1612	2184	2581	2568	2526	2572	1251	584	667	1335	1130	970
STOR CHANGE	1	292	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE	3123	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	16.5	16.3	16.3	26.3	23.6	26.2	36.7	42.0	41.8	42.4	41.8	42.0	42.0	42.0	21.7	18.4	16.9
POWER																	
AVE POWER MW		135	138	222	199	221	308	336	335	336	318	296	284	279	159	139	134
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	294	319	339
ENERGY GWH	2150.6	48.5	23.2	47.9	143.5	164.5	221.7	250.2	249.6	241.7	236.8	106.7	47.7	53.6	118.1	103.6	93.3
--GAVINS POINT--																	
NAT INFLOW	2000	109	51	65	185	300	240	175	165	120	140	65	30	35	85	95	140
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-2	0	0	-19	5	-5	-20	-10	0	-1	1	0	0	0	38	6	3
EVAPORATION	24							2	5	6	6	1	1	1	3		
REG INFLOW	24423	595	278	516	1589	1888	2380	2705	2718	2643	2705	1309	611	698	1445	1230	1112
RELEASE	24423	595	278	516	1589	1888	2380	2705	2705	2618	2705	1309	611	698	1445	1230	1150
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	20.0	20.0	20.0	28.9	26.7	30.7	40.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	23.5	20.0	20.0
POWER																	
AVE POWER MW		69	69	98	91	103	114	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	861.8	24.8	11.6	21.2	65.6	76.3	82.0	84.1	84.8	82.9	86.3	41.8	19.5	22.3	58.4	52.0	48.3
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	2550	145	68	87	410	705	315	215	155	125	65	38	18	20	50	30	105
DEPLETION	266	7	3	4	22	36	31	39	36	24	11	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	26707	733	342	599	1977	2557	2664	2881	2824	2719	2759	1341	626	715	1482	1246	1241
KCFS		24.7	24.7	33.6	33.2	41.6	44.8	46.9	45.9	45.7	44.9	45.1	45.1	45.1	24.1	20.3	21.6
--TOTAL--																	
NAT INFLOW	30300	1459	681	875	3355	4620	7080	4235	1660	1300	1355	595	278	317	640	700	1150
DEPLETION	2329	12	6	7	75	495	1527	1094	208	-208	-85	-135	-63	-72	-202	-206	-124
CHAN STOR	-19	95	0	-19	-37	-69	-49	-6	0	36	39	-1	0	-1	9	-19	3
EVAPORATION	1242							85	268	331	284	66	31	35	142		
STORAGE	56828	57637	57970	58220	59486	60985	63825	63992	62353	60846	59282	58604	58289	57928	57154	56795	56831
SYSTEM POWER																	
AVE POWER MW		877	878	997	1023	1294	1615	1754	1752	1674	1446	1412	1441	1553	1099	1139	1099
PEAK POW MW		2326	2326	2329	2344	2360	2392	2384	2371	2364	2336	2306	2295	2289	2251	2272	2282
ENERGY GWH	11909.0	315.7	147.5	215.4	736.6	962.5	1162.5	1305.3	1303.4	1205.4	1075.7	508.4	242.1	298.3	817.5	847.6	765.2
DAILY GWH		21.0	21.1	23.9	24.6	31.0	38.8	42.1	42.0	40.2	34.7	33.9	34.6	37.3	26.4	27.3	26.4
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

28FEB11		2011										2012			
INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																
NAT INFLOW 7200	230	107	138	600	1180	1810	840	315	295	430	180	84	96	300	250	345
DEPLETION 418	-36	-17	-21	25	298	525	234	11	-75	-42	-41	-19	-22	-132	-153	-118
EVAPORATION 462							29	89	111	96	44	20	23	50		
MOD INFLOW 6320	266	124	159	575	882	1285	577	215	259	376	177	83	94	382	403	463
RELEASE 6533	179	83	107	476	646	625	646	646	490	369	179	83	111	646	646	604
STOR CHANGE -213	87	41	52	99	236	660	-68	-431	-230	7	-2	-1	-17	-264	-243	-141
STORAGE 14785	14872	14913	14965	15064	15300	15961	15893	15462	15232	15238	15237	15236	15219	14956	14713	14572
ELEV FTMSL 2234.0	2234.4	2234.6	2234.8	2235.3	2236.4	2239.4	2239.1	2237.1	2236.1	2236.1	2236.1	2236.1	2236.0	2234.8	2233.6	2233.0
DISCH KCFS 9.0	6.0	6.0	6.0	8.0	10.5	10.5	10.5	10.5	8.2	6.0	6.0	6.0	7.0	10.5	10.5	10.5
POWER																
AVE POWER MW	82	82	82	109	143	144	144	144	113	82	82	82	96	142	142	141
PEAK POW MW	163	163	163	163	164	166	166	165	164	164	164	164	164	163	162	161
ENERGY GWH 1078.4	29.5	13.8	17.7	78.8	106.2	103.5	107.4	107.0	81.4	61.3	29.7	13.8	18.4	106.0	105.6	98.4
--GARRISON--																
NAT INFLOW 10800	460	214	276	870	1325	3095	1860	595	460	495	195	91	104	180	260	320
DEPLETION 989	4	2	3	-3	177	765	602	107	-142	-25	-121	-56	-65	-115	-87	-57
CHAN STOR -15	30			-20	-25				22	22			-10	-34		
EVAPORATION 538							33	104	129	112	51	24	27	58		
REG INFLOW 15791	664	296	380	1329	1769	2955	1871	1029	984	798	444	207	243	849	993	981
RELEASE 16060	476	222	286	1190	1599	1607	1599	1599	1251	922	446	208	270	1291	1599	1496
STOR CHANGE -269	188	74	95	139	170	1348	272	-569	-267	-124	-2	-1	-27	-443	-606	-515
STORAGE 18107	18295	18368	18463	18602	18772	20121	20392	19823	19556	19432	19429	19428	19401	18959	18353	17838
ELEV FTMSL 1837.5	1838.1	1838.3	1838.6	1839.1	1839.6	1843.7	1844.5	1842.8	1842.0	1841.7	1841.6	1841.6	1841.6	1840.2	1838.3	1836.6
DISCH KCFS 26.0	16.0	16.0	16.0	20.0	26.0	27.0	26.0	26.0	21.0	15.0	15.0	15.0	17.0	21.0	26.0	26.0
POWER																
AVE POWER MW	199	200	200	250	326	342	333	332	268	191	191	191	216	266	325	322
PEAK POW MW	470	471	472	474	476	499	499	498	486	483	483	483	483	478	471	465
ENERGY GWH 2452.6	71.8	33.6	43.3	180.3	242.3	245.9	247.8	247.2	192.7	142.0	68.6	32.0	41.4	197.6	242.1	224.0
--OAHE--																
NAT INFLOW 2300	232	108	139	405	195	780	160	75	95	35	30	14	16	-80		95
DEPLETION 681	24	11	14	49	71	145	173	116	28	-10	1	0	1	12	18	28
CHAN STOR -1	40			-16	-24	-4	4		20	24			-8	-16	-21	
EVAPORATION 503							32	99	122	104	46	22	25	53		
REG INFLOW 17175	724	319	411	1530	1699	2238	1558	1459	1216	887	429	200	252	1129	1560	1563
RELEASE 17452	666	309	402	1293	1624	1607	1849	1979	1759	1259	562	296	272	1096	1324	1154
STOR CHANGE -277	58	11	9	237	75	630	-292	-520	-543	-372	-133	-96	-20	34	236	408
STORAGE 18831	18889	18900	18909	19146	19221	19851	19560	19039	18496	18125	17992	17896	17876	17910	18146	18554
ELEV FTMSL 1607.5	1607.7	1607.7	1607.7	1608.5	1608.7	1610.7	1609.8	1608.2	1606.4	1605.2	1604.7	1604.4	1604.4	1604.5	1605.3	1606.6
DISCH KCFS 22.8	22.4	22.2	22.5	21.7	26.4	27.0	30.1	32.2	29.6	20.5	18.9	21.3	17.1	17.8	21.5	20.1
POWER																
AVE POWER MW	289	287	291	282	342	352	393	417	380	262	241	271	218	227	274	257
PEAK POW MW	709	709	709	713	714	725	720	711	702	695	693	692	691	692	696	703
ENERGY GWH 2723.3	104.1	48.3	62.9	202.7	254.8	253.6	292.2	310.5	273.8	195.0	86.7	45.6	41.9	168.6	203.9	178.9
--BIG BEND--																
EVAPORATION 103							6	20	25	22	10	5	5	11		
REG INFLOW 17349	666	309	402	1293	1624	1607	1843	1959	1734	1238	552	292	267	1085	1324	1154
RELEASE 17349	666	309	402	1293	1624	1607	1843	1959	1734	1238	552	292	267	1085	1324	1154
STORAGE 1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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 22.8	22.4	22.2	22.5	21.7	26.4	27.0	30.0	31.9	29.1	20.1	18.6	21.0	16.8	17.6	21.5	20.1
POWER																
AVE POWER MW	106	104	105	102	124	126	140	149	138	99	93	105	85	89	106	96
PEAK POW MW	517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH 1002.0	38.2	17.5	22.8	73.3	92.0	91.0	104.4	110.9	99.4	73.5	33.6	17.7	16.3	66.0	78.6	67.0
--FORT RANDALL--																
NAT INFLOW 900	119	55	71	155	140	135	70	65	30		10	5	5	5	-10	45
DEPLETION 80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION 117							8	25	31	25	9	4	4	10		
REG INFLOW 18052	783	363	472	1444	1755	1730	1887	1984	1726	1212	551	292	268	1077	1311	1196
RELEASE 18050	490	229	472	1444	1755	1730	1887	1984	1872	1855	872	408	294	974	961	822
STOR CHANGE 2	294	134					0	0	-146	-643	-321	-116	-26	102	350	374
STORAGE 3121	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2399	2749	3123
ELEV FTMSL 1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS 16.9	16.5	16.5	26.5	24.3	28.5	29.1	30.7	32.3	31.5	30.2	29.3	29.4	18.5	15.8	15.6	14.3
POWER																
AVE POWER MW	136	139	223	205	240	245	258	271	263	242	221	215	135	116	119	114
PEAK POW MW	351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH 1782.0	48.9	23.4	48.2	147.6	178.9	176.4	192.2	201.8	189.2	179.7	79.7	36.1	25.9	86.6	88.3	79.3
--GAVINS POINT--																
NAT INFLOW 1500	104	49	62	145	160	175	100	90	95	120	60	28	32	80	85	115
DEPLETION 114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR 4	1	0	-19	4	-8	-1	-3	-3	2	2	2	0	20	5	0	2
EVAPORATION 36							2	6	9	8	3	2	2	4		
REG INFLOW 19404	595	278	516	1589	1888	1880	1943	2054	1965	1968	925	432	341	1045	1045	940
RELEASE 19404	595	278	516	1589	1888	1880	1943	2041	1940	1968	925	432	341	1045	1045	978
STOR CHANGE								13	25							-38
STORAGE 342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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 20.0	20.0	20.0	28.9	26.7	30.7	31.6	31.6	33.2	32.6	32.0	31.1	31.1	21.5	17.0	17.0	17.0
POWER																
AVE POWER MW	69	69	98	91	103	105	105	109	109	108	106	106	76	60	60	60
PEAK POW MW	114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH 794.2	24.8	11.6	21.2	65.6	76.3	75.3	77.8	80.9	78.3	80.6	38.3	17.9	14.5	44.7	44.7	41.5
--GAVINS POINT - SIOUX CITY--																
NAT INFLOW 1700	138	64	83	325	295	150	180	120	105	55	30	14	16	25	25	75
DEPLETION 266	7	3	4	22	36	31	39	36	24	11	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																
KAF 20838	726	339	595	1892	2147	1999	2084	2125	2021	2012	949	443	354	1057	1056	1039
KCFS	24.4	24.4	33.3	31.8	34.9	33.6	33.9	34.6	34.0	32.7	31.9	31.9	22.3	17.2	17.2	18.1
--TOTAL--																
NAT INFLOW 24400	1283	598	769	2500	3295	6145	3210	1260	1080	1135	505	236	269	510	610	995
DEPLETION 2548	0	0	0	102	610	1502	1105	295	-163	-63	-149	-69	-79	-209	-204	-130
CHAN STOR -12	70	0	-19	-31	-56	-5	1	-3	43	48	1	0	3	-46	-20	2
EVAPORATION 1759							110	344	427	367	163	76	86	187		
STORAGE 56808	57434	57694	57849	58324	58806	61445	61357	59849	58688	57556	57098	56884	56795	56224	55962	56050
SYSTEM POWER																
AVE POWER MW	881	882	1000	1039	1277	1313	1373	1422	1271	984	935	971	825	900	1026	990
PEAK POW MW	2324	2322	2324	2330	2334	2369	2365	2354	2336	2316	2291	2281	2278	2242	2264	2273
ENERGY GWH 9832.5	317.3	148.1	216.1	748.2	950.4	945.6	1021.8	1058.3	914.8	732.1	336.5	163.1	158.4	669.5	763.2	689.1
DAILY GWH	21.2	21.2	24.0	24.9	30.7	31.5	33.0	34.1	30.5	23.6	22.4	23.3	19.8	21.6	24.6	23.8

VALUES IN 1000 AF EXCEPT AS INDICATED

28FEB11		2011										2012				
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	6000	203	95	122	485	955	1480	665	285	255	340	165	77	88	260	220	305
DEPLETION	315	-17	-8	-10	38	195	405	227	2	-100	-79	-30	-14	-16	-98	-105	-76
EVAPORATION	552							35	107	133	115	52	24	28	59		
MOD INFLOW	5133	220	103	132	447	760	1075	403	176	222	304	143	67	76	299	325	381
RELEASE	6750	179	83	107	417	615	655	676	676	525	369	179	83	111	707	707	661
STOR CHANGE	-1617	42	19	25	30	145	420	-273	-501	-302	-65	-36	-17	-35	-408	-382	-280
STORAGE	14789	14831	14850	14875	14906	15051	15471	15198	14698	14395	14330	14294	14278	14243	13835	13453	13172
ELEV FTMSL	2234.0	2234.2	2234.3	2234.4	2234.6	2235.2	2237.2	2235.9	2233.6	2232.1	2231.8	2231.6	2231.5	2231.4	2229.3	2227.4	2226.0
DISCH KCFS	6.0	6.0	6.0	6.0	7.0	10.0	11.0	11.0	11.0	8.8	6.0	6.0	6.0	7.0	11.5	11.5	11.5
POWER																	
AVE POWER MW		82	82	82	96	136	149	149	148	120	81	81	81	95	151	150	148
PEAK POW MW		162	162	163	163	163	165	164	162	161	161	160	160	160	159	157	156
ENERGY GWH	1093.8	29.5	13.8	17.7	68.8	101.4	107.1	110.8	110.1	86.2	60.5	29.3	13.7	18.2	112.2	111.2	103.3
--GARRISON--																	
NAT INFLOW	9200	423	198	254	705	1110	2635	1585	505	390	420	165	77	88	150	220	275
DEPLETION	1050	15	7	9	21	126	639	566	129	-103	22	-107	-50	-57	-82	-53	-34
CHAN STOR	-55				-10	-30	-10			21	28			-10	-45		
EVAPORATION	642							41	127	156	133	59	28	31	67		
REG INFLOW	14203	587	274	352	1091	1569	2641	1655	926	883	662	391	182	215	827	980	970
RELEASE	16189	476	222	286	952	1353	1666	1660	1660	1321	1045	506	236	301	1291	1660	1553
STOR CHANGE	-1986	110	51	66	139	217	975	-6	-735	-438	-384	-115	-54	-87	-464	-680	-583
STORAGE	18112	18223	18274	18340	18479	18695	19670	19665	18930	18492	18109	17994	17940	17853	17389	16709	16126
ELEV FTMSL	1837.5	1837.9	1838.0	1838.2	1838.7	1839.4	1842.4	1842.4	1840.1	1838.7	1837.5	1837.1	1836.9	1836.7	1835.1	1832.8	1830.7
DISCH KCFS	26.0	16.0	16.0	16.0	16.0	22.0	28.0	27.0	27.0	22.2	17.0	17.0	17.0	19.0	21.0	27.0	27.0
POWER																	
AVE POWER MW		199	200	200	200	275	353	343	341	279	212	211	211	235	258	327	322
PEAK POW MW		469	470	471	472	475	492	490	478	473	468	467	466	465	459	451	443
ENERGY GWH	2435.2	71.8	33.5	43.2	144.2	204.9	254.5	254.8	253.9	200.5	157.9	76.0	35.4	45.1	192.0	243.1	224.2
--OAHE--																	
NAT INFLOW	1300	203	95	122	180	130	275	140	65	75	15	13	6	7	-90	-10	75
DEPLETION	681	24	11	14	49	71	145	173	116	28	-10	1	0	1	12	18	28
CHAN STOR	-6	40				-24	-25	4		21	23	0		-9	-9	-27	0
EVAPORATION	562							36	111	136	116	52	24	27	60		
REG INFLOW	16240	695	306	393	1083	1387	1771	1595	1498	1252	977	466	217	271	1121	1605	1600
RELEASE	18277	633	297	508	1561	1916	1802	2069	2092	1874	1371	594	312	265	910	1112	962
STOR CHANGE	-2037	62	9	-115	-478	-528	-31	-474	-594	-622	-393	-128	-95	7	210	494	638
STORAGE	18836	18898	18907	18793	18315	17786	17755	17282	16687	16066	15672	15544	15450	15456	15667	16161	16799
ELEV FTMSL	1607.5	1607.7	1607.7	1607.4	1605.8	1604.1	1603.9	1602.3	1600.2	1598.0	1596.5	1596.1	1595.7	1595.7	1596.5	1598.3	1600.6
DISCH KCFS	23.5	21.3	21.4	28.5	26.2	31.2	30.3	33.6	34.0	31.5	22.3	20.0	22.5	16.7	14.8	18.1	16.7
POWER																	
AVE POWER MW		275	276	367	337	395	383	423	423	387	272	242	272	202	180	221	207
PEAK POW MW		709	709	707	699	690	689	680	670	658	651	649	647	647	651	660	672
ENERGY GWH	2761.1	99.0	46.4	79.2	242.3	294.2	275.5	314.4	314.6	278.7	202.4	87.3	45.7	38.8	133.9	164.5	144.1
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	18148	633	297	508	1561	1916	1802	2061	2068	1843	1344	582	306	258	896	1112	962
RELEASE	18148	633	297	508	1561	1916	1802	2061	2068	1843	1344	582	306	258	896	1112	962
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	23.5	21.3	21.4	28.5	26.2	31.2	30.3	33.5	33.6	31.0	21.8	19.5	22.1	16.3	14.6	18.1	16.7
POWER																	
AVE POWER MW		101	100	133	123	146	142	157	157	147	107	98	111	82	74	89	80
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	1046.2	36.3	16.8	28.8	88.4	108.5	102.1	116.7	117.1	105.7	79.7	35.3	18.6	15.7	54.7	66.1	55.8
--FORT RANDALL--																	
NAT INFLOW	450	73	34	44	90	65	125	35	25		-20	-8	-4	-4	-30	-15	40
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	146							10	32	39	31	12	5	5	12		
REG INFLOW	18372	704	330	551	1647	1972	1915	2068	2046	1797	1292	561	297	249	851	1094	999
RELEASE	18370	411	196	551	1647	1972	1915	2068	2046	1943	1935	882	413	274	748	744	625
STOR CHANGE	2	293	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE	3122	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	17.4	13.8	14.1	30.9	27.7	32.1	32.2	33.6	33.3	32.7	31.5	29.6	29.8	17.3	12.2	12.1	10.9
POWER																	
AVE POWER MW		114	119	260	233	270	271	283	280	273	252	224	218	126	90	92	87
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1819.5	41.2	20.0	56.1	168.0	200.6	194.9	210.3	208.1	196.2	187.3	80.5	36.6	24.2	66.7	68.5	60.4
--GAVINS POINT--																	
NAT INFLOW	1300	87	41	52	125	140	150	85	75	80	110	53	25	28	75	75	100
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	11	7	-1	-32	6	-8	0	-3	1	1	2	3	0	23	9	0	2
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	19523	506	236	571	1773	2084	2041	2109	2104	2018	2035	928	433	321	818	818	727
RELEASE	19523	506	236	571	1773	2084	2041	2109	2091	1993	2035	928	433	321	818	818	765
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	20.0	17.0	17.0	32.0	29.8	33.9	34.3	34.3	34.0	33.5	33.1	31.2	31.2	20.2	13.3	13.3	13.3
POWER																	
AVE POWER MW		59	59	106	100	110	111	111	110	111	111	107	107	71	47	47	47
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	786.8	21.2	9.9	22.8	72.3	81.6	79.6	82.2	82.1	79.8	82.5	38.3	17.9	13.7	35.1	35.1	32.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1050	121	56	73	140	170	90	105	75	60	35	25	12	13	10	20	45
DEPLETION	266	7	3	4	22	36	31	39	36	24	11	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	20307	620	289	640	1891	2218	2100	2175	2130	2029	2059	947	442	331	815	824	796
KCFS		20.8	20.8	35.8	31.8	36.1	35.3	35.4	34.6	34.1	33.5	31.8	31.8	20.8	13.3	13.4	13.8
--TOTAL--																	
NAT INFLOW	19300	1111	518	666	1725	2570	4755	2615	1030	860	900	413	193	220	375	510	840
DEPLETION	2506	30	14	18	139	456	1256	1062	308	-149	-53	-123	-57	-66	-142	-122	-65
CHAN STOR	-50	47	-1	-32	-4	-62	-35	1	1	43	53	3	0	5	-44	-27	2
EVAPORATION	2076							131	410	506	432	191	88	101	217		
STORAGE	56823	57330	57544	57520	57211	57045	58409	57657	55840	54357	52872	52272	51991	51850	51291	51073	51184
SYSTEM POWER																	
AVE POWER MW		831	836	1147	1089	1332	1408	1464	1460	1315	1035	963	999	811	799	925	891
PEAK POW MW		2323	2321	2320	2313	2307	2325	2314	2289	2276	2254	2227	2216	2212	2178	2203	2215
ENERGY GWH	9942.6	299.0	140.5	247.8	784.1	991.3	1013.6	1089.3	1085.9	947.1	770.2	346.8	167.8	155.7	594.6	688.6	620.4
DAILY GWH		19.9	20.1	27.5	26.1	32.0	33.8	35.1	35.0	31.6	24.8	23.1	24.0	19.5	19.2	22.2	21.4

VALUES IN 1000 AF EXCEPT AS INDICATED

28FEB11		2011										2012			
INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																
NAT INFLOW 5400	194	90	116	470	845	1195	610	270	245	320	158	74	84	230	210	290
DEPLETION 373	-17	-8	-10	38	195	405	219	1	-108	-90	-24	-11	-13	-80	-69	-55
EVAPORATION 533							34	104	128	111	50	23	27	57		
MOD INFLOW 4494	211	98	126	432	650	790	357	165	225	299	132	61	70	253	279	345
RELEASE 6830	179	83	107	565	615	655	676	676	495	369	179	83	103	676	707	661
STOR CHANGE -2336	32	15	19	-133	35	135	-319	-511	-270	-70	-47	-22	-33	-423	-428	-316
STORAGE 14789	14821	14836	14855	14722	14757	14893	14574	14063	13793	13723	13676	13654	13621	13198	12770	12453
ELEV FTMSL 2234.0	2234.2	2234.2	2234.3	2233.7	2233.9	2234.5	2233.0	2230.5	2229.1	2228.8	2228.5	2228.4	2228.3	2226.1	2223.8	2222.1
DISCH KCFS 6.0	6.0	6.0	6.0	9.5	10.0	11.0	11.0	11.0	8.3	6.0	6.0	6.0	6.5	11.0	11.5	11.5
POWER																
AVE POWER MW	82	82	82	129	136	148	147	146	112	81	81	80	87	144	147	146
PEAK POW MW	162	162	162	162	162	163	161	160	159	158	158	158	158	156	154	152
ENERGY GWH 1097.5	29.5	13.8	17.7	93.2	101.1	106.3	109.6	108.8	80.6	60.0	29.0	13.5	16.7	106.9	109.5	101.4
--GARRISON--																
NAT INFLOW 7400	365	170	219	575	1055	2205	1080	360	160	390	148	69	79	135	135	255
DEPLETION 933	15	7	9	21	111	524	493	111	-107	20	-93	-43	-50	-52	-22	-12
CHAN STOR -55				-35	-5	-10			26	23			-5	-45	-5	
EVAPORATION 623							40	124	151	129	58	27	30	65		
REG INFLOW 12619	528	247	317	1085	1554	2326	1223	802	637	633	361	169	196	753	859	928
RELEASE 15476	476	222	286	952	1291	1517	1506	1506	1209	1015	491	229	270	1291	1660	1553
STOR CHANGE -2857	52	24	31	133	263	808	-283	-705	-572	-381	-129	-60	-74	-538	-801	-625
STORAGE 18112	18165	18189	18220	18353	18616	19424	19141	18436	17864	17483	17354	17293	17220	16681	15880	15255
ELEV FTMSL 1837.5	1837.7	1837.8	1837.9	1838.3	1839.1	1841.6	1840.8	1838.5	1836.7	1835.4	1835.0	1834.8	1834.5	1832.7	1829.9	1827.6
DISCH KCFS 26.0	16.0	16.0	16.0	16.0	21.0	25.5	24.5	24.5	20.3	16.5	16.5	16.5	17.0	21.0	27.0	27.0
POWER																
AVE POWER MW	199	199	199	200	263	321	310	308	253	204	202	202	208	254	321	316
PEAK POW MW	469	469	469	471	474	483	480	472	465	461	459	458	457	450	440	432
ENERGY GWH 2306.0	71.7	33.5	43.1	143.8	195.3	231.4	230.5	228.8	181.8	151.4	72.9	33.9	39.9	189.2	238.9	219.8
--OAHE--																
NAT INFLOW 1150	196	91	118	170	115	255	125	50	65	5	8	4	4	-100	-20	65
DEPLETION 681	24	11	14	49	71	145	173	116	28	-10	1	0	1	12	18	28
CHAN STOR -8	40				-20	-19	4		18	17			-2	-19	-28	0
EVAPORATION 540							35	108	131	111	49	23	26	57		
REG INFLOW 15397	688	303	389	1073	1315	1609	1427	1333	1134	936	448	209	245	1104	1595	1590
RELEASE 18324	643	301	514	1576	1931	1822	2084	2112	1894	1391	601	315	267	875	1073	926
STOR CHANGE -2927	45	1	-125	-503	-616	-214	-657	-780	-760	-454	-153	-106	-22	229	522	664
STORAGE 18836	18881	18882	18757	18254	17638	17425	16768	15989	15229	14774	14622	14516	14494	14723	15245	15909
ELEV FTMSL 1607.5	1607.7	1607.7	1607.3	1605.6	1603.5	1602.8	1600.5	1597.7	1594.9	1593.1	1592.5	1592.1	1592.0	1592.9	1594.9	1597.4
DISCH KCFS 23.5	21.6	21.7	28.8	26.5	31.4	30.6	33.9	34.4	31.8	22.6	20.2	22.7	16.8	14.2	17.4	16.1
POWER																
AVE POWER MW	279	280	371	339	398	385	422	422	385	271	240	269	200	170	209	196
PEAK POW MW	709	709	706	698	687	683	671	657	643	634	631	629	628	633	643	655
ENERGY GWH 2740.2	100.6	47.1	80.1	244.4	295.9	277.2	314.1	313.8	277.2	201.6	86.6	45.3	38.3	126.1	155.7	136.2
--BIG BEND--																
EVAPORATION 129							8	24	31	27	12	6	7	14		
REG INFLOW 18195	643	301	514	1576	1931	1822	2076	2088	1863	1364	588	310	260	861	1073	926
RELEASE 18195	643	301	514	1576	1931	1822	2076	2088	1863	1364	588	310	260	861	1073	926
STORAGE 1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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 23.5	21.6	21.7	28.8	26.5	31.4	30.6	33.8	34.0	31.3	22.2	19.8	22.3	16.4	14.0	17.4	16.1
POWER																
AVE POWER MW	102	102	135	124	147	143	158	159	148	109	99	112	83	71	86	77
PEAK POW MW	517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH 1048.7	36.9	17.1	29.1	89.3	109.3	103.2	117.5	118.2	106.8	80.9	35.8	18.8	15.8	52.5	63.8	53.7
--FORT RANDALL--																
NAT INFLOW 350	68	32	41	85	60	115	25	15	-10	-30	-13	-6	-7	-40	-20	35
DEPLETION 80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION 146							10	32	39	31	12	5	5	12		
REG INFLOW 18319	710	332	554	1657	1982	1925	2073	2056	1807	1302	563	298	248	806	1050	958
RELEASE 18317	416	198	554	1657	1982	1925	2073	2056	1953	1945	884	414	274	703	700	584
STOR CHANGE 2	293	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE 3122	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL 1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS 17.4	14.0	14.3	31.0	27.8	32.2	32.4	33.7	33.4	32.8	31.6	29.7	29.8	17.3	11.4	11.4	10.1
POWER																
AVE POWER MW	116	121	261	235	271	272	283	281	274	253	224	218	126	84	87	81
PEAK POW MW	351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH 1815.2	41.7	20.2	56.4	169.0	201.6	195.9	210.8	209.1	197.2	188.3	80.7	36.7	24.1	62.7	64.5	56.4
--GAVINS POINT--																
NAT INFLOW 1200	82	38	49	115	130	140	80	65	70	100	48	22	25	70	70	95
DEPLETION 114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR 12	7	-1	-32	6	-8	0	-3	1	1	2	4	0	23	11	0	2
EVAPORATION 45							3	8	11	10	4	2	2	5		
REG INFLOW 19371	506	236	571	1773	2084	2041	2109	2104	2018	2035	925	432	317	769	769	681
RELEASE 19371	506	236	571	1773	2084	2041	2109	2091	1993	2035	925	432	317	769	769	719
STOR CHANGE								13	25							-38
STORAGE 342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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 20.0	17.0	17.0	32.0	29.8	33.9	34.3	34.3	34.0	33.5	33.1	31.1	31.1	20.0	12.5	12.5	12.5
POWER																
AVE POWER MW	59	59	106	100	110	111	111	110	111	111	106	106	71	44	44	44
PEAK POW MW	114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH 780.4	21.2	9.9	22.8	72.3	81.6	79.6	82.2	82.1	79.8	82.5	38.3	17.9	13.5	33.0	33.0	30.7
--GAVINS POINT - SIOUX CITY--																
NAT INFLOW 700	87	41	52	90	120	65	70	40	35	25	18	8	9	5	15	20
DEPLETION 266	7	3	4	22	36	31	39	36	24	11	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																
KAF 19805	586	274	619	1841	2168	2075	2140	2095	2004	2049	937	437	324	761	770	725
KCFS	19.7	19.7	34.7	30.9	35.3	34.9	34.8	34.1	33.7	33.3	31.5	31.5	20.4	12.4	12.5	12.6
--TOTAL--																
NAT INFLOW 16200	992	463	595	1505	2325	3975	1990	800	565	810	365	170	195	300	390	760
DEPLETION 2447	30	14	18	139	441	1141	981	289	-161	-66	-104	-49	-55	-94	-55	-22
CHAN STOR -51	46	-1	-32	-29	-34	-29	2	1	46	43	3	0	16	-53	-33	2
EVAPORATION 2015							129	399	490	418	185	86	97	210		
STORAGE 56823	57245	57420	57345	56841	56523	57253	55995	54012	52290	50741	50091	49787	49633	49003	48646	48705
SYSTEM POWER																
AVE POWER MW	838	843	1154	1128	1324	1380	1431	1426	1283	1028	953	988	773	767	894	860
PEAK POW MW	2322	2320	2318	2310	2303	2309	2292	2269	2251	2227	2199	2187	2184	2149	2172	2184
ENERGY GWH 9788.0	301.6	141.6	249.2	812.0	984.9	993.5	1064.7	1060.8	923.4	764.6	343.2	166.0	148.5	570.5	665.5	598.3
DAILY GWH	20.1	20.2	27.7	27.1	31.8	33.1	34.3	34.2	30.8	24.7	22.9	23.7	18.6	18.4	21.5	20.6

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB12	2012										2013				
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	7200	230	107	138	600	1180	1810	840	315	295	430	180	84	96	300	250	345
DEPLETION	462	-28	-13	-17	28	365	481	233	-1	-82	-41	-43	-20	-23	-135	-147	-95
EVAPORATION	457							28	88	109	95	43	20	23	50		
MOD INFLOW	6281	258	120	155	572	815	1329	579	228	268	376	180	84	96	385	397	440
RELEASE	6485	179	83	107	476	646	625	646	646	492	369	179	83	111	615	646	583
STOR CHANGE	-203	79	37	48	96	169	704	-67	-418	-225	7	1	1	-15	-230	-249	-143
STORAGE	14572	14651	14688	14736	14832	15001	15706	15639	15221	14996	15003	15005	15005	14990	14761	14512	14369
ELEV FTMSL	2233.0	2233.3	2233.5	2233.8	2234.2	2235.0	2238.2	2237.9	2236.0	2235.0	2235.0	2235.0	2235.0	2234.9	2233.9	2232.7	2232.0
DISCH KCFS	10.5	6.0	6.0	6.0	8.0	10.5	10.5	10.5	10.5	8.3	6.0	6.0	6.0	7.0	10.0	10.5	10.5
POWER																	
AVE POWER MW		82	82	82	109	142	143	144	143	113	82	82	82	96	136	141	141
PEAK POW MW		162	162	162	162	163	165	165	164	163	163	163	163	163	162	161	161
ENERGY GWH	1067.2	29.4	13.7	17.7	78.5	105.7	103.0	107.0	106.6	81.6	61.1	29.6	13.8	18.4	101.3	105.2	94.7
--GARRISON--																	
NAT INFLOW	10800	460	214	276	870	1325	3095	1860	595	460	495	195	91	104	180	260	320
DEPLETION	1086	1	0	1	12	166	814	638	104	-128	-11	-123	-57	-65	-117	-92	-57
CHAN STOR	0	45			-20	-25				22	22			-10	-29	-5	
EVAPORATION	531							33	103	128	111	50	23	26	56		
REG INFLOW	15667	682	297	382	1314	1780	2906	1835	1033	974	786	446	208	244	826	993	960
RELEASE	15910	476	222	286	1131	1660	1547	1537	1537	1281	1107	536	250	301	1230	1476	1333
STOR CHANGE	-242	206	75	97	184	120	1359	298	-504	-308	-321	-89	-42	-57	-404	-483	-373
STORAGE	17838	18044	18119	18216	18400	18519	19878	20176	19672	19364	19043	18954	18913	18855	18452	17969	17596
ELEV FTMSL	1836.6	1837.3	1837.5	1837.8	1838.4	1838.8	1843.0	1843.9	1842.4	1841.4	1840.5	1840.2	1840.1	1839.9	1838.6	1837.0	1835.8
DISCH KCFS	26.0	16.0	16.0	16.0	19.0	27.0	26.0	25.0	25.0	21.5	18.0	18.0	18.0	19.0	20.0	24.0	24.0
POWER																	
AVE POWER MW		198	199	199	237	336	329	319	319	273	228	228	227	240	251	298	295
PEAK POW MW		467	468	469	472	473	498	499	491	482	479	478	478	477	472	466	462
ENERGY GWH	2419.3	71.5	33.4	43.1	170.6	250.3	236.6	237.5	237.1	196.7	169.4	81.9	38.2	46.0	186.7	221.7	198.5
--OAHE--																	
NAT INFLOW	2300	232	108	139	405	195	780	160	75	95	35	30	14	16	-80		95
DEPLETION	696	24	11	15	50	72	148	178	119	29	-11	1	0	1	13	18	28
CHAN STOR	8	40			-12	-32	4	4		14	14			-4	-4	-16	
EVAPORATION	498							32	98	120	103	46	22	25	53		
REG INFLOW	17024	724	319	410	1474	1752	2183	1491	1396	1241	1064	518	242	288	1079	1441	1400
RELEASE	17271	574	267	409	1293	1624	1607	1849	1979	1759	1259	562	296	250	1099	1324	1120
STOR CHANGE	-247	150	52	2	181	128	576	-358	-583	-518	-195	-43	-54	38	-19	117	279
STORAGE	18554	18704	18757	18759	18939	19067	19643	19285	18702	18184	17989	17946	17891	17929	17910	18027	18307
ELEV FTMSL	1606.6	1607.1	1607.3	1607.3	1607.8	1608.2	1610.0	1608.9	1607.1	1605.4	1604.7	1604.6	1604.4	1604.5	1604.5	1604.9	1605.8
DISCH KCFS	20.1	19.3	19.2	22.9	21.7	26.4	27.0	30.1	32.2	29.6	20.5	18.9	21.3	15.8	17.9	21.5	20.2
POWER																	
AVE POWER MW		248	248	295	281	341	351	391	415	378	261	240	271	201	227	274	258
PEAK POW MW		706	706	706	710	712	721	715	706	697	693	692	691	692	692	694	699
ENERGY GWH	2686.7	89.4	41.7	63.7	202.0	254.0	252.8	291.1	308.9	272.2	194.2	86.5	45.5	38.6	169.1	203.7	173.1
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	17168	574	267	409	1293	1624	1607	1843	1959	1734	1238	552	292	245	1087	1324	1120
RELEASE	17168	574	267	409	1293	1624	1607	1843	1959	1734	1238	552	292	245	1087	1324	1120
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	20.1	19.3	19.2	22.9	21.7	26.4	27.0	30.0	31.9	29.1	20.1	18.6	21.0	15.5	17.7	21.5	20.2
POWER																	
AVE POWER MW		91	90	107	102	124	126	140	149	138	99	93	105	78	89	106	97
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	991.6	32.9	15.1	23.1	73.2	92.0	91.0	104.4	110.9	99.4	73.5	33.6	17.7	15.0	66.2	78.6	65.0
--FORT RANDALL--																	
NAT INFLOW	900	119	55	71	155	140	135	70	65	30		10	5	5	5	-10	45
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	117							8	25	31	25	9	4	4	10		
REG INFLOW	17871	691	322	479	1444	1755	1730	1887	1984	1726	1212	551	292	246	1079	1311	1162
RELEASE	17871	400	188	479	1444	1755	1730	1887	1984	1872	1855	872	408	272	977	961	788
STOR CHANGE	0	292	134					0	0	-146	-643	-321	-116	-26	102	350	374
STORAGE	3123	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2399	2749	3123
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	14.3	13.4	13.5	26.8	24.3	28.5	29.1	30.7	32.3	31.5	30.2	29.3	29.4	17.1	15.9	15.6	14.2
POWER																	
AVE POWER MW		111	114	226	205	240	245	258	271	263	242	221	215	125	117	119	113
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1764.6	40.0	19.2	48.9	147.6	178.9	176.4	192.2	201.8	189.2	179.7	79.7	36.1	24.0	86.8	88.3	76.0
--GAVINS POINT--																	
NAT INFLOW	1500	104	49	62	145	160	175	100	90	95	120	60	28	32	80	85	115
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	2	0	-26	5	-8	-1	-3	-3	2	2	2	0	23	2	0	3
EVAPORATION	36							2	6	9	8	3	2	2	4		
REG INFLOW	19221	506	236	516	1589	1888	1880	1943	2054	1965	1968	925	432	322	1045	1045	906
RELEASE	19221	506	236	516	1589	1888	1880	1943	2041	1940	1968	925	432	322	1045	1045	944
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	17.0	17.0	17.0	28.9	26.7	30.7	31.6	31.6	33.2	32.6	32.0	31.1	31.1	20.3	17.0	17.0	17.0
POWER																	
AVE POWER MW		59	59	98	91	103	105	105	109	109	108	106	106	72	60	60	60
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	786.7	21.2	9.9	21.2	65.6	76.3	75.3	77.8	80.9	78.3	80.6	38.3	17.9	13.7	44.7	44.7	40.1
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1700	138	64	83	325	295	150	180	120	105	55	30	14	16	25	25	75
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	20653	637	297	595	1892	2147	1999	2084	2124	2021	2012	949	443	335	1057	1056	1004
KCFS		21.4	21.4	33.3	31.8	34.9	33.6	33.9	34.5	34.0	32.7	31.9	31.9	21.1	17.2	17.2	18.1
--TOTAL--																	
NAT INFLOW	24400	1283	598	769	2500	3295	6145	3210	1260	1080	1135	505	236	269	510	610	995
DEPLETION	2706	5	2	3	121	667	1510	1145	284	-155	-49	-153	-71	-81	-213	-203	-106
CHAN STOR	7	87	0	-26	-27	-65	3	1	-3	37	39	1	0	9	-31	-21	3
EVAPORATION	1741							109	340	422	363	162	75	85	185		
STORAGE	56050	56778	57076	57223	57683	58100	60738	60611	59119	57948	56796	56344	56133	56073	55522	55258	55358
SYSTEM POWER																	
AVE POWER MW		790	792	1008	1024	1287	1299	1357	1406	1274	1020	971	1007	811	880	998	964
PEAK POW MW		2317	2316	2317	2323	2327	2364	2359	2341	2326	2309	2284	2274	2272	2236	2256	2265
ENERGY GWH	9716.2	284.5	133.1	217.7	737.5	957.3	935.1	1010.0	1046.2	917.4	758.6	349.5	169.2	155.7	654.8	742.2	647.5
DAILY GWH		19.0	19.0	24.2	24.6	30.9	31.2	32.6	33.7	30.6	24.5	23.3	24.2	19.5	21.1	23.9	23.1

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB13	2013												2014			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	7200	230	107	138	600	1180	1810	840	315	295	430	180	84	96	300	250	345
DEPLETION	477	-25	-12	-15	15	304	556	248	11	-101	-44	-43	-20	-23	-134	-147	-94
EVAPORATION	452							28	87	108	94	43	20	23	49		
MOD INFLOW	6271	255	119	153	585	876	1254	564	217	288	380	180	84	96	385	397	439
RELEASE	6473	179	83	107	417	615	655	676	676	495	369	179	83	95	615	646	583
STOR CHANGE	-202	76	35	46	168	261	599	-112	-459	-208	11	2	1	1	-230	-249	-144
STORAGE	14369	14445	14480	14526	14694	14955	15555	15443	14983	14776	14786	14788	14789	14790	14560	14311	14167
ELEV FTMSL	2232.0	2232.4	2232.5	2232.7	2233.5	2234.8	2237.6	2237.0	2234.9	2233.9	2234.0	2234.0	2234.0	2234.0	2232.9	2231.7	2231.0
DISCH KCFS	10.5	6.0	6.0	6.0	7.0	10.0	11.0	11.0	11.0	8.3	6.0	6.0	6.0	6.0	10.0	10.5	10.5
POWER																	
AVE POWER MW		81	81	82	95	136	149	149	149	114	82	82	82	82	136	141	140
PEAK POW MW		161	161	161	162	163	165	164	163	162	162	162	162	162	161	161	160
ENERGY GWH	1061.1	29.3	13.7	17.6	68.6	101.2	107.1	111.2	110.6	81.8	60.9	29.5	13.8	15.7	101.0	104.9	94.4
--GARRISON--																	
NAT INFLOW	10800	460	214	276	870	1325	3095	1860	595	460	495	195	91	104	180	260	320
DEPLETION	1077	1	1	1	13	152	816	649	110	-130	-15	-126	-59	-67	-119	-92	-58
CHAN STOR	0	45			-10	-30	-10			26	23				-39	-5	
EVAPORATION	523							32	102	126	109	49	23	26	56		
REG INFLOW	15673	682	297	382	1264	1758	2924	1855	1060	985	793	451	210	240	819	993	961
RELEASE	15921	491	229	295	1190	1537	1607	1599	1599	1279	1045	506	236	270	1230	1476	1333
STOR CHANGE	-248	191	68	87	73	221	1317	256	-539	-294	-253	-55	-26	-29	-411	-483	-372
STORAGE	17596	17787	17855	17942	18016	18236	19553	19810	19271	18977	18724	18669	18643	18614	18203	17720	17348
ELEV FTMSL	1835.8	1836.4	1836.7	1836.9	1837.2	1837.9	1842.0	1842.8	1841.2	1840.3	1839.5	1839.3	1839.2	1839.1	1837.8	1836.2	1835.0
DISCH KCFS	24.0	16.5	16.5	16.5	20.0	25.0	27.0	26.0	26.0	21.5	17.0	17.0	17.0	17.0	20.0	24.0	24.0
POWER																	
AVE POWER MW		204	204	204	248	310	339	330	329	272	215	214	214	214	250	297	294
PEAK POW MW		464	465	466	467	470	487	496	481	478	475	475	474	474	469	463	459
ENERGY GWH	2408.6	73.3	34.3	44.2	178.3	230.5	244.2	245.6	245.0	195.7	159.6	77.0	35.9	41.0	185.8	220.6	197.5
--OAHE--																	
NAT INFLOW	2300	232	108	139	405	195	780	160	75	95	35	30	14	16	-80		95
DEPLETION	709	24	11	15	50	73	151	182	122	30	-11	1	0	1	13	18	29
CHAN STOR	0	30			-14	-20	-8	4		18	18	0			-12	-17	
EVAPORATION	494							31	97	119	102	46	21	24	53		
REG INFLOW	17018	729	326	419	1531	1639	2228	1549	1455	1243	1008	489	228	261	1072	1441	1399
RELEASE	17272	574	267	409	1293	1624	1607	1849	1979	1759	1259	562	296	250	1099	1324	1120
STOR CHANGE	-254	155	59	11	238	15	620	-300	-524	-516	-252	-73	-68	10	-27	117	278
STORAGE	18307	18462	18521	18532	18770	18786	19406	19106	18582	18066	17815	17742	17674	17684	17657	17775	18053
ELEV FTMSL	1605.8	1606.3	1606.5	1606.5	1607.3	1607.3	1609.3	1608.4	1606.7	1605.0	1604.1	1603.9	1603.7	1603.7	1603.6	1604.0	1604.9
DISCH KCFS	20.2	19.3	19.2	22.9	21.7	26.4	27.0	30.1	32.2	29.6	20.5	18.9	21.3	15.8	17.9	21.5	20.2
POWER																	
AVE POWER MW		247	247	294	280	340	350	390	414	377	260	239	270	200	226	273	256
PEAK POW MW		701	702	703	707	707	717	712	703	695	690	689	688	688	687	689	694
ENERGY GWH	2677.2	89.1	41.5	63.5	201.3	253.1	251.8	290.1	308.1	271.6	193.7	86.2	45.4	38.4	168.3	202.7	172.3
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	17168	574	267	409	1293	1624	1607	1843	1959	1734	1238	552	292	245	1087	1324	1120
RELEASE	17168	574	267	409	1293	1624	1607	1843	1959	1734	1238	552	292	245	1087	1324	1120
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	20.2	19.3	19.2	22.9	21.7	26.4	27.0	30.0	31.9	29.1	20.1	18.6	21.0	15.5	17.7	21.5	20.2
POWER																	
AVE POWER MW		91	90	107	102	124	126	140	149	138	99	93	105	78	89	106	97
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	991.6	32.9	15.1	23.1	73.2	92.0	91.0	104.4	110.9	99.4	73.5	33.6	17.7	15.0	66.2	78.6	65.0
--FORT RANDALL--																	
NAT INFLOW	900	119	55	71	155	140	135	70	65	30		10	5	5	5	-10	45
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	117							8	25	31	25	9	4	4	10		
REG INFLOW	17871	691	322	479	1444	1755	1730	1887	1984	1726	1212	551	292	246	1079	1311	1162
RELEASE	17871	400	188	479	1444	1755	1730	1887	1984	1872	1855	872	408	272	977	961	788
STOR CHANGE	0	292	134					0	0	-146	-643	-321	-116	-26	102	350	374
STORAGE	3123	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2399	2749	3123
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	14.2	13.4	13.5	26.8	24.3	28.5	29.1	30.7	32.3	31.5	30.2	29.3	29.4	17.1	15.9	15.6	14.2
POWER																	
AVE POWER MW		111	114	226	205	240	245	258	271	263	242	221	215	125	117	119	113
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1764.6	40.0	19.2	48.9	147.6	178.9	176.4	192.2	201.8	189.2	179.7	79.7	36.1	24.0	86.8	88.3	76.0
--GAVINS POINT--																	
NAT INFLOW	1500	104	49	62	145	160	175	100	90	95	120	60	28	32	80	85	115
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	1	0	-26	5	-8	-1	-3	-3	2	2	2	0	23	2	0	3
EVAPORATION	36							2	6	9	8	3	2	2	4		
REG INFLOW	19221	506	236	516	1589	1888	1880	1943	2054	1965	1968	925	432	322	1045	1045	906
RELEASE	19221	506	236	516	1589	1888	1880	1943	2041	1940	1968	925	432	322	1045	1045	944
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	17.0	17.0	17.0	28.9	26.7	30.7	31.6	31.6	33.2	32.6	32.0	31.1	31.1	20.3	17.0	17.0	17.0
POWER																	
AVE POWER MW		59	59	98	91	103	105	105	109	109	108	106	106	72	60	60	60
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	786.7	21.2	9.9	21.2	65.6	76.3	75.3	77.8	80.9	78.3	80.6	38.3	17.9	13.7	44.7	44.7	40.1
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1700	138	64	83	325	295	150	180	120	105	55	30	14	16	25	25	75
DEPLETION	270	7	3	4	23	36	31	39	37	25	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	20651	637	297	595	1891	2147	1999	2084	2124	2020	2012	949	443	335	1057	1056	1004
KCFS		21.4	21.4	33.3	31.8	34.9	33.6	33.9	34.5	33.9	32.7	31.9	31.9	21.1	17.2	17.2	18.1
--TOTAL--																	
NAT INFLOW	24400	1283	598	769	2500	3295	6145	3210	1260	1080	1135	505	236	269	510	610	995
DEPLETION	2727	9	4	5	110	593	1590	1175	305	-174	-56	-156	-73	-83	-214	-203	-105
CHAN STOR	-2	77	0	-26	-19	-58	-19	1	-3	46	44	1	0	23	-50	-21	3
EVAPORATION	1724							108	337	418	359	160	74	85	183		
STORAGE	55358	56071	56368	56512	56992	57490	60026	59870	58361	57222	56086	55639	55430	55386	54820	54556	54655
SYSTEM POWER																	
AVE POWER MW		794	796	1011	1020	1253	1314	1373	1421	1272	1005	956	992	770	877	994	960
PEAK POW MW		2309	2308	2310	2315	2319	2349	2352	2328	2319	2302	2277	2266	2264	2227	2248	2257
ENERGY GWH	9689.8	285.9	133.7	218.4	734.6	931.9	945.8	1021.2	1057.3	916.0	748.1	344.2	166.7	147.8	652.8	739.8	645.3
DAILY GWH		19.1	19.1	24.3	24.5	30.1	31.5	32.9	34.1	30.5	24.1	22.9	23.8	18.5	21.1	23.9	23.0

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB14	2014												2015			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	7200	230	107	138	600	1180	1810	840	315	295	430	180	84	96	300	250	345
DEPLETION	489	-25	-12	-15	15	305	560	255	17	-100	-45	-44	-21	-23	-136	-148	-95
EVAPORATION	448							28	86	107	93	42	20	23	49		
MOD INFLOW	6263	255	119	153	585	875	1250	557	212	288	382	182	85	97	387	398	440
RELEASE	6434	179	83	107	417	676	625	646	646	487	369	179	83	95	615	646	583
STOR CHANGE	-171	76	35	46	168	199	625	-88	-434	-199	13	3	2	2	-228	-248	-143
STORAGE	14167	14243	14279	14324	14493	14691	15316	15228	14794	14595	14608	14611	14613	14614	14387	14139	13996
ELEV FTMSL	2231.0	2231.4	2231.5	2231.8	2232.6	2233.5	2236.5	2236.1	2234.0	2233.1	2233.1	2233.1	2233.2	2233.2	2232.1	2230.9	2230.2
DISCH KCFS	10.5	6.0	6.0	6.0	7.0	11.0	10.5	10.5	10.5	8.2	6.0	6.0	6.0	6.0	10.0	10.5	10.5
POWER																	
AVE POWER MW		81	81	81	95	147	142	143	142	111	82	82	82	82	135	141	140
PEAK POW MW		160	160	161	161	162	164	164	162	162	162	162	162	162	161	160	159
ENERGY GWH	1051.8	29.2	13.6	17.6	68.4	109.4	102.4	106.3	105.9	80.2	60.8	29.4	13.7	15.7	100.7	104.5	94.1
--GARRISON--																	
NAT INFLOW	10800	460	214	276	870	1325	3095	1860	595	460	495	195	91	104	180	260	320
DEPLETION	1090	1	1	1	14	152	826	665	115	-133	-20	-130	-61	-69	-120	-93	-59
CHAN STOR	0	45			-10	-40	5			23	21				-40	-5	
EVAPORATION	515							32	100	124	107	48	22	26	55		
REG INFLOW	15629	682	297	382	1263	1810	2899	1809	1025	978	798	455	212	243	820	994	962
RELEASE	15838	476	222	286	1190	1660	1547	1599	1599	1253	984	476	222	286	1230	1476	1333
STOR CHANGE	-209	206	75	96	72	149	1352	210	-573	-275	-186	-21	-10	-43	-409	-482	-371
STORAGE	17348	17554	17629	17725	17798	17947	19299	19509	18935	18660	18475	18454	18444	18401	17992	17510	17139
ELEV FTMSL	1835.0	1835.7	1835.9	1836.2	1836.5	1837.0	1841.2	1841.9	1840.1	1839.3	1838.7	1838.6	1838.6	1838.4	1837.1	1835.5	1834.3
DISCH KCFS	24.0	16.0	16.0	16.0	20.0	27.0	26.0	26.0	26.0	21.1	16.0	16.0	16.0	18.0	20.0	24.0	24.0
POWER																	
AVE POWER MW		196	197	197	247	333	325	329	329	265	201	201	200	225	249	295	293
PEAK POW MW		461	462	464	464	466	482	484	478	475	472	472	472	472	467	461	456
ENERGY GWH	2385.4	70.7	33.1	42.6	177.5	247.4	234.1	244.7	244.5	190.7	149.5	72.2	33.7	43.2	185.1	219.7	196.6
--OAHE--																	
NAT INFLOW	2300	232	108	139	405	195	780	160	75	95	35	30	14	16	-80		95
DEPLETION	724	25	12	15	51	75	154	187	125	30	-12	1	0	1	13	19	29
CHAN STOR	0	33			-16	-28	4			20	21			-8	-8	-17	
EVAPORATION	487							31	96	118	101	45	21	24	52		
REG INFLOW	16927	716	319	410	1528	1752	2177	1541	1453	1221	951	460	215	269	1076	1440	1399
RELEASE	17141	574	267	409	1293	1624	1607	1849	1979	1759	1259	562	296	245	1055	1281	1082
STOR CHANGE	-214	142	52	2	235	128	570	-308	-526	-538	-308	-102	-82	24	21	159	317
STORAGE	18053	18195	18247	18249	18484	18612	19182	18873	18348	17809	17501	17399	17317	17341	17363	17522	17839
ELEV FTMSL	1604.9	1605.4	1605.6	1605.6	1606.4	1606.8	1608.6	1607.6	1605.9	1604.1	1603.1	1602.7	1602.4	1602.5	1602.6	1603.1	1604.2
DISCH KCFS	20.2	19.3	19.2	22.9	21.7	26.4	27.0	30.1	32.2	29.6	20.5	18.9	21.3	15.4	17.2	20.8	19.5
POWER																	
AVE POWER MW		246	246	292	278	339	349	389	412	376	259	238	268	194	216	262	247
PEAK POW MW		697	698	698	702	704	714	708	699	690	684	683	681	682	682	685	691
ENERGY GWH	2645.1	88.7	41.3	63.1	200.3	252.0	250.9	289.1	306.8	270.4	192.7	85.7	45.1	37.3	160.7	195.2	165.7
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	17037	574	267	409	1293	1624	1607	1843	1959	1734	1238	552	292	240	1044	1281	1082
RELEASE	17037	574	267	409	1293	1624	1607	1843	1959	1734	1238	552	292	240	1044	1281	1082
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	20.2	19.3	19.2	22.9	21.7	26.4	27.0	30.0	31.9	29.1	20.1	18.6	21.0	15.1	17.0	20.8	19.5
POWER																	
AVE POWER MW		91	90	107	102	124	126	140	149	138	99	93	105	76	85	102	93
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	983.9	32.9	15.1	23.1	73.2	92.0	91.0	104.4	110.9	99.4	73.5	33.6	17.7	14.6	63.6	76.0	62.8
--FORT RANDALL--																	
NAT INFLOW	900	119	55	71	155	140	135	70	65	30		10	5	5	5	-10	45
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	117							8	25	31	25	9	4	4	10		
REG INFLOW	17741	691	322	479	1444	1755	1730	1887	1984	1726	1212	551	292	241	1036	1268	1124
RELEASE	17740	400	188	479	1444	1755	1730	1887	1984	1872	1855	872	408	267	933	918	750
STOR CHANGE	0	292	134					0	0	-146	-643	-321	-116	-26	102	350	374
STORAGE	3123	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2399	2749	3123
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	14.2	13.4	13.5	26.8	24.3	28.5	29.1	30.7	32.3	31.5	30.2	29.3	29.4	16.8	15.2	14.9	13.5
POWER																	
AVE POWER MW		111	114	226	205	240	245	258	271	263	242	221	215	123	112	113	108
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1752.7	40.0	19.2	48.9	147.6	178.9	176.4	192.2	201.8	189.2	179.7	79.7	36.1	23.5	83.0	84.4	72.3
--GAVINS POINT--																	
NAT INFLOW	1500	104	49	62	145	160	175	100	90	95	120	60	28	32	80	85	115
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	0	1	0	-26	5	-8	-1	-3	-3	2	2	2	0	23	3	0	3
EVAPORATION	36							2	6	9	8	3	2	2	4		
REG INFLOW	19091	506	236	516	1589	1888	1880	1943	2054	1965	1968	925	432	317	1002	1002	867
RELEASE	19091	506	236	516	1589	1888	1880	1943	2041	1940	1968	925	432	317	1002	1002	905
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	17.0	17.0	17.0	28.9	26.7	30.7	31.6	31.6	33.2	32.6	32.0	31.1	31.1	20.0	16.3	16.3	16.3
POWER																	
AVE POWER MW		59	59	98	91	103	105	105	109	109	108	106	106	71	58	58	57
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	781.2	21.2	9.9	21.2	65.6	76.3	75.3	77.8	80.9	78.3	80.6	38.3	17.9	13.5	42.9	42.9	38.5
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1700	138	64	83	325	295	150	180	120	105	55	30	14	16	25	25	75
DEPLETION	276	7	3	4	23	36	32	39	38	25	11	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	20515	636	297	594	1891	2147	1998	2084	2123	2020	2012	949	443	330	1013	1012	965
KCFS		21.4	21.4	33.3	31.8	34.9	33.6	33.9	34.5	33.9	32.7	31.9	31.9	20.8	16.5	16.5	17.4
--TOTAL--																	
NAT INFLOW	24400	1283	598	769	2500	3295	6145	3210	1260	1080	1135	505	236	269	510	610	995
DEPLETION	2773	10	5	6	112	596	1608	1203	320	-176	-63	-161	-75	-86	-216	-203	-107
CHAN STOR	0	79	0	-26	-21	-76	8	-3	-3	44	45	1	0	15	-45	-21	3
EVAPORATION	1706							107	334	414	355	158	73	84	181		
STORAGE	54655	55370	55667	55810	56286	56762	59309	59122	57602	56469	55344	54904	54698	54655	54142	53921	54061
SYSTEM POWER																	
AVE POWER MW		786	787	1003	1017	1285	1292	1363	1412	1262	990	941	977	770	855	971	937
PEAK POW MW		2301	2300	2301	2307	2312	2339	2336	2320	2311	2292	2268	2257	2255	2219	2240	2250
ENERGY GWH	9600.2	282.8	132.3	216.6	732.6	956.0	930.2	1014.4	1050.8	908.3	736.8	338.8	164.1	147.9	636.0	722.7	629.9
DAILY GWH		18.9	18.9	24.1	24.4	30.8	31.0	32.7	33.9	30.3	23.8	22.6	23.4	18.5	20.5	23.3	22.5
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB15	2015										2016					
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	7200	230	107	138	600	1180	1810	840	315	295	430	180	84	96	300	250	345
DEPLETION	497	-25	-12	-15	15	306	564	263	22	-99	-46	-44	-21	-23	-135	-147	-106
EVAPORATION	443							27	85	106	92	42	19	22	48		
MOD INFLOW	6260	255	119	153	585	874	1246	550	208	288	384	182	85	97	387	397	451
RELEASE	6382	179	83	107	446	676	625	646	646	474	369	179	83	95	584	615	575
STOR CHANGE	-121	77	36	46	139	198	621	-96	-438	-186	15	4	2	2	-197	-218	-124
STORAGE	13996	14073	14108	14154	14293	14491	15112	15016	14578	14392	14407	14411	14412	14414	14217	13999	13875
ELEV FTMSL	2230.2	2230.5	2230.7	2230.9	2231.6	2232.6	2235.5	2235.1	2233.0	2232.1	2232.2	2232.2	2232.2	2232.2	2231.2	2230.2	2229.5
DISCH KCFS	10.5	6.0	6.0	6.0	7.5	11.0	10.5	10.5	10.5	8.0	6.0	6.0	6.0	6.0	9.5	10.0	10.0
POWER																	
AVE POWER MW		81	81	81	101	146	142	142	142	108	81	81	81	81	128	135	134
PEAK POW MW		160	160	160	160	161	163	163	161	161	161	161	161	161	160	159	159
ENERGY GWH	1041.9	29.1	13.6	17.5	73.0	109.0	102.1	106.0	105.5	77.8	60.6	29.3	13.7	15.6	95.6	100.1	93.4
--GARRISON--																	
NAT INFLOW	10800	460	214	276	870	1325	3095	1860	595	460	495	195	91	104	180	260	320
DEPLETION	1102	1	1	1	14	153	836	681	121	-136	-25	-133	-62	-71	-121	-93	-65
CHAN STOR	5	45			-15	-35	5			25	19				-35	-5	
EVAPORATION	513							32	100	123	107	48	22	26	55		
REG INFLOW	15572	682	297	382	1287	1813	2889	1793	1020	971	801	458	214	245	796	963	960
RELEASE	15719	476	222	286	1160	1660	1547	1568	1568	1210	984	476	222	254	1230	1476	1381
STOR CHANGE	-147	206	75	96	127	153	1342	225	-548	-239	-182	-18	-8	-9	-434	-513	-420
STORAGE	17139	17345	17420	17517	17643	17797	19138	19363	18815	18577	18394	18377	18368	18359	17925	17412	16992
ELEV FTMSL	1834.3	1835.0	1835.2	1835.5	1836.0	1836.5	1840.8	1841.4	1839.8	1839.0	1838.4	1838.4	1838.3	1838.3	1836.9	1835.2	1833.8
DISCH KCFS	24.0	16.0	16.0	16.0	19.5	27.0	26.0	25.5	25.5	20.3	16.0	16.0	16.0	16.0	20.0	24.0	24.0
POWER																	
AVE POWER MW		196	196	197	240	331	324	322	322	255	201	200	200	200	249	295	292
PEAK POW MW		459	460	461	463	464	480	482	476	474	471	471	471	471	466	460	454
ENERGY GWH	2362.1	70.4	33.0	42.5	172.5	246.6	233.4	239.8	239.4	183.8	149.2	72.1	33.6	38.4	184.9	219.3	203.1
--OAHE--																	
NAT INFLOW	2300	232	108	139	405	195	780	160	75	95	35	30	14	16	-80		95
DEPLETION	736	25	12	15	51	76	157	191	128	31	-12	1	0	1	13	19	29
CHAN STOR	0	33			-14	-30	4	2		21	18				-17	-17	
EVAPORATION	480							30	94	116	99	44	21	24	51		
REG INFLOW	16803	717	319	410	1500	1749	2174	1508	1421	1179	950	461	215	246	1069	1440	1447
RELEASE	16955	553	257	410	1293	1624	1607	1849	1979	1759	1259	562	296	238	993	1219	1057
STOR CHANGE	-152	163	62	0	207	125	567	-341	-558	-580	-310	-101	-81	8	76	220	390
STORAGE	17839	18002	18064	18064	18272	18397	18963	18623	18064	17485	17175	17074	16993	17001	17077	17297	17687
ELEV FTMSL	1604.2	1604.8	1605.0	1605.0	1605.7	1606.1	1607.9	1606.8	1605.0	1603.0	1602.0	1601.6	1601.3	1601.3	1601.6	1602.4	1603.7
DISCH KCFS	19.5	18.6	18.5	23.0	21.7	26.4	27.0	30.1	32.2	29.6	20.5	18.9	21.3	15.0	16.1	19.8	18.4
POWER																	
AVE POWER MW		237	236	292	277	337	347	387	410	374	257	237	267	188	202	249	232
PEAK POW MW		693	694	695	698	700	710	704	694	684	678	677	675	675	677	681	688
ENERGY GWH	2605.0	85.2	39.7	63.2	199.6	251.1	250.0	287.9	305.4	268.9	191.5	85.2	44.8	36.0	150.4	185.0	161.3
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	16852	553	257	410	1293	1624	1607	1843	1959	1734	1238	552	292	233	981	1219	1057
RELEASE	16852	553	257	410	1293	1624	1607	1843	1959	1734	1238	552	292	233	981	1219	1057
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	19.5	18.6	18.5	23.0	21.7	26.4	27.0	30.0	31.9	29.1	20.1	18.6	21.0	14.7	16.0	19.8	18.4
POWER																	
AVE POWER MW		88	87	108	102	124	126	140	149	138	99	93	105	74	80	97	88
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	973.0	31.7	14.6	23.2	73.2	92.0	91.0	104.4	110.9	99.4	73.5	33.6	17.7	14.2	59.8	72.4	61.3
--FORT RANDALL--																	
NAT INFLOW	900	119	55	71	155	140	135	70	65	30		10	5	5	5	-10	45
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	117							8	25	31	25	9	4	4	10		
REG INFLOW	17555	670	312	480	1444	1755	1730	1887	1984	1726	1212	551	292	234	973	1206	1099
RELEASE	17555	379	178	480	1444	1755	1730	1887	1984	1872	1855	872	408	259	871	856	725
STOR CHANGE	0	292	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE	3123	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	13.5	12.7	12.8	26.9	24.3	28.5	29.1	30.7	32.3	31.5	30.2	29.3	29.4	16.4	14.2	13.9	12.6
POWER																	
AVE POWER MW		105	108	227	205	240	245	258	271	263	242	221	215	119	104	106	100
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1735.7	38.0	18.2	49.0	147.5	178.9	176.4	192.2	201.8	189.2	179.7	79.7	36.1	22.9	77.5	78.8	69.9
--GAVINS POINT--																	
NAT INFLOW	1500	104	49	62	145	160	175	100	90	95	120	60	28	32	80	85	115
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	0	1	0	-27	5	-8	-1	-3	-3	2	2	2	0	24	4	0	2
EVAPORATION	36							2	6	9	8	3	2	2	4		
REG INFLOW	18906	485	226	516	1589	1888	1880	1943	2054	1965	1968	925	432	311	941	941	842
RELEASE	18906	485	226	516	1589	1888	1880	1943	2041	1940	1968	925	432	311	941	941	880
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	16.3	16.3	16.3	28.9	26.7	30.7	31.6	31.6	33.2	32.6	32.0	31.1	31.1	19.6	15.3	15.3	15.3
POWER																	
AVE POWER MW		57	57	98	91	103	105	105	109	109	108	106	106	69	54	54	54
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	773.5	20.4	9.5	21.2	65.6	76.3	75.3	77.8	80.9	78.3	80.6	38.3	17.9	13.3	40.3	40.3	37.5
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1700	138	64	83	325	295	150	180	120	105	55	30	14	16	25	25	75
DEPLETION	277	7	3	4	23	36	32	40	38	25	11	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	20329	616	287	594	1891	2147	1998	2083	2123	2020	2012	949	443	324	952	951	940
KCFS		20.7	20.7	33.3	31.8	34.9	33.6	33.9	34.5	33.9	32.7	31.9	31.9	20.4	15.5	15.5	16.3
--TOTAL--																	
NAT INFLOW	24400	1283	598	769	2500	3295	6145	3210	1260	1080	1135	505	236	269	510	610	995
DEPLETION	2806	9	4	6	112	599	1625	1232	334	-177	-69	-164	-76	-87	-216	-202	-124
CHAN STOR	5	80	0	-27	-24	-74	8	-1	-3	48	40	1	0	25	-48	-21	2
EVAPORATION	1691							106	331	410	352	157	73	83	179		
STORAGE	54061	54798	55105	55247	55720	56196	58725	58514	56982	55857	54737	54301	54097	54072	53619	53459	53640
SYSTEM POWER																	
AVE POWER MW		763	765	1003	1016	1282	1289	1355	1403	1247	988	939	975	731	818	935	900
PEAK POW MW		2294	2294	2295	2301	2305	2333	2329	2313	2303	2285	2260	2250	2247	2212	2235	2245
ENERGY GWH	9491.2	274.8	128.5	216.6	731.5	953.8	928.2	1008.0	1043.9	897.5	735.2	338.1	163.8	140.4	608.5	695.9	626.5
DAILY GWH		18.3	18.4	24.1	24.4	30.8	30.9	32.5	33.7	29.9	23.7	22.5	23.4	17.6	19.6	22.4	21.6
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB16	2016												2017			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	7200	230	107	138	600	1180	1810	840	315	295	430	180	84	96	300	250	345
DEPLETION	510	-25	-12	-15	15	307	568	270	25	-101	-49	-46	-21	-24	-138	-149	-96
EVAPORATION	440							27	85	105	92	42	19	22	48		
MOD INFLOW	6250	255	119	153	585	873	1242	543	205	291	387	184	86	98	390	399	441
RELEASE	6366	179	83	107	417	676	625	646	646	477	369	179	83	95	615	615	555
STOR CHANGE	-116	76	35	46	168	197	617	-103	-440	-186	18	5	3	3	-225	-216	-114
STORAGE	13875	13951	13986	14032	14200	14397	15014	14911	14471	14285	14303	14308	14311	14314	14089	13873	13759
ELEV FTMSL	2229.5	2229.9	2230.1	2230.3	2231.2	2232.1	2235.1	2234.6	2232.5	2231.6	2231.7	2231.7	2231.7	2231.7	2230.6	2229.5	2229.0
DISCH KCFS	10.0	6.0	6.0	6.0	7.0	11.0	10.5	10.5	10.5	8.0	6.0	6.0	6.0	6.0	10.0	10.0	10.0
POWER																	
AVE POWER MW		81	81	81	95	146	142	142	142	109	81	81	81	81	135	134	134
PEAK POW MW		159	159	160	160	161	163	163	161	160	161	161	161	161	160	159	159
ENERGY GWH	1037.3	29.1	13.6	17.5	68.1	108.8	101.9	105.8	105.3	78.2	60.5	29.3	13.7	15.6	100.2	99.9	90.0
--GARRISON--																	
NAT INFLOW	10800	460	214	276	870	1325	3095	1860	595	460	495	195	91	104	180	260	320
DEPLETION	1273	2	1	1	16	153	847	697	126	-139	-29	-119	-55	-63	-85	-56	-25
CHAN STOR	0	40			-10	-40	5			24	20				-40		
EVAPORATION	511							32	99	123	106	48	22	25	55		
REG INFLOW	15383	676	297	381	1261	1808	2878	1777	1015	977	806	444	207	237	786	931	900
RELEASE	15527	476	222	286	1071	1691	1517	1537	1537	1215	984	476	222	254	1230	1476	1333
STOR CHANGE	-144	200	74	96	189	117	1360	240	-522	-237	-177	-32	-15	-17	-444	-545	-433
STORAGE	16992	17192	17267	17362	17552	17669	19030	19269	18748	18510	18333	18301	18286	18269	17825	17280	16848
ELEV FTMSL	1833.8	1834.4	1834.7	1835.0	1835.7	1836.1	1840.4	1841.2	1839.5	1838.8	1838.2	1838.1	1838.1	1838.0	1836.6	1834.7	1833.3
DISCH KCFS	24.0	16.0	16.0	16.0	18.0	27.5	25.5	25.0	25.0	20.4	16.0	16.0	16.0	16.0	20.0	24.0	24.0
POWER																	
AVE POWER MW		195	196	196	221	337	317	316	315	256	200	200	200	200	248	294	291
PEAK POW MW		457	458	459	461	463	479	482	476	473	471	470	470	470	465	458	453
ENERGY GWH	2328.7	70.2	32.9	42.3	159.0	250.5	228.4	235.0	234.4	184.3	149.1	72.0	33.6	38.4	184.5	218.7	195.5
--OAHE--																	
NAT INFLOW	2300	232	108	139	405	195	780	160	75	95	35	30	14	16	-80		95
DEPLETION	752	25	12	15	52	77	160	195	132	32	-12	1	0	1	13	19	30
CHAN STOR	0	33			-8	-39	8	2		19	19				-17	-17	
EVAPORATION	475							30	93	114	98	44	20	23	51		
REG INFLOW	16599	716	319	410	1416	1770	2145	1474	1387	1182	951	461	215	246	1069	1440	1398
RELEASE	16745	520	242	410	1286	1618	1601	1850	1979	1759	1259	562	296	232	955	1182	993
STOR CHANGE	-146	196	77	-1	129	152	544	-376	-592	-577	-308	-101	-81	14	114	257	405
STORAGE	17687	17883	17960	17959	18089	18241	18785	18410	17818	17241	16933	16832	16751	16765	16879	17136	17541
ELEV FTMSL	1603.7	1604.4	1604.6	1604.6	1605.1	1605.6	1607.3	1606.1	1604.2	1602.2	1601.1	1600.8	1600.5	1600.5	1600.9	1601.8	1603.2
DISCH KCFS	18.4	17.5	17.4	23.0	21.6	26.3	26.9	30.1	32.2	29.6	20.5	18.9	21.3	14.6	15.5	19.2	17.9
POWER																	
AVE POWER MW		222	222	292	275	335	345	386	409	372	256	235	265	182	194	240	225
PEAK POW MW		691	693	693	695	698	707	701	690	680	674	672	671	671	673	678	685
ENERGY GWH	2564.0	79.9	37.2	63.1	198.1	249.4	248.4	286.9	304.1	267.7	190.6	84.8	44.6	35.0	144.1	178.8	151.2
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	16642	520	242	410	1286	1618	1601	1843	1959	1734	1238	552	292	227	944	1182	993
RELEASE	16642	520	242	410	1286	1618	1601	1843	1959	1734	1238	552	292	227	944	1182	993
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	18.4	17.5	17.4	23.0	21.6	26.3	26.9	30.0	31.9	29.1	20.1	18.6	21.0	14.3	15.3	19.2	17.9
POWER																	
AVE POWER MW		83	82	108	101	123	126	140	149	138	99	93	105	72	77	94	86
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	960.8	29.8	13.7	23.2	72.9	91.6	90.7	104.4	110.9	99.4	73.5	33.6	17.7	13.9	57.6	70.3	57.6
--FORT RANDALL--																	
NAT INFLOW	900	119	55	71	155	140	135	70	65	30		10	5	5	5	-10	45
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	117							8	25	31	25	9	4	4	10		
REG INFLOW	17345	637	297	481	1437	1749	1724	1887	1984	1726	1212	551	292	228	936	1169	1035
RELEASE	17345	346	163	481	1437	1749	1724	1887	1984	1872	1855	872	408	254	833	819	661
STOR CHANGE	0	291	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	12.6	11.6	11.7	26.9	24.2	28.4	29.0	30.7	32.3	31.5	30.2	29.3	29.4	16.0	13.6	13.3	11.9
POWER																	
AVE POWER MW		96	99	227	204	240	244	258	271	263	242	221	215	117	100	101	95
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1715.8	34.7	16.6	49.0	146.9	178.3	175.8	192.2	201.8	189.2	179.7	79.7	36.1	22.4	74.2	75.4	63.8
--GAVINS POINT--																	
NAT INFLOW	1500	104	49	62	145	160	175	100	90	95	120	60	28	32	80	85	115
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	0	2	0	-29	5	-8	-1	-3	-3	2	2	2	0	25	5	0	3
EVAPORATION	36							2	6	9	8	3	2	2	4		
REG INFLOW	18696	452	211	514	1583	1882	1874	1943	2054	1965	1968	925	432	306	904	904	778
RELEASE	18696	452	211	514	1583	1882	1874	1943	2041	1940	1968	925	432	306	904	904	816
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	15.3	15.2	15.2	28.8	26.6	30.6	31.5	31.6	33.2	32.6	32.0	31.1	31.1	19.3	14.7	14.7	14.7
POWER																	
AVE POWER MW		53	53	98	91	102	104	105	109	109	108	106	106	68	52	52	52
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	764.9	19.1	8.9	21.1	65.3	76.1	75.2	77.8	80.9	78.3	80.6	38.3	17.9	13.1	38.8	38.8	34.8
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1700	138	64	83	325	295	150	180	120	105	55	30	14	16	25	25	75
DEPLETION	280	7	3	4	24	37	32	40	38	25	12	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	20116	583	272	592	1884	2140	1992	2083	2123	2020	2011	949	443	319	915	914	876
KCFS		19.6	19.6	33.2	31.7	34.8	33.5	33.9	34.5	33.9	32.7	31.9	31.9	20.1	14.9	14.9	15.8
--TOTAL--																	
NAT INFLOW	24400	1283	598	769	2500	3295	6145	3210	1260	1080	1135	505	236	269	510	610	995
DEPLETION	3009	11	5	7	116	602	1643	1259	346	-181	-75	-151	-70	-80	-183	-167	-73
CHAN STOR	0	75	0	-29	-13	-87	12	-1	-3	45	41	1	0	25	-52	-17	3
EVAPORATION	1681							105	329	408	350	156	72	82	178		
STORAGE	53640	54404	54725	54866	55353	55820	58341	58103	56562	55440	54330	53882	53672	53646	53194	53040	53234
SYSTEM POWER																	
AVE POWER MW		730	732	1002	987	1283	1278	1347	1394	1246	987	938	973	721	806	917	882
PEAK POW MW		2290	2289	2291	2296	2301	2329	2324	2307	2298	2279	2254	2244	2242	2207	2230	2240
ENERGY GWH	9371.5	262.7	122.9	216.3	710.3	954.7	920.3	1002.2	1037.5	897.1	734.0	337.5	163.5	138.4	599.4	681.9	592.9
DAILY GWH		17.5	17.6	24.0	23.7	30.8	30.7	32.3	33.5	29.9	23.7	22.5	23.4	17.3	19.3	22.0	21.2
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB12	2012												2013			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	6100	207	96	124	493	971	1505	676	290	259	346	168	78	89	264	224	310
DEPLETION	469	-14	-7	-8	47	287	518	234	-1	-113	-53	-39	-18	-21	-120	-133	-90
EVAPORATION	505							32	98	121	105	47	22	25	54		
MOD INFLOW	5126	221	103	132	446	684	987	410	193	251	294	159	74	85	330	357	400
RELEASE	6122	179	83	107	387	584	595	615	615	477	369	179	83	95	584	615	555
STOR CHANGE	-996	42	20	25	59	100	392	-204	-422	-227	-75	-19	-9	-10	-255	-258	-155
STORAGE	13172	13214	13234	13259	13318	13418	13810	13606	13184	12957	12882	12863	12854	12843	12589	12331	12176
ELEV FTMSL	2226.0	2226.2	2226.3	2226.4	2226.7	2227.2	2229.2	2228.2	2226.0	2224.8	2224.4	2224.3	2224.3	2224.2	2222.8	2221.4	2220.6
DISCH KCFS	11.5	6.0	6.0	6.0	6.5	9.5	10.0	10.0	10.0	8.0	6.0	6.0	6.0	6.0	9.5	10.0	10.0
POWER																	
AVE POWER MW		80	80	80	87	127	133	134	133	106	79	79	79	79	125	130	130
PEAK POW MW		156	157	157	157	157	159	158	156	155	155	155	155	155	153	152	151
ENERGY GWH	980.3	28.7	13.4	17.3	62.4	94.2	96.1	99.5	98.9	76.6	59.1	28.6	13.3	15.2	93.0	96.9	87.1
--GARRISON--																	
NAT INFLOW	9338	430	200	258	716	1127	2674	1609	513	396	426	168	78	89	152	223	279
DEPLETION	1126	15	7	9	30	129	791	635	117	-126	-8	-119	-56	-63	-106	-78	-50
CHAN STOR	15	56			-5	-31	-5			20	21				-36	-5	
EVAPORATION	583							36	112	140	122	55	26	29	63		
REG INFLOW	13767	650	277	356	1068	1551	2473	1553	898	879	702	410	191	219	743	911	884
RELEASE	14987	476	222	286	1428	1722	1369	1414	1414	1130	922	446	208	238	1138	1353	1222
STOR CHANGE	-1220	174	55	71	-360	-170	1104	139	-516	-250	-221	-36	-17	-19	-394	-442	-337
STORAGE	16126	16300	16355	16425	16065	15895	16999	17138	16622	16372	16151	16115	16098	16079	15685	15243	14906
ELEV FTMSL	1830.7	1831.4	1831.5	1831.8	1830.5	1829.9	1833.8	1834.3	1832.5	1831.6	1830.8	1830.7	1830.6	1830.6	1829.2	1827.6	1826.3
DISCH KCFS	27.0	16.0	16.0	16.0	24.0	28.0	23.0	23.0	23.0	19.0	15.0	15.0	15.0	15.0	18.5	22.0	22.0
POWER																	
AVE POWER MW		191	192	192	286	331	275	279	278	228	180	179	179	179	219	257	255
PEAK POW MW		446	446	447	443	440	455	456	450	447	444	443	443	443	438	432	427
ENERGY GWH	2158.8	68.8	32.2	41.5	205.7	245.9	198.1	207.6	206.7	164.1	133.6	64.4	30.1	34.3	163.0	191.5	171.3
--OAHE--																	
NAT INFLOW	1369	214	100	128	190	137	290	147	68	79	16	13	6	7	-95	-10	79
DEPLETION	696	24	11	15	50	72	148	178	119	29	-11	1	0	1	13	18	28
CHAN STOR	21	47			-34	-17	21			18	18				-16	-16	0
EVAPORATION	541							35	107	131	111	50	23	26	58		
REG INFLOW	15140	713	311	399	1534	1770	1532	1348	1256	1067	856	408	191	218	956	1309	1273
RELEASE	16391	438	317	447	1393	1769	1631	1862	1886	1677	1167	496	266	227	865	1062	887
STOR CHANGE	-1250	274	-6	-48	141	1	-99	-514	-630	-610	-311	-87	-75	-9	91	246	386
STORAGE	16799	17073	17067	17019	17160	17161	17061	16548	15918	15308	14997	14910	14834	14826	14916	15162	15549
ELEV FTMSL	1600.6	1601.6	1601.6	1601.4	1601.9	1601.9	1601.6	1599.7	1597.5	1595.2	1594.0	1593.6	1593.3	1593.3	1593.6	1594.6	1596.1
DISCH KCFS	16.7	14.7	22.8	25.1	23.4	28.8	27.4	30.3	30.7	28.2	19.0	16.7	19.2	14.3	14.1	17.3	16.0
POWER																	
AVE POWER MW		184	285	313	293	359	342	376	376	341	228	200	229	171	169	208	193
PEAK POW MW		677	677	676	678	678	676	667	655	644	638	636	635	635	637	641	649
ENERGY GWH	2434.3	66.3	48.0	67.6	210.7	267.5	246.4	279.4	279.8	245.8	169.9	71.9	38.5	32.8	125.5	154.4	129.8
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	16262	438	317	447	1393	1769	1631	1854	1862	1646	1140	483	260	220	851	1062	887
RELEASE	16262	438	317	447	1393	1769	1631	1854	1862	1646	1140	483	260	220	851	1062	887
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	16.7	14.7	22.8	25.1	23.4	28.8	27.4	30.2	30.3	27.7	18.5	16.2	18.8	13.9	13.8	17.3	16.0
POWER																	
AVE POWER MW		70	107	117	110	135	128	141	142	131	91	82	94	70	70	85	77
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	937.8	25.1	18.0	25.3	78.9	100.2	92.4	105.0	105.4	94.4	67.7	29.5	15.8	13.4	52.0	63.2	51.5
--FORT RANDALL--																	
NAT INFLOW	480	77	36	46	96	69	133	37	27		-21	-8	-4	-4	-32	-16	43
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	146							10	32	39	31	12	5	5	12		
REG INFLOW	16515	514	353	493	1485	1829	1752	1863	1842	1599	1087	462	251	210	804	1043	927
RELEASE	16515	223	219	493	1485	1829	1752	1863	1842	1746	1730	783	367	236	701	693	553
STOR CHANGE	0	291	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	10.9	7.5	15.7	27.6	25.0	29.7	29.4	30.3	30.0	29.3	28.1	26.3	26.4	14.9	11.4	11.3	10.0
POWER																	
AVE POWER MW		62	133	233	211	250	248	255	252	245	226	199	194	109	84	86	80
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1638.4	22.5	22.3	50.3	151.7	186.4	178.5	189.8	187.6	176.6	167.8	71.7	32.6	20.9	62.5	63.9	53.5
--GAVINS POINT--																	
NAT INFLOW	1318	89	41	53	127	142	152	86	76	81	112	53	25	28	76	76	101
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	0	6	-16	-23	5	-9	1	-2	1	1	2	3	0	21	6	0	2
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	17675	319	244	524	1612	1943	1880	1906	1901	1822	1832	830	387	281	769	769	656
RELEASE	17675	319	244	524	1612	1943	1880	1906	1888	1797	1832	830	387	281	769	769	694
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	13.3	10.7	17.6	29.3	27.1	31.6	31.6	31.0	30.7	30.2	29.8	27.9	27.9	17.7	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	61	99	92	105	105	103	103	103	103	98	98	63	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	728.7	13.5	10.2	21.4	66.5	77.8	75.3	76.8	76.6	74.3	76.8	35.2	16.4	12.0	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1095	126	59	76	146	177	94	109	78	63	37	26	12	14	10	21	47
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	18502	438	300	595	1736	2084	1943	1976	1929	1836	1858	850	397	292	766	776	726
KCFS		14.7	21.6	33.3	29.2	33.9	32.7	32.1	31.4	30.9	30.2	28.6	28.6	18.4	12.5	12.6	13.1
--TOTAL--																	
NAT INFLOW	19700	1143	533	685	1768	2623	4848	2664	1052	878	916	419	196	223	375	518	859
DEPLETION	2753	32	15	19	158	552	1524	1143	297	-184	-58	-145	-68	-77	-187	-175	-94
CHAN STOR	36	110	-16	-23	-34	-57	17	-2	1	39	41	3	0	22	-45	-21	2
EVAPORATION	1949							122	382	473	406	181	84	95	206		
STORAGE	51184	51966	52168	52215	52055	51985	53383	52803	51249	50041	48791	48327	48110	48046	47591	47487	47716
SYSTEM POWER																	
AVE POWER MW		625	858	1034	1078	1306	1232	1288	1284	1155	907	837	873	671	711	810	778
PEAK POW MW		2261	2259	2259	2257	2256	2269	2261	2242	2231	2211	2186	2175	2172	2137	2160	2171
ENERGY GWH	8878.4	225.0	144.1	223.4	775.9	971.9	886.8	958.0	955.1	831.8	674.9	301.3	146.7	128.7	528.9	603.0	522.8
DAILY GWH		15.0	20.6	24.8	25.9	31.4	29.6	30.9	30.8	27.7	21.8	20.1	21.0	16.1	17.1	19.5	18.7
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB13	2013											2014			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	6345	215	100	129	513	1010	1565	703	301	270	360	175	81	93	275	233	322
DEPLETION	477	-26	-12	-15	21	289	568	241	4	-113	-55	-40	-19	-21	-121	-134	-90
EVAPORATION	488							30	94	117	102	46	22	25	53		
MOD INFLOW	5380	241	112	144	492	721	997	432	203	266	313	168	79	90	343	367	412
RELEASE	5699	149	69	89	476	615	536	553	553	423	307	149	69	103	553	553	500
STOR CHANGE	-319	92	43	55	16	106	461	-121	-350	-157	6	20	9	-13	-211	-186	-88
STORAGE	12176	12267	12310	12365	12381	12487	12949	12827	12477	12320	12326	12346	12355	12342	12131	11945	11857
ELEV FTMSL	2220.6	2221.1	2221.3	2221.6	2221.7	2222.3	2224.8	2224.1	2222.2	2221.4	2221.4	2221.5	2221.6	2221.5	2220.3	2219.3	2218.8
DISCH KCFS	10.0	5.0	5.0	5.0	8.0	10.0	9.0	9.0	9.0	7.1	5.0	5.0	5.0	6.5	9.0	9.0	9.0
POWER																	
AVE POWER MW		65	65	65	104	130	118	119	118	93	65	65	65	85	117	116	116
PEAK POW MW		151	152	152	152	153	155	155	153	152	152	152	152	152	151	150	149
ENERGY GWH	900.4	23.5	11.0	14.1	75.2	96.9	85.2	88.4	88.0	66.9	48.6	23.5	11.0	16.3	87.1	86.7	78.0
--GARRISON--																	
NAT INFLOW	9674	445	208	267	741	1167	2771	1667	531	410	442	174	81	93	158	231	289
DEPLETION	1032	6	3	3	18	167	749	630	117	-133	-17	-127	-59	-67	-115	-86	-57
CHAN STOR	10	52			-31	-21	10			19	22			-15	-26		
EVAPORATION	577							35	112	139	121	54	25	29	62		
REG INFLOW	13774	640	274	353	1168	1594	2568	1555	856	846	667	394	184	219	739	870	846
RELEASE	14168	446	208	268	1071	1506	1309	1353	1353	1127	922	446	208	238	1138	1353	1222
STOR CHANGE	-394	194	66	85	97	88	1259	202	-497	-281	-255	-52	-24	-19	-399	-482	-376
STORAGE	14906	15100	15166	15251	15348	15435	16694	16896	16399	16119	15864	15812	15788	15769	15370	14888	14512
ELEV FTMSL	1826.3	1827.0	1827.3	1827.6	1827.9	1828.3	1832.7	1833.4	1831.7	1830.7	1829.8	1829.6	1829.5	1829.5	1828.0	1826.2	1824.8
DISCH KCFS	22.0	15.0	15.0	15.0	18.0	24.5	22.0	22.0	22.0	18.9	15.0	15.0	15.0	15.0	18.5	22.0	22.0
POWER																	
AVE POWER MW		174	175	175	210	286	261	265	265	226	178	178	178	178	217	255	253
PEAK POW MW		430	431	432	433	434	451	453	447	443	440	439	439	439	433	427	422
ENERGY GWH	2021.0	62.7	29.4	37.8	151.4	212.6	187.9	197.5	196.8	162.8	132.8	64.0	29.8	34.1	161.8	189.9	169.7
--OAHE--																	
NAT INFLOW	1547	242	113	145	214	155	327	167	77	89	18	15	7	8	-107	-12	89
DEPLETION	709	24	11	15	50	73	151	182	122	30	-11	1	0	1	13	18	29
CHAN STOR	0	31		0	-13	-29	11			14	18				-16	-16	0
EVAPORATION	522							33	102	125	108	49	23	26	56		
REG INFLOW	14484	695	310	398	1222	1560	1496	1305	1206	1074	862	412	192	220	945	1306	1282
RELEASE	14888	425	270	378	1177	1549	1407	1725	1750	1549	1038	433	216	153	878	1063	876
STOR CHANGE	-404	270	40	20	45	11	89	-421	-544	-474	-177	-21	-24	67	67	243	406
STORAGE	15549	15819	15858	15878	15923	15934	16022	15602	15058	14583	14406	14385	14362	14428	14495	14739	15145
ELEV FTMSL	1596.1	1597.1	1597.2	1597.3	1597.5	1597.5	1597.8	1596.3	1594.2	1592.3	1591.6	1591.5	1591.4	1591.7	1592.0	1592.9	1594.5
DISCH KCFS	16.0	14.3	19.5	21.2	19.8	25.2	23.7	28.1	28.5	26.0	16.9	14.5	15.6	9.6	14.3	17.3	15.8
POWER																	
AVE POWER MW		174	238	258	242	308	289	341	343	310	201	172	184	115	170	206	189
PEAK POW MW		654	654	655	656	656	657	650	639	630	627	626	626	627	628	633	641
ENERGY GWH	2172.5	62.8	39.9	55.8	174.1	228.8	208.2	253.9	255.0	223.4	149.2	62.1	31.0	22.0	126.1	153.1	127.1
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	14759	425	270	378	1177	1549	1407	1718	1726	1518	1011	420	210	146	864	1063	876
RELEASE	14759	425	270	378	1177	1549	1407	1718	1726	1518	1011	420	210	146	864	1063	876
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	16.0	14.3	19.5	21.2	19.8	25.2	23.7	27.9	28.1	25.5	16.4	14.1	15.1	9.2	14.0	17.3	15.8
POWER																	
AVE POWER MW		68	91	99	93	118	111	131	131	121	81	71	76	47	71	85	76
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	851.7	24.4	15.3	21.4	66.7	87.7	79.7	97.3	97.7	87.0	60.1	25.7	12.8	9.0	52.7	63.2	50.8
--FORT RANDALL--																	
NAT INFLOW	560	91	42	54	112	81	155	44	31		-25	-10	-4	-5	-37	-19	50
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	146							10	32	39	31	12	5	5	12		
REG INFLOW	15093	514	312	431	1285	1621	1550	1734	1710	1472	955	397	200	136	811	1041	923
RELEASE	15093	223	178	431	1285	1621	1550	1734	1710	1618	1598	719	316	162	708	691	549
STOR CHANGE	0	291	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	10.0	7.5	12.8	24.2	21.6	26.4	26.1	28.2	27.8	27.2	26.0	24.2	22.8	10.2	11.5	11.2	9.9
POWER																	
AVE POWER MW		62	108	204	183	222	220	238	234	228	209	183	167	75	85	86	79
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1498.5	22.5	18.2	44.1	131.5	165.5	158.3	176.8	174.4	163.9	155.2	65.9	28.1	14.4	63.1	63.7	53.1
--GAVINS POINT--																	
NAT INFLOW	1361	91	42	55	131	147	157	89	79	84	115	55	26	29	78	78	105
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	5	-10	-22	5	-9	1	-4	1	1	2	3	3	23	-2	1	3
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	16294	319	210	465	1416	1740	1684	1777	1772	1697	1703	768	340	209	769	769	656
RELEASE	16294	319	210	465	1416	1740	1684	1777	1759	1672	1703	768	340	209	769	769	694
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	12.5	10.7	15.2	26.0	23.8	28.3	28.3	28.9	28.6	28.1	27.7	25.8	24.5	13.2	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	53	89	82	96	96	98	98	97	97	90	86	47	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	681.2	13.6	8.9	19.2	58.7	71.6	69.3	73.1	72.7	70.2	72.2	32.6	14.5	9.0	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1212	140	65	84	162	196	104	121	87	69	40	29	14	15	11	23	52
DEPLETION	270	7	3	4	23	36	31	39	37	25	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	17236	452	272	544	1555	1900	1757	1859	1809	1716	1732	791	351	222	767	778	731
KCFS		15.2	19.6	30.5	26.1	30.9	29.5	30.2	29.4	28.8	28.2	26.6	25.3	14.0	12.5	12.6	13.2
--TOTAL--																	
NAT INFLOW	20699	1224	571	734	1873	2756	5079	2791	1106	922	950	438	204	233	378	534	907
DEPLETION	2682	12	6	7	121	593	1535	1149	305	-189	-69	-154	-72	-82	-197	-184	-100
CHAN STOR	9	88	-10	-22	-39	-58	22	-4	1	34	42	3	3	8	-45	-16	3
EVAPORATION	1907							119	371	462	398	177	82	94	203		
STORAGE	47716	48563	48846	49006	49164	49368	51177	50837	49459	48427	47357	46983	46828	46836	46397	46321	46600
SYSTEM POWER																	
AVE POWER MW		582	730	891	913	1160	1095	1192	1189	1075	831	760	757	545	704	793	757
PEAK POW MW		2217	2216	2218	2220	2222	2243	2237	2219	2210	2192	2169	2159	2158	2122	2144	2156
ENERGY GWH	8125.4	209.4	122.7	192.5	657.6	863.1	788.7	887.0	884.6	774.2	618.1	273.7	127.2	104.7	523.9	589.7	508.4
DAILY GWH		14.0	17.5	21.4	21.9	27.8	26.3	28.6	28.5	25.8	19.9	18.2	18.2	13.1	16.9	19.0	18.2
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB14	2014										2015				
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	6537	222	103	133	528	1041	1613	724	310	278	370	180	84	96	283	240	332
DEPLETION	486	-26	-12	-16	21	290	572	248	8	-114	-57	-41	-19	-22	-122	-134	-91
EVAPORATION	486							30	93	116	102	46	21	25	53		
MOD INFLOW	5565	248	116	149	507	751	1041	446	209	276	325	175	81	93	352	374	423
RELEASE	5625	149	69	89	417	584	536	553	553	402	338	164	76	87	553	553	500
STOR CHANGE	-60	99	46	59	90	167	505	-107	-345	-127	-13	11	5	6	-201	-179	-77
STORAGE	11857	11956	12002	12061	12152	12319	12824	12717	12372	12246	12233	12244	12249	12255	12053	11874	11797
ELEV FTMSL	2218.8	2219.4	2219.6	2220.0	2220.4	2221.4	2224.1	2223.5	2221.7	2221.0	2220.9	2221.0	2221.0	2221.0	2219.9	2218.9	2218.5
DISCH KCFS	9.0	5.0	5.0	5.0	7.0	9.5	9.0	9.0	9.0	6.8	5.5	5.5	5.5	5.5	9.0	9.0	9.0
POWER																	
AVE POWER MW		65	65	65	91	124	118	119	118	88	72	72	72	72	117	116	116
PEAK POW MW		150	150	150	151	152	155	154	152	151	151	151	151	151	150	149	149
ENERGY GWH	886.3	23.3	10.9	14.0	65.4	91.9	85.0	88.2	87.7	63.5	53.4	25.8	12.1	13.8	86.9	86.5	77.9
--GARRISON--																	
NAT INFLOW	9933	457	213	274	761	1198	2845	1711	545	421	454	178	83	95	162	238	297
DEPLETION	1090	2	1	1	11	187	781	663	123	-136	-22	-130	-61	-69	-117	-87	-58
CHAN STOR	0	42			-21	-26	5			23	13		0	0	-36		
EVAPORATION	572							35	110	138	120	54	25	29	62		
REG INFLOW	13896	646	282	362	1146	1569	2605	1566	865	844	708	418	195	223	735	878	855
RELEASE	13967	417	194	250	1071	1537	1309	1353	1353	1077	861	417	194	222	1138	1353	1222
STOR CHANGE	-71	229	87	112	75	32	1296	214	-488	-232	-153	1	1	1	-403	-474	-367
STORAGE	14512	14741	14828	14940	15015	15047	16342	16556	16068	15836	15683	15684	15685	15685	15282	14808	14441
ELEV FTMSL	1824.8	1825.7	1826.0	1826.4	1826.7	1826.8	1831.5	1832.3	1830.5	1829.7	1829.2	1829.2	1829.2	1829.2	1827.7	1825.9	1824.6
DISCH KCFS	22.0	14.0	14.0	14.0	18.0	25.0	22.0	22.0	22.0	18.1	14.0	14.0	14.0	14.0	18.5	22.0	22.0
POWER																	
AVE POWER MW		161	162	162	209	289	259	263	263	215	166	165	165	165	217	255	252
PEAK POW MW		425	426	428	429	429	446	449	443	440	438	438	438	438	432	426	421
ENERGY GWH	1980.4	58.0	27.2	35.1	150.2	215.0	186.3	195.9	195.3	154.6	123.3	59.6	27.8	31.8	161.4	189.5	169.4
--OAHE--																	
NAT INFLOW	1698	265	124	159	235	170	359	183	85	98	20	17	8	9	-118	-13	98
DEPLETION	724	25	12	15	51	75	154	187	125	30	-12	1	0	1	13	19	29
CHAN STOR	0	36			-18	-31	13			18	19			0	-21	-16	0
EVAPORATION	520							33	101	125	108	49	23	26	56		
REG INFLOW	14421	693	307	394	1237	1601	1527	1316	1212	1038	804	383	179	205	929	1304	1291
RELEASE	14493	415	264	370	1161	1543	1384	1680	1707	1390	924	494	162	188	880	1063	868
STOR CHANGE	-72	279	42	24	76	58	143	-364	-495	-352	-120	-110	17	17	50	241	423
STORAGE	15145	15423	15465	15489	15565	15624	15767	15403	14908	14556	14436	14325	14342	14359	14408	14650	15073
ELEV FTMSL	1594.5	1595.6	1595.8	1595.9	1596.1	1596.4	1596.9	1595.5	1593.6	1592.2	1591.7	1591.3	1591.4	1591.4	1591.6	1592.6	1594.3
DISCH KCFS	15.8	13.9	19.0	20.7	19.5	25.1	23.3	27.3	27.8	23.4	15.0	16.6	11.7	11.8	14.3	17.3	15.6
POWER																	
AVE POWER MW		169	231	251	237	304	283	331	333	278	179	197	139	140	170	205	187
PEAK POW MW		646	647	648	649	650	653	646	636	630	627	625	625	626	627	631	640
ENERGY GWH	2106.9	60.7	38.8	54.2	170.4	226.3	203.6	246.2	247.9	200.2	132.9	70.8	23.3	26.9	126.2	152.8	125.7
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	14364	415	264	370	1161	1543	1384	1673	1683	1359	897	481	157	181	866	1063	868
RELEASE	14364	415	264	370	1161	1543	1384	1673	1683	1359	897	481	157	181	866	1063	868
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	15.8	13.9	19.0	20.7	19.5	25.1	23.3	27.2	27.4	22.8	14.6	16.2	11.3	11.4	14.1	17.3	15.6
POWER																	
AVE POWER MW		66	89	97	91	117	109	127	128	108	73	82	57	58	71	85	75
PEAK POW MW		517	509	509	509	509	509	509	509	521	538	538	538	538	538	538	529
ENERGY GWH	829.7	23.8	15.0	21.0	65.8	87.4	78.4	94.7	95.3	77.8	54.2	29.3	9.6	11.1	52.8	63.2	50.4
--FORT RANDALL--																	
NAT INFLOW	627	101	47	61	125	91	174	49	35		-28	-11	-5	-6	-42	-21	56
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	143							10	32	39	29	11	5	5	12		
REG INFLOW	14768	514	311	430	1282	1625	1546	1694	1671	1313	839	459	147	170	808	1039	921
RELEASE	14768	223	177	430	1282	1625	1546	1694	1671	1580	1558	699	173	170	705	689	547
STOR CHANGE	0	291	134			0		0	0	-267	-719	-240	-26	0	103	350	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3282	2563	2323	2297	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1352.0	1342.0	1338.0	1337.5	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	9.9	7.5	12.7	24.1	21.5	26.4	26.0	27.5	27.2	26.6	25.3	23.5	12.4	10.7	11.5	11.2	9.8
POWER																	
AVE POWER MW		62	108	203	182	223	219	232	229	221	200	174	91	78	84	85	79
PEAK POW MW		351	356	356	356	356	356	356	356	345	305	287	285	285	293	319	339
ENERGY GWH	1462.6	22.5	18.1	43.9	131.2	165.8	157.9	172.8	170.5	159.2	148.5	62.7	15.3	15.0	62.9	63.5	52.9
--GAVINS POINT--																	
NAT INFLOW	1394	93	44	56	134	150	161	91	81	86	118	57	26	30	80	80	107
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	5	-10	-22	5	-9	1	-3	1	1	2	3	20	3	-1	0	3
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	16002	322	211	464	1416	1746	1684	1740	1735	1661	1666	750	215	198	769	769	656
RELEASE	16002	322	211	464	1416	1746	1684	1740	1722	1636	1666	750	215	198	769	769	694
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	12.5	10.8	15.2	26.0	23.8	28.4	28.3	28.3	28.0	27.5	27.1	25.2	15.5	12.5	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	53	89	82	97	96	96	96	96	95	88	55	44	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	669.3	13.6	8.9	19.2	58.7	71.9	69.3	71.6	71.3	68.8	70.6	31.8	9.2	8.5	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1311	151	70	91	175	212	112	131	94	75	44	31	14	17	13	25	56
DEPLETION	276	7	3	4	23	36	32	39	38	25	11	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	17037	465	278	551	1568	1922	1764	1832	1778	1686	1699	774	227	211	768	779	735
KCFS		15.6	20.0	30.8	26.4	31.3	29.6	29.8	28.9	28.3	27.6	26.0	16.3	13.3	12.5	12.7	13.2
--TOTAL--																	
NAT INFLOW	21500	1290	602	774	1958	2862	5264	2889	1150	958	978	452	211	241	378	549	946
DEPLETION	2770	9	4	6	115	616	1575	1194	319	-193	-77	-157	-73	-84	-199	-183	-102
CHAN STOR	-1	83	-10	-22	-34	-67	19	-3	1	42	34	4	21	3	-59	-16	3
EVAPORATION	1894							118	369	459	395	176	82	93	203		
STORAGE	46600	47498	47807	48003	48244	48501	50446	50188	48873	47921	46915	46577	46573	46596	46144	46082	46397
SYSTEM POWER																	
AVE POWER MW		561	707	868	891	1154	1084	1169	1167	1005	783	778	579	558	703	791	753
PEAK POW MW		2203	2203	2205	2208	2210	2233	2228	2212	2204	2176	2156	2154	2155	2119	2141	2153
ENERGY GWH	7935.2	201.9	118.8	187.4	641.8	858.2	780.4	869.5	868.0	724.0	582.8	280.0	97.2	107.1	523.3	588.7	505.9
DAILY GWH		13.5	17.0	20.8	21.4	27.7	26.0	28.0	28.0	24.1	18.8	18.7	13.9	13.4	16.9	19.0	18.1
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	29FEB15	2015											2016			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	6841	232	108	139	553	1089	1687	758	325	291	388	188	88	100	296	251	348
DEPLETION	494	-26	-12	-16	21	291	576	256	12	-114	-59	-40	-19	-21	-121	-134	-100
EVAPORATION	489							30	94	117	102	46	22	25	53		
MOD INFLOW	5858	258	120	155	532	798	1111	472	219	288	345	182	85	97	364	385	448
RELEASE	5675	149	69	89	417	584	536	553	553	419	307	149	69	95	553	584	546
STOR CHANGE	183	109	51	65	115	214	575	-81	-334	-131	37	33	15	2	-190	-199	-98
STORAGE	11797	11906	11957	12022	12138	12352	12927	12846	12512	12380	12418	12451	12466	12468	12278	12079	11980
ELEV FTMSL	2218.5	2219.1	2219.4	2219.7	2220.4	2221.5	2224.7	2224.2	2222.4	2221.7	2221.9	2222.1	2222.2	2222.2	2221.1	2220.0	2219.5
DISCH KCFS	9.0	5.0	5.0	5.0	7.0	9.5	9.0	9.0	9.0	7.0	5.0	5.0	5.0	6.0	9.0	9.5	9.5
POWER																	
AVE POWER MW		65	65	65	91	124	118	119	118	92	65	66	66	79	117	123	123
PEAK POW MW		149	150	150	151	152	155	155	153	152	152	152	153	153	152	150	150
ENERGY GWH	896.5	23.3	10.9	14.0	65.4	91.9	85.1	88.4	88.0	66.4	48.7	23.6	11.0	15.1	87.4	91.8	85.5
--GARRISON--																	
NAT INFLOW	10335	476	222	285	792	1247	2960	1780	567	438	472	186	87	99	169	247	309
DEPLETION	1104	3	1	2	12	187	792	679	128	-139	-26	-134	-62	-71	-117	-87	-64
CHAN STOR	-5	42			-21	-26	5			20	21			-10	-31	-5	
EVAPORATION	576							35	111	139	121	54	25	29	62		
REG INFLOW	14324	664	290	373	1176	1618	2709	1619	881	878	706	413	193	226	746	913	919
RELEASE	14100	417	194	250	1041	1506	1339	1383	1383	1089	861	417	194	238	1168	1353	1265
STOR CHANGE	224	247	96	123	134	112	1370	236	-502	-211	-155	-3	-1	-12	-422	-440	-346
STORAGE	14441	14688	14784	14906	15041	15153	16522	16758	16256	16045	15890	15886	15885	15873	15451	15011	14665
ELEV FTMSL	1824.6	1825.5	1825.9	1826.3	1826.8	1827.2	1832.1	1833.0	1831.2	1830.5	1829.9	1829.9	1829.9	1829.8	1828.3	1826.7	1825.4
DISCH KCFS	22.0	14.0	14.0	14.0	17.5	24.5	22.5	22.5	22.5	18.3	14.0	14.0	14.0	15.0	19.0	22.0	22.0
POWER																	
AVE POWER MW		161	162	162	203	284	265	270	270	218	167	166	166	178	224	256	253
PEAK POW MW		424	425	427	429	431	449	452	445	442	440	440	440	434	429	429	424
ENERGY GWH	2006.3	58.0	27.2	35.0	146.0	211.1	191.1	201.2	200.6	157.0	123.9	59.9	27.9	34.2	166.4	190.4	176.4
--OAHE--																	
NAT INFLOW	1957	306	143	183	271	195	414	211	98	113	23	19	9	10	-135	-15	113
DEPLETION	736	25	12	15	51	76	157	191	128	31	-12	1	0	1	13	19	29
CHAN STOR	0	36			-16	-31	9			19	20			-5	-19	-14	
EVAPORATION	524							33	102	126	109	49	23	26	57		
REG INFLOW	14797	734	326	419	1246	1594	1605	1370	1251	1064	807	385	180	217	945	1305	1349
RELEASE	14567	396	254	357	1132	1539	1345	1694	1724	1532	1027	426	165	148	886	1064	879
STOR CHANGE	229	338	71	62	113	56	260	-323	-473	-468	-220	-41	15	69	58	241	471
STORAGE	15073	15411	15482	15544	15658	15713	15973	15650	15178	14710	14490	14449	14464	14532	14591	14831	15302
ELEV FTMSL	1594.3	1595.6	1595.8	1596.1	1596.5	1596.7	1597.7	1596.5	1594.7	1592.8	1592.0	1591.8	1591.9	1592.1	1592.4	1593.3	1595.1
DISCH KCFS	15.6	13.3	18.3	20.0	19.0	25.0	22.6	27.5	28.0	25.7	16.7	14.3	11.9	9.3	14.4	17.3	15.3
POWER																	
AVE POWER MW		161	222	242	231	304	276	335	338	308	199	170	141	111	172	206	184
PEAK POW MW		646	647	649	651	652	656	651	642	633	628	628	628	629	630	635	644
ENERGY GWH	2124.4	57.9	37.3	52.3	166.4	226.1	198.4	249.3	251.6	221.6	147.9	61.3	23.7	21.3	127.7	153.6	127.9
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	14438	396	254	357	1132	1539	1345	1686	1699	1501	1000	414	159	141	872	1064	879
RELEASE	14438	396	254	357	1132	1539	1345	1686	1699	1501	1000	414	159	141	872	1064	879
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	15.6	13.3	18.3	20.0	19.0	25.0	22.6	27.4	27.6	25.2	16.3	13.9	11.5	8.9	14.2	17.3	15.3
POWER																	
AVE POWER MW		63	86	94	89	117	106	128	129	120	80	70	58	45	72	85	73
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	833.3	22.7	14.4	20.2	64.1	87.1	76.2	95.5	96.2	86.1	59.5	25.3	9.7	8.7	53.3	63.3	51.0
--FORT RANDALL--																	
NAT INFLOW	744	120	56	72	149	108	207	58	41		-33	-13	-6	-7	-50	-25	66
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	146							10	32	39	31	12	5	5	12		
REG INFLOW	14955	515	310	428	1277	1638	1540	1716	1694	1455	935	388	148	129	807	1036	942
RELEASE	14955	223	176	428	1277	1638	1540	1716	1694	1601	1578	709	264	155	704	686	568
STOR CHANGE	0	291	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	9.8	7.5	12.7	24.0	21.5	26.6	25.9	27.9	27.5	26.9	25.7	23.8	19.0	9.8	11.4	11.2	9.9
POWER																	
AVE POWER MW		62	107	202	182	225	218	235	232	225	206	181	140	72	84	85	79
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1485.7	22.5	18.0	43.7	130.7	167.1	157.2	175.0	172.8	162.2	153.3	65.0	23.5	13.8	62.7	63.2	54.9
--GAVINS POINT--																	
NAT INFLOW	1444	97	45	58	139	156	167	94	83	89	122	59	27	31	83	83	111
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	4	-10	-22	5	-10	1	-4	1	1	2	3	9	17	-3	1	2
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	16239	325	211	464	1416	1765	1684	1765	1759	1685	1691	762	296	198	769	769	681
RELEASE	16239	325	211	464	1416	1765	1684	1765	1746	1660	1691	762	296	198	769	769	719
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	12.5	10.9	15.2	26.0	23.8	28.7	28.3	28.7	28.4	27.9	27.5	25.6	21.3	12.5	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	53	89	82	98	96	98	97	97	96	90	75	44	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	679.0	13.8	8.9	19.2	58.7	72.6	69.3	72.6	72.2	69.7	71.7	32.3	12.6	8.5	33.0	33.0	30.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1479	170	79	102	197	240	127	148	106	85	49	35	16	19	14	28	63
DEPLETION	277	7	3	4	23	36	32	40	38	25	11	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	17441	488	287	562	1590	1969	1779	1873	1814	1720	1729	790	309	214	769	782	767
KCFS		16.4	20.7	31.5	26.7	32.0	29.9	30.5	29.5	28.9	28.1	26.6	22.3	13.5	12.5	12.7	13.3
--TOTAL--																	
NAT INFLOW	22800	1401	653	840	2101	3035	5562	3049	1220	1016	1021	473	221	252	377	569	1010
DEPLETION	2805	10	5	6	116	618	1593	1223	331	-195	-83	-160	-75	-85	-198	-183	-117
CHAN STOR	-7	83	-10	-22	-32	-67	16	-4	1	40	43	3	9	2	-53	-19	2
EVAPORATION	1910							118	371	463	399	178	82	94	204		
STORAGE	46397	47383	47735	47985	48348	48730	50935	50766	49470	48538	47558	47226	47138	47171	46720	46672	47035
SYSTEM POWER																	
AVE POWER MW		550	694	854	877	1151	1080	1186	1185	1060	813	743	646	529	713	800	756
PEAK POW MW		2202	2202	2205	2210	2214	2240	2236	2220	2212	2195	2171	2163	2162	2126	2149	2162
ENERGY GWH	8025.2	198.1	116.6	184.5	631.5	856.0	777.3	882.1	881.5	762.9	605.0	267.3	108.5	101.6	530.5	595.4	526.4
DAILY GWH		13.2	16.7	20.5	21.1	27.6	25.9	28.5	28.4	25.4	19.5	17.8	15.5	12.7	17.1	19.2	18.2

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 29FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB16	2016												2017			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	7200	244	114	146	582	1146	1776	798	342	306	408	198	92	106	312	264	366
DEPLETION	510	-25	-12	-15	21	292	580	262	16	-114	-61	-42	-20	-22	-124	-135	-91
EVAPORATION	498							31	96	119	104	47	22	25	54		
MOD INFLOW	6192	269	126	161	561	854	1196	505	230	301	365	193	90	103	382	399	457
RELEASE	5790	149	69	89	357	615	565	584	584	444	369	179	83	95	553	553	500
STOR CHANGE	402	120	56	72	204	239	631	-79	-354	-144	-4	14	7	8	-172	-154	-43
STORAGE	11980	12101	12157	12229	12433	12672	13303	13224	12870	12726	12722	12737	12744	12751	12580	12425	12382
ELEV FTMSL	2219.5	2220.2	2220.5	2220.9	2222.0	2223.3	2226.6	2226.2	2224.3	2223.6	2223.6	2223.6	2223.7	2223.7	2222.8	2222.0	2221.7
DISCH KCFS	9.5	5.0	5.0	5.0	6.0	10.0	9.5	9.5	9.5	7.5	6.0	6.0	6.0	6.0	9.0	9.0	9.0
POWER																	
AVE POWER MW		65	65	65	78	131	126	126	126	99	79	79	79	79	118	118	118
PEAK POW MW		151	151	151	152	154	157	157	155	154	154	154	154	154	153	152	152
ENERGY GWH	921.5	23.4	10.9	14.1	56.4	97.2	90.5	94.0	93.6	70.9	58.9	28.5	13.3	15.2	88.0	87.6	79.0
--GARRISON--																	
NAT INFLOW	10800	497	232	298	828	1303	3093	1861	593	458	493	194	90	103	176	258	323
DEPLETION	1125	3	2	2	13	188	802	696	134	-142	-31	-121	-56	-64	-131	-100	-70
CHAN STOR	6	47			-10	-41	5			21	15				-30		
EVAPORATION	584							36	112	140	122	55	26	30	64		
REG INFLOW	14886	689	300	385	1162	1688	2861	1714	931	925	786	437	204	233	766	911	893
RELEASE	14395	446	194	250	1012	1599	1428	1476	1476	1052	799	402	187	214	1168	1414	1277
STOR CHANGE	491	243	105	135	150	90	1433	238	-545	-127	-14	36	17	19	-402	-503	-385
STORAGE	14665	14908	15014	15149	15299	15389	16822	17060	16516	16388	16375	16410	16427	16446	16044	15541	15156
ELEV FTMSL	1825.4	1826.3	1826.7	1827.2	1827.8	1828.1	1833.2	1834.0	1832.1	1831.7	1831.6	1831.7	1831.8	1831.9	1830.5	1828.6	1827.2
DISCH KCFS	22.0	15.0	14.0	14.0	17.0	26.0	24.0	24.0	24.0	17.7	13.0	13.5	13.5	13.5	19.0	23.0	23.0
POWER																	
AVE POWER MW		173	163	163	198	303	285	290	289	212	156	162	162	162	227	271	268
PEAK POW MW		427	429	430	432	434	452	455	448	447	447	447	447	447	442	436	431
ENERGY GWH	2065.5	62.4	27.3	35.2	142.8	225.2	205.0	215.9	215.2	152.8	116.2	58.4	27.3	31.2	168.7	201.7	180.2
--OAHE--																	
NAT INFLOW	2300	360	168	216	318	230	486	248	115	133	27	22	10	12	-159	-18	133
DEPLETION	752	25	12	15	52	77	160	195	132	32	-12	1	0	1	13	19	30
CHAN STOR	-5	32	4		-13	-39	9			28	21	-2			-25	-18	
EVAPORATION	544							35	107	132	112	50	23	27	58		
REG INFLOW	15395	812	355	450	1264	1712	1763	1494	1351	1049	747	370	174	199	913	1359	1380
RELEASE	14892	368	241	339	1096	1555	1294	1767	1798	1612	1115	468	253	198	886	1065	836
STOR CHANGE	503	445	114	111	168	157	469	-273	-446	-563	-368	-98	-79	1	27	294	545
STORAGE	15302	15747	15861	15972	16140	16297	16766	16493	16047	15484	15116	15018	14939	14940	14967	15261	15805
ELEV FTMSL	1595.1	1596.8	1597.2	1597.7	1598.3	1598.8	1600.5	1599.5	1597.9	1595.8	1594.4	1594.0	1593.7	1593.7	1593.8	1595.0	1597.0
DISCH KCFS	15.3	12.4	17.3	19.0	18.4	25.3	21.7	28.7	29.2	27.1	18.1	15.7	18.3	12.5	14.4	17.3	15.0
POWER																	
AVE POWER MW		150	212	232	226	311	269	355	359	329	219	189	219	150	173	208	183
PEAK POW MW		652	654	656	659	662	671	666	658	647	640	639	637	637	638	643	653
ENERGY GWH	2199.1	54.1	35.6	50.2	162.7	231.0	193.7	264.4	267.0	237.1	163.0	68.2	36.8	28.7	128.7	155.1	122.8
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	14763	368	241	339	1096	1555	1294	1759	1773	1581	1088	456	248	191	872	1065	836
RELEASE	14763	368	241	339	1096	1555	1294	1759	1773	1581	1088	456	248	191	872	1065	836
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	15.3	12.4	17.3	19.0	18.4	25.3	21.7	28.6	28.8	26.6	17.7	15.3	17.8	12.0	14.2	17.3	15.0
POWER																	
AVE POWER MW		59	81	89	86	118	102	134	135	126	87	77	90	61	72	85	72
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	852.5	21.1	13.6	19.2	62.1	88.1	73.3	99.6	100.4	90.7	64.7	27.8	15.1	11.7	53.2	63.4	48.5
--FORT RANDALL--																	
NAT INFLOW	900	145	68	87	180	130	250	70	50		-40	-15	-7	-8	-60	-30	80
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	146							10	32	39	31	12	5	5	12		
REG INFLOW	15436	512	308	426	1272	1676	1532	1801	1777	1535	1016	428	235	178	797	1032	913
RELEASE	15436	220	174	426	1272	1676	1532	1801	1777	1681	1659	749	351	204	694	682	539
STOR CHANGE	0	291	134					0	0	-146	-643	-321	-116	-26	103	350	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3403	2760	2439	2323	2297	2400	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.0	1340.0	1338.0	1337.5	1339.3	1344.8	1350.0
DISCH KCFS	9.9	7.4	12.5	23.8	21.4	27.3	25.7	29.3	28.9	28.2	27.0	25.2	25.3	12.8	11.3	11.1	9.7
POWER																	
AVE POWER MW		62	106	201	181	230	217	247	243	236	216	191	186	94	83	85	78
PEAK POW MW		351	356	356	356	356	356	356	356	350	319	296	287	285	293	319	339
ENERGY GWH	1531.7	22.2	17.8	43.5	130.2	171.0	156.4	183.5	181.1	170.2	161.1	68.6	31.2	18.0	61.9	62.9	52.1
--GAVINS POINT--																	
NAT INFLOW	1500	101	47	60	144	162	173	98	86	92	127	61	28	32	87	87	115
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	5	-10	-22	5	-11	3	-7	1	1	2	3	0	23	3	0	3
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	16777	326	211	464	1416	1808	1684	1851	1845	1768	1777	803	375	254	769	769	656
RELEASE	16777	326	211	464	1416	1808	1684	1851	1832	1743	1777	803	375	254	769	769	694
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	12.5	11.0	15.2	26.0	23.8	29.4	28.3	30.1	29.8	29.3	28.9	27.0	27.0	16.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	53	89	82	99	96	101	101	101	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	698.7	13.8	8.9	19.2	58.7	74.0	69.3	75.2	75.1	72.8	75.1	34.1	15.9	10.9	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1700	196	91	118	227	275	146	170	121	97	57	41	19	22	16	32	73
DEPLETION	280	7	3	4	24	37	32	40	38	25	12	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	18197	515	299	578	1619	2046	1798	1981	1915	1815	1822	837	391	272	771	786	752
KCFS		17.3	21.6	32.4	27.2	33.3	30.2	32.2	31.1	30.5	29.6	28.1	28.1	17.1	12.5	12.8	13.5
--TOTAL--																	
NAT INFLOW	24400	1543	719	925	2279	3246	5924	3245	1307	1086	1072	500	233	266	372	593	1090
DEPLETION	2861	12	5	7	119	622	1610	1250	345	-197	-89	-149	-70	-79	-215	-197	-113
CHAN STOR	0	83	-5	-22	-19	-92	17	-7	1	50	38	1	0	24	-53	-18	3
EVAPORATION	1946							121	379	472	406	181	84	96	207		
STORAGE	47035	48134	48543	48862	49384	49870	52403	52289	50958	50003	48974	48605	48433	48435	47991	47977	48431
SYSTEM POWER																	
AVE POWER MW		547	680	840	851	1191	1095	1254	1253	1103	859	793	830	603	717	811	762
PEAK POW MW		2212	2213	2218	2224	2229	2260	2257	2241	2233	2215	2191	2181	2179	2143	2166	2180
ENERGY GWH	8269.1	197.0	114.2	181.4	613.1	886.4	788.3	932.6	932.4	794.5	638.9	285.5	139.5	115.7	533.6	603.7	512.3
DAILY GWH		13.1	16.3	20.2	20.4	28.6	26.3	30.1	30.1	26.5	20.6	19.0	19.9	14.5	17.2	19.5	18.3
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB12	2012												2013			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	5527	198	93	119	481	865	1223	624	276	251	328	161	75	86	235	215	297
DEPLETION	413	-8	-4	-5	56	199	368	250	23	-92	-74	-17	-8	-9	-100	-112	-54
EVAPORATION	483							30	93	116	101	46	21	24	52		
MOD INFLOW	4631	207	96	124	425	666	855	344	160	227	301	132	62	71	283	327	351
RELEASE	5854	179	83	107	387	523	565	584	584	451	369	179	83	95	553	584	528
STOR CHANGE	-1224	28	13	17	38	143	290	-240	-424	-224	-68	-46	-21	-24	-270	-257	-177
STORAGE	12453	12482	12495	12511	12550	12693	12983	12743	12318	12094	12026	11980	11959	11934	11664	11406	11230
ELEV FTMSL	2222.1	2222.3	2222.3	2222.4	2222.6	2223.4	2224.9	2223.7	2221.4	2220.1	2219.8	2219.5	2219.4	2219.2	2217.7	2216.3	2215.2
DISCH KCFS	11.5	6.0	6.0	6.0	6.5	8.5	9.5	9.5	9.5	7.6	6.0	6.0	6.0	6.0	9.0	9.5	9.5
POWER																	
AVE POWER MW		79	79	79	85	112	125	125	124	99	78	78	78	78	116	121	121
PEAK POW MW		153	153	153	153	154	155	154	152	150	150	150	150	148	146	146	145
ENERGY GWH	921.4	28.3	13.2	17.0	61.4	83.0	90.2	93.3	92.5	71.0	57.9	28.0	13.1	14.9	86.1	90.3	81.1
--GARRISON--																	
NAT INFLOW	7739	382	178	229	601	1103	2306	1129	377	167	408	155	72	82	141	141	267
DEPLETION	1232	27	12	16	50	109	774	651	135	-120	-1	-114	-53	-61	-91	-63	-39
CHAN STOR	21	57			-5	-21	-10			20	16				-31	-5	
EVAPORATION	554							35	108	133	115	52	24	28	59		
REG INFLOW	11828	591	249	320	933	1496	2087	1028	718	625	679	395	184	211	695	783	834
RELEASE	13339	357	167	214	1131	1476	1369	1291	1291	1016	799	387	180	214	1107	1230	1111
STOR CHANGE	-1511	234	83	106	-198	20	718	-264	-573	-390	-120	8	4	-3	-412	-447	-277
STORAGE	15255	15490	15572	15678	15480	15501	16219	15955	15383	14992	14872	14881	14884	14881	14469	14022	13745
ELEV FTMSL	1827.6	1828.5	1828.8	1829.1	1828.4	1828.5	1831.1	1830.1	1828.1	1826.6	1826.2	1826.2	1826.2	1826.2	1824.7	1822.9	1821.9
DISCH KCFS	27.0	12.0	12.0	12.0	19.0	24.0	23.0	21.0	21.0	17.1	13.0	13.0	13.0	13.5	18.0	20.0	20.0
POWER																	
AVE POWER MW		141	141	142	223	281	271	249	247	199	151	151	151	157	207	227	225
PEAK POW MW		435	436	437	435	435	445	441	434	428	427	427	427	427	421	415	411
ENERGY GWH	1879.0	50.7	23.8	30.6	160.8	208.8	195.5	185.6	183.8	143.2	112.3	54.3	25.3	30.1	154.0	169.0	151.2
--OAHE--																	
NAT INFLOW	1181	201	94	121	175	118	262	128	51	67	5	8	4	4	-103	-20	67
DEPLETION	696	24	11	15	50	72	148	178	119	29	-11	1	0	1	13	18	28
CHAN STOR	30	66			-31	-22	4	9		18	19			-2	-21	-9	
EVAPORATION	516							33	101	124	107	48	22	25	55		
REG INFLOW	13339	600	249	320	1225	1500	1487	1217	1122	947	728	345	161	190	914	1182	1150
RELEASE	14889	457	288	401	1237	1415	1485	1724	1754	1427	982	510	222	121	947	1022	897
STOR CHANGE	-1550	144	-38	-81	-12	84	2	-507	-631	-480	-254	-165	-61	69	-33	160	253
STORAGE	15909	16053	16015	15934	15922	16006	16008	15501	14870	14389	14135	13970	13909	13978	13945	14106	14359
ELEV FTMSL	1597.4	1598.0	1597.8	1597.5	1597.5	1597.8	1597.8	1595.9	1593.5	1591.6	1590.5	1589.9	1589.6	1589.9	1589.8	1590.4	1591.4
DISCH KCFS	16.1	15.3	20.7	22.5	20.8	23.0	25.0	28.0	28.5	24.0	16.0	17.2	16.0	7.7	15.4	16.6	16.1
POWER																	
AVE POWER MW		188	254	275	254	281	305	341	342	285	189	202	188	90	181	195	191
PEAK POW MW		658	657	656	655	657	657	648	636	626	621	618	617	618	617	621	626
ENERGY GWH	2164.7	67.7	42.7	59.4	182.9	209.4	219.7	253.4	254.7	205.2	140.4	72.6	31.5	17.3	134.5	145.3	128.1
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	14760	457	288	401	1237	1415	1485	1716	1729	1397	955	498	216	115	933	1022	897
RELEASE	14760	457	288	401	1237	1415	1485	1716	1729	1397	955	498	216	115	933	1022	897
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	16.1	15.3	20.7	22.5	20.8	23.0	25.0	27.9	28.1	23.5	15.5	16.7	15.6	7.2	15.2	16.6	16.1
POWER																	
AVE POWER MW		73	97	105	97	108	117	131	132	111	77	84	79	37	76	82	77
PEAK POW MW		517	509	509	509	509	509	509	509	521	538	538	538	538	538	538	529
ENERGY GWH	852.5	26.2	16.3	22.7	70.1	80.2	84.1	97.2	97.9	79.9	57.6	30.3	13.2	7.1	56.8	60.8	52.1
--FORT RANDALL--																	
NAT INFLOW	368	71	33	43	90	63	121	26	16	-11	-32	-13	-6	-7	-42	-21	37
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	143							10	32	39	29	11	5	5	12		
REG INFLOW	14906	526	320	443	1323	1469	1594	1714	1699	1340	892	473	205	103	875	998	931
RELEASE	14906	235	186	443	1323	1469	1594	1714	1699	1607	1611	712	232	103	722	698	557
STOR CHANGE	0	291	134			0	0	0	0	-267	-719	-239	-27	0	153	300	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3282	2563	2324	2297	2297	2450	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1352.0	1342.0	1338.0	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	10.1	7.9	13.4	24.8	22.2	23.9	26.8	27.9	27.6	27.0	26.2	23.9	16.7	6.5	11.7	11.3	10.0
POWER																	
AVE POWER MW		66	113	210	188	202	226	235	233	225	206	177	122	48	87	87	80
PEAK POW MW		351	356	356	356	356	356	356	356	345	305	287	285	285	297	319	339
ENERGY GWH	1476.2	23.6	19.0	45.3	135.4	150.2	162.7	174.8	173.3	161.8	153.5	63.9	20.5	9.1	64.6	64.6	53.8
--GAVINS POINT--																	
NAT INFLOW	1223	84	39	50	117	133	143	82	66	71	102	49	23	26	71	71	97
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	4	-11	-22	5	-3	-6	-2	0	1	1	4	13	19	-10	1	2
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	15970	324	215	472	1440	1580	1708	1752	1747	1673	1703	756	264	143	769	769	656
RELEASE	15970	324	215	472	1440	1580	1708	1752	1734	1648	1703	756	264	143	769	769	694
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	12.5	10.9	15.5	26.4	24.2	25.7	28.7	28.5	28.2	27.7	27.7	25.4	19.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	54	90	83	88	98	97	96	96	97	89	67	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	668.1	13.7	9.1	19.5	59.7	65.3	70.3	72.1	71.8	69.2	72.2	32.1	11.3	6.2	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	762	95	44	57	98	131	71	76	44	38	27	19	9	10	5	16	22
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	16464	412	256	524	1516	1675	1748	1789	1741	1662	1719	769	270	150	761	771	701
KCFS		13.8	18.4	29.4	25.5	27.2	29.4	29.1	28.3	27.9	28.0	25.8	19.4	9.4	12.4	12.5	12.6
--TOTAL--																	
NAT INFLOW	16800	1032	481	619	1562	2413	4126	2065	830	583	838	378	176	201	307	402	787
DEPLETION	2803	50	23	30	187	444	1357	1175	339	-157	-72	-118	-55	-63	-152	-139	-47
CHAN STOR	51	127	-11	-22	-31	-46	-11	7	0	39	37	4	13	17	-62	-14	2
EVAPORATION	1869							118	366	454	389	173	80	92	198		
STORAGE	48705	49402	49593	49636	49464	49712	50721	49711	48095	46758	45597	45156	45050	45091	44529	44285	44420
SYSTEM POWER																	
AVE POWER MW		584	738	900	931	1071	1142	1178	1175	1014	798	781	684	441	711	757	738
PEAK POW MW		2228	2226	2226	2223	2226	2237	2223	2201	2188	2158	2137	2133	2134	2100	2116	2126
ENERGY GWH	7962.0	210.4	124.0	194.5	670.2	796.9	822.5	876.4	874.0	730.4	593.9	281.2	114.9	84.6	529.2	563.0	495.9
DAILY GWH		14.0	17.7	21.6	22.3	25.7	27.4	28.3	28.2	24.3	19.2	18.7	16.4	10.6	17.1	18.2	17.7

VALUES IN 1000 AF EXCEPT AS INDICATED

28FEB13		2013										2014			
INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																
NAT INFLOW 5589	200	93	120	486	875	1237	631	280	254	331	163	76	87	238	217	300
DEPLETION 560	-8	-4	-5	64	289	489	254	24	-96	-78	-32	-15	-17	-105	-118	-83
EVAPORATION 451							28	87	108	94	43	20	23	49		
MOD INFLOW 4578	208	97	125	422	586	748	349	169	242	315	152	71	81	294	335	383
RELEASE 5464	149	69	89	446	523	536	553	553	423	307	149	69	79	523	523	472
STOR CHANGE -886	59	28	36	-24	63	212	-204	-384	-181	7	4	2	2	-229	-188	-89
STORAGE 11230	11289	11317	11352	11328	11391	11604	11400	11015	10834	10842	10846	10847	10849	10621	10433	10344
ELEV FTMSL 2215.2	2215.6	2215.7	2216.0	2215.8	2216.2	2217.4	2216.2	2214.0	2212.9	2213.0	2213.0	2213.0	2213.0	2213.0	2211.6	2210.5	2210.0
DISCH KCFS 9.5	5.0	5.0	5.0	7.5	8.5	9.0	9.0	9.0	7.1	5.0	5.0	5.0	5.0	8.5	8.5	8.5
POWER																
AVE POWER MW	64	64	64	95	108	115	115	114	89	63	63	63	63	106	106	105
PEAK POW MW	145	146	146	146	146	148	146	144	142	142	142	143	143	141	140	139
ENERGY GWH 834.1	22.9	10.7	13.8	68.7	80.4	82.7	85.5	84.8	64.4	46.8	22.6	10.6	12.1	79.0	78.5	70.7
--GARRISON--																
NAT INFLOW 7910	391	182	234	615	1128	2357	1154	385	171	417	158	74	84	144	144	273
DEPLETION 1052	11	5	7	26	176	750	611	117	-147	-30	-123	-57	-66	-104	-75	-49
CHAN STOR 11	48			-26	-11	-5			20	22			0	-37		0
EVAPORATION 530							33	103	127	110	50	23	26	57		
REG INFLOW 11803	576	246	317	1009	1464	2137	1063	719	633	667	380	177	202	677	742	794
RELEASE 12892	387	180	232	952	1353	1220	1261	1261	1003	799	387	180	230	1107	1230	1111
STOR CHANGE -1089	189	66	85	57	111	917	-197	-542	-369	-133	-7	-3	-28	-430	-488	-317
STORAGE 13745	13934	14000	14085	14142	14253	15170	14973	14431	14062	13929	13922	13918	13891	13461	12973	12656
ELEV FTMSL 1821.9	1822.6	1822.9	1823.2	1823.4	1823.8	1827.3	1826.6	1824.5	1823.1	1822.6	1822.6	1822.5	1822.4	1820.7	1818.8	1817.5
DISCH KCFS 20.0	13.0	13.0	13.0	16.0	22.0	20.5	20.5	20.5	16.9	13.0	13.0	13.0	14.5	18.0	20.0	20.0
POWER																
AVE POWER MW	147	147	148	182	249	236	238	236	192	147	147	147	164	202	221	218
PEAK POW MW	414	414	416	416	418	431	428	421	415	413	413	413	413	407	400	395
ENERGY GWH 1765.7	52.8	24.7	31.9	130.8	185.5	169.6	176.9	175.2	138.1	109.7	53.0	24.7	31.5	150.0	164.4	146.8
--OAHE--																
NAT INFLOW 1196	204	95	122	177	119	265	130	52	68	5	8	4	4	-104	-21	68
DEPLETION 709	24	11	15	50	73	151	182	122	30	-11	1	0	1	13	18	29
CHAN STOR 0	33			-14	-28	7			18	19			-7	-17	-10	
EVAPORATION 472							30	91	113	98	44	21	24	52		
REG INFLOW 12907	599	264	340	1065	1371	1341	1179	1099	946	737	349	163	203	921	1181	1150
RELEASE 14023	452	260	395	1210	1553	1452	1711	1740	1032	852	236	126	141	945	1022	896
STOR CHANGE -1116	147	4	-55	-145	-182	-111	-532	-641	-86	-115	113	37	61	-24	159	254
STORAGE 14359	14506	14510	14455	14310	14128	14016	13484	12843	12757	12642	12756	12793	12854	12830	12989	13243
ELEV FTMSL 1591.4	1592.0	1592.0	1591.8	1591.2	1590.5	1590.1	1587.9	1585.1	1584.7	1584.2	1584.7	1584.9	1585.2	1585.1	1585.7	1586.8
DISCH KCFS 16.1	15.2	18.7	22.1	20.3	25.3	24.4	27.8	28.3	17.3	13.8	7.9	9.1	8.9	15.4	16.6	16.1
POWER																
AVE POWER MW	180	223	262	241	297	286	324	324	198	158	91	104	102	175	190	185
PEAK POW MW	629	629	628	625	621	619	608	593	591	589	591	592	594	593	597	602
ENERGY GWH 1967.2	64.9	37.4	56.6	173.2	221.1	206.1	240.7	241.3	142.4	117.3	32.6	17.4	19.6	130.5	141.4	124.6
--BIG BEND--																
EVAPORATION 129							8	24	31	27	12	6	7	14		
REG INFLOW 13895	452	260	395	1210	1553	1452	1703	1716	1001	825	224	120	135	930	1022	896
RELEASE 13895	452	260	395	1210	1553	1452	1703	1716	1001	825	224	120	135	930	1022	896
STORAGE 1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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 16.1	15.2	18.7	22.1	20.3	25.3	24.4	27.7	27.9	16.8	13.4	7.5	8.7	8.5	15.1	16.6	16.1
POWER																
AVE POWER MW	72	88	104	95	118	114	130	131	82	68	38	44	43	76	82	77
PEAK POW MW	517	509	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH 803.8	25.9	14.7	22.4	68.5	88.0	82.3	96.5	97.2	59.1	50.4	13.7	7.4	8.3	56.7	60.8	52.0
--FORT RANDALL--																
NAT INFLOW 378	73	34	44	92	65	124	27	16	-11	-32	-14	-6	-7	-43	-22	38
DEPLETION 80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION 137							10	32	37	26	10	5	5	12		
REG INFLOW 14055	523	294	438	1298	1609	1564	1702	1685	947	765	200	109	122	872	997	931
RELEASE 14055	232	160	438	1298	1609	1564	1702	1685	1594	1370	200	109	122	719	697	557
STOR CHANGE 0	291	134					0	0	-647	-605	0	0	0	153	300	374
STORAGE 3124	3415	3549	3549	3549	3549	3549	3549	3549	2902	2297	2297	2297	2297	2450	2750	3124
ELEV FTMSL 1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1347.0	1337.5	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS 10.0	7.8	11.5	24.5	21.8	26.2	26.3	27.7	27.4	26.8	22.3	6.7	7.8	7.7	11.7	11.3	10.0
POWER																
AVE POWER MW	65	97	207	185	221	222	233	231	218	169	49	57	56	86	87	80
PEAK POW MW	351	356	356	356	356	356	356	356	328	284	285	285	285	297	319	339
ENERGY GWH 1390.3	23.3	16.4	44.8	132.8	164.2	159.7	173.6	171.9	157.2	125.4	17.8	9.6	10.8	64.4	64.5	53.8
--GAVINS POINT--																
NAT INFLOW 1233	85	40	51	118	134	144	82	67	72	103	49	23	26	72	72	97
DEPLETION 114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR -1	4	-7	-25	5	-8	0	-3	1	1	8	29	-2	0	-7	1	2
EVAPORATION 45							3	8	11	10	4	2	2	5		
REG INFLOW 15128	322	192	464	1416	1716	1684	1740	1735	1661	1470	268	125	143	769	769	656
RELEASE 15128	322	192	464	1416	1716	1684	1740	1722	1636	1470	268	125	143	769	769	694
STOR CHANGE								13	25							-38
STORAGE 342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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 12.5	10.8	13.9	26.0	23.8	27.9	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	38	48	89	82	95	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 632.7	13.6	8.1	19.2	58.8	70.7	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 794	99	46	59	102	136	74	79	45	40	28	20	9	11	6	17	23
DEPLETION 270	7	3	4	23	36	31	39	37	25	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																
KAF 15652	413	235	519	1495	1816	1727	1780	1730	1651	1487	282	131	150	762	772	702
KCFS	13.9	16.9	29.1	25.1	29.5	29.0	29.0	28.1	27.8	24.2	9.5	9.5	9.5	12.4	12.5	12.6
--TOTAL--																
NAT INFLOW 17100	1051	490	630	1590	2457	4201	2103	845	594	852	384	179	205	313	407	799
DEPLETION 2785	35	16	21	172	602	1457	1143	325	-186	-105	-142	-66	-76	-170	-157	-85
CHAN STOR 9	85	-7	-25	-35	-47	2	-3	1	39	49	29	-2	-7	-62	-9	2
EVAPORATION 1763							111	345	426	365	163	76	87	189		
STORAGE 44420	45108	45339	45404	45292	45284	46303	45369	43815	42556	41711	41821	41856	41892	41362	41145	41329
SYSTEM POWER																
AVE POWER MW	565	667	873	879	1089	1069	1135	1131	875	688	420	447	460	690	729	711
PEAK POW MW	2170	2168	2169	2167	2165	2177	2162	2138	2132	2084	2087	2088	2089	2054	2071	2080
ENERGY GWH 7393.7	203.5	112.0	188.6	632.8	809.9	769.7	844.8	841.7	630.0	512.1	151.3	75.1	88.4	513.7	542.7	477.6
DAILY GWH	13.6	16.0	21.0	21.1	26.1	25.7	27.3	27.2	21.0	16.5	10.1	10.7	11.0	16.6	17.5	17.1
INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB14	2014											2015			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	5895	212	99	127	513	922	1305	666	295	267	349	172	80	92	251	229	317
DEPLETION	487	-24	-11	-14	49	273	474	261	28	-96	-80	-33	-15	-17	-106	-118	-84
EVAPORATION	436							27	84	104	91	41	19	22	47		
MOD INFLOW	4972	235	110	141	464	649	831	378	183	259	338	163	76	87	310	347	401
RELEASE	5429	134	62	80	387	553	536	553	553	424	307	149	69	103	523	523	472
STOR CHANGE	-457	101	47	61	77	96	295	-175	-371	-165	31	15	7	-16	-213	-176	-71
STORAGE	10344	10445	10492	10553	10630	10726	11021	10846	10475	10310	10341	10356	10362	10346	10133	9958	9886
ELEV FTMSL	2210.0	2210.6	2210.9	2211.2	2211.7	2212.3	2214.0	2213.0	2210.8	2209.8	2209.9	2210.0	2210.1	2210.0	2208.7	2207.6	2207.1
DISCH KCFS	8.5	4.5	4.5	4.5	6.5	9.0	9.0	9.0	9.0	7.1	5.0	5.0	5.0	6.5	8.5	8.5	8.5
POWER																	
AVE POWER MW		56	56	56	81	112	113	113	112	88	62	62	62	80	105	104	104
PEAK POW MW		140	140	141	141	142	144	143	140	139	139	139	139	139	138	136	136
ENERGY GWH	815.0	20.1	9.4	12.1	58.3	83.5	81.3	84.1	83.5	63.5	46.1	22.3	10.4	15.4	77.9	77.4	69.6
--GARRISON--																	
NAT INFLOW	8842	437	204	262	687	1261	2635	1290	430	191	466	177	82	94	161	161	305
DEPLETION	1050	6	3	4	16	191	792	624	122	-150	-34	-132	-61	-70	-116	-86	-59
CHAN STOR	0	43			-21	-27				20	23			-16	-21		0
EVAPORATION	513							32	99	123	107	48	23	26	55		
REG INFLOW	12709	607	263	338	1036	1597	2379	1188	762	662	723	408	191	226	723	770	836
RELEASE	13269	387	180	232	1131	1537	1309	1230	1230	981	799	387	180	238	1107	1230	1111
STOR CHANGE	-560	221	83	106	-94	59	1069	-42	-467	-320	-76	22	10	-12	-384	-460	-275
STORAGE	12656	12876	12959	13065	12971	13030	14100	14058	13591	13271	13195	13217	13227	13214	12830	12370	12095
ELEV FTMSL	1817.5	1818.4	1818.7	1819.2	1818.8	1819.0	1823.2	1823.1	1821.2	1820.0	1819.7	1819.8	1819.8	1819.8	1818.2	1816.3	1815.1
DISCH KCFS	20.0	13.0	13.0	13.0	19.0	25.0	22.0	20.0	20.0	16.5	13.0	13.0	13.0	15.0	18.0	20.0	20.0
POWER																	
AVE POWER MW		142	143	143	209	274	245	226	225	184	144	144	144	166	198	217	215
PEAK POW MW		398	399	401	400	400	416	415	409	404	403	403	403	403	397	390	386
ENERGY GWH	1773.4	51.3	24.0	31.0	150.4	203.7	176.5	168.3	167.2	132.3	107.4	51.9	24.3	31.9	147.4	161.5	144.3
--OAHE--																	
NAT INFLOW	1272	217	101	130	188	127	282	138	55	72	6	9	4	5	-111	-22	72
DEPLETION	724	25	12	15	51	75	154	187	125	30	-12	1	0	1	13	19	29
CHAN STOR	0	34			-29	-29	15	10		18	18			-10	-15	-10	
EVAPORATION	456							29	88	109	94	43	20	23	50		
REG INFLOW	13361	613	270	347	1238	1560	1452	1162	1072	932	741	352	164	209	918	1179	1154
RELEASE	13936	441	276	384	1192	1533	1429	1704	1736	1030	852	236	126	141	948	1022	886
STOR CHANGE	-574	172	-5	-37	46	28	22	-543	-665	-98	-112	116	38	68	-30	157	268
STORAGE	13243	13415	13409	13372	13419	13446	13469	12926	12261	12163	12052	12168	12206	12274	12244	12400	12668
ELEV FTMSL	1586.8	1587.6	1587.5	1587.4	1587.6	1587.7	1587.8	1585.5	1582.5	1582.1	1581.6	1582.1	1582.3	1582.6	1582.4	1583.2	1584.3
DISCH KCFS	16.1	14.8	19.8	21.5	20.0	24.9	24.0	27.7	28.2	17.3	13.9	7.9	9.1	8.9	15.4	16.6	15.9
POWER																	
AVE POWER MW		172	230	249	232	288	278	318	319	194	155	89	102	100	173	187	181
PEAK POW MW		606	606	605	606	607	607	595	580	577	575	578	578	580	579	583	589
ENERGY GWH	1922.1	61.8	38.6	53.7	166.8	214.2	200.0	236.5	237.2	139.9	115.6	32.0	17.1	19.2	129.0	139.2	121.4
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13807	441	276	384	1192	1533	1429	1696	1712	999	825	223	120	135	933	1022	886
RELEASE	13807	441	276	384	1192	1533	1429	1696	1712	999	825	223	120	135	933	1022	886
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	16.1	14.8	19.8	21.5	20.0	24.9	24.0	27.6	27.8	16.8	13.4	7.5	8.6	8.5	15.2	16.6	15.9
POWER																	
AVE POWER MW		70	93	101	94	117	112	129	130	82	68	38	44	43	76	82	77
PEAK POW MW		517	509	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	798.8	25.3	15.6	21.8	67.5	86.8	81.0	96.1	96.9	58.9	50.4	13.7	7.4	8.3	56.9	60.8	51.4
--FORT RANDALL--																	
NAT INFLOW	430	83	39	50	105	74	141	31	18	-12	-37	-16	-7	-8	-49	-25	43
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	137							10	32	37	26	10	5	5	12		
REG INFLOW	14020	523	314	433	1293	1598	1558	1699	1683	944	761	197	107	120	869	994	926
RELEASE	14020	232	180	433	1293	1598	1558	1699	1683	1591	1366	197	108	120	716	694	552
STOR CHANGE	0	291	134				0	0	0	-647	-605	0	0	0	153	300	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	2902	2297	2297	2296	2297	2450	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1347.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	10.0	7.8	12.9	24.3	21.7	26.0	26.2	27.6	27.4	26.7	22.2	6.6	7.7	7.6	11.6	11.3	9.9
POWER																	
AVE POWER MW		65	109	205	184	219	221	233	231	218	168	49	57	56	86	86	79
PEAK POW MW		351	356	356	356	356	356	356	356	328	284	285	285	285	297	319	339
ENERGY GWH	1387.0	23.3	18.4	44.3	132.4	163.1	159.1	173.3	171.7	156.9	125.1	17.5	9.5	10.7	64.1	64.2	53.4
--GAVINS POINT--																	
NAT INFLOW	1284	88	41	53	123	139	150	85	69	75	107	51	24	27	75	75	102
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	4	-10	-22	5	-8	0	-3	1	1	8	29	-2	0	-8	1	3
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	15145	325	211	464	1416	1709	1684	1740	1735	1661	1470	268	125	143	769	769	656
RELEASE	15145	325	211	464	1416	1709	1684	1740	1722	1636	1470	268	125	143	769	769	694
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	12.5	10.9	15.2	26.0	23.8	27.8	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		38	53	89	82	95	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	633.4	13.8	8.9	19.2	58.7	70.4	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	977	121	57	73	125	167	91	98	56	49	35	25	11	13	7	21	28
DEPLETION	276	7	3	4	23	36	32	39	38	25	11	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	15846	439	264	533	1518	1840	1743	1799	1740	1660	1494	286	133	152	762	775	707
KCFS		14.8	19.0	29.9	25.5	29.9	29.3	29.3	28.3	27.9	24.3	9.6	9.6	9.6	12.4	12.6	12.7
--TOTAL--																	
NAT INFLOW	18700	1158	540	694	1741	2690	4604	2308	923	642	926	417	195	222	334	439	867
DEPLETION	2731	15	7	9	148	603	1488	1168	338	-189	-112	-151	-70	-80	-182	-166	-96
CHAN STOR	-1	82	-10	-22	-46	-64	14	7	1	39	48	30	-2	-26	-44	-9	3
EVAPORATION	1715							108	335	414	355	159	74	85	184		
STORAGE	41329	42114	42373	42503	42532	42715	44102	43342	41852	40648	39885	40037	40092	40132	39658	39479	39737
SYSTEM POWER																	
AVE POWER MW		543	684	843	881	1104	1065	1116	1113	862	682	414	441	478	683	721	699
PEAK POW MW		2126	2125	2126	2126	2129	2147	2133	2109	2104	2056	2060	2061	2062	2028	2045	2055
ENERGY GWH	7329.8	195.6	114.9	182.0	634.2	821.7	767.1	830.0	827.8	620.3	507.1	149.1	74.1	91.7	508.2	536.2	469.8
DAILY GWH		13.0	16.4	20.2	21.1	26.5	25.6	26.8	26.7	20.7	16.4	9.9	10.6	11.5	16.4	17.3	16.8
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB15	2015											2016			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	5983	214	100	129	521	936	1324	676	299	271	355	175	81	93	255	233	321
DEPLETION	494	-24	-11	-14	49	274	478	268	33	-96	-82	-33	-15	-17	-107	-117	-92
EVAPORATION	425							26	82	101	89	40	19	22	46		
MOD INFLOW	5064	238	111	143	472	662	846	382	184	266	348	167	78	89	316	350	413
RELEASE	5375	119	56	71	476	553	536	553	553	401	277	134	62	79	492	523	489
STOR CHANGE	-311	119	56	71	-4	109	310	-172	-369	-136	72	33	15	10	-176	-173	-76
STORAGE	9886	10006	10061	10133	10128	10237	10548	10376	10007	9871	9943	9976	9991	10001	9824	9652	9576
ELEV FTMSL	2207.1	2207.9	2208.2	2208.7	2208.6	2209.3	2211.2	2210.2	2207.9	2207.0	2207.5	2207.7	2207.8	2207.8	2206.7	2205.6	2205.1
DISCH KCFS	8.5	4.0	4.0	4.0	8.0	9.0	9.0	9.0	9.0	6.7	4.5	4.5	4.5	5.0	8.0	8.5	8.5
POWER																	
AVE POWER MW		49	49	49	98	111	111	112	111	82	55	55	55	61	98	103	103
PEAK POW MW		137	137	138	138	138	140	139	137	136	136	136	137	137	135	134	134
ENERGY GWH	796.7	17.6	8.3	10.6	70.7	82.3	80.1	83.0	82.3	59.3	41.0	19.8	9.3	11.8	72.6	76.7	71.4
--GARRISON--																	
NAT INFLOW	9140	452	211	271	710	1303	2723	1334	444	198	482	182	85	97	167	167	315
DEPLETION	1095	1	1	1	6	204	814	653	128	-152	-39	-133	-62	-71	-113	-82	-61
CHAN STOR	0	49			-43	-11				24	24			-5	-32	-5	0
EVAPORATION	507							31	98	122	106	48	22	25	55		
REG INFLOW	12913	618	265	341	1137	1642	2445	1203	771	653	716	401	187	217	685	766	865
RELEASE	13295	402	187	241	1071	1537	1190	1230	1230	1010	861	417	194	238	1107	1230	1150
STOR CHANGE	-383	217	78	100	66	104	1254	-27	-459	-357	-145	-15	-7	-21	-422	-464	-285
STORAGE	12095	12312	12390	12490	12556	12660	13915	13888	13429	13072	12927	12912	12905	12884	12462	11998	11713
ELEV FTMSL	1815.1	1816.1	1816.4	1816.8	1817.1	1817.5	1822.5	1822.4	1820.6	1819.2	1818.6	1818.5	1818.5	1818.4	1816.7	1814.7	1813.5
DISCH KCFS	20.0	13.5	13.5	13.5	18.0	25.0	20.0	20.0	20.0	17.0	14.0	14.0	14.0	15.0	18.0	20.0	20.0
POWER																	
AVE POWER MW		146	146	147	195	271	221	225	224	188	154	154	154	165	196	215	212
PEAK POW MW		390	391	392	393	395	413	413	406	401	399	399	399	398	392	385	380
ENERGY GWH	1760.6	52.4	24.6	31.7	140.6	201.4	159.4	167.5	166.4	135.5	114.9	55.5	25.9	31.6	145.9	159.8	147.8
--OAHE--																	
NAT INFLOW	1295	221	103	132	192	130	287	141	56	73	6	9	4	5	-113	-23	73
DEPLETION	736	25	12	15	51	76	157	191	128	31	-12	1	0	1	13	19	29
CHAN STOR	1	32			-22	-35	25			16	15			-5	-15	-10	
EVAPORATION	440							28	85	105	91	41	19	22	49		
REG INFLOW	13415	630	279	359	1190	1557	1345	1152	1073	964	803	383	178	215	917	1177	1194
RELEASE	13808	379	244	342	1193	1528	1422	1702	1734	1030	852	236	126	141	949	1022	908
STOR CHANGE	-393	251	35	17	-3	28	-78	-550	-661	-67	-49	147	53	73	-32	156	287
STORAGE	12668	12920	12955	12971	12969	12997	12919	12369	11708	11641	11592	11739	11792	11865	11834	11989	12276
ELEV FTMSL	1584.3	1585.4	1585.6	1585.7	1585.7	1585.8	1585.4	1583.0	1580.0	1579.7	1579.4	1580.1	1580.4	1580.7	1580.6	1581.3	1582.6
DISCH KCFS	15.9	12.7	17.5	19.2	20.0	24.9	23.9	27.7	28.2	17.3	13.9	7.9	9.1	8.9	15.4	16.6	15.8
POWER																	
AVE POWER MW		145	201	219	229	284	273	313	314	191	153	88	101	99	172	185	177
PEAK POW MW		595	596	596	596	597	595	582	566	565	563	567	568	570	569	573	580
ENERGY GWH	1880.3	52.4	33.7	47.3	165.1	211.2	196.5	232.9	233.4	137.8	114.0	31.6	16.9	19.0	127.6	137.7	123.1
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13679	379	244	342	1193	1528	1422	1694	1710	999	825	223	120	135	934	1022	908
RELEASE	13679	379	244	342	1193	1528	1422	1694	1710	999	825	223	120	135	934	1022	908
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	15.9	12.7	17.5	19.2	20.0	24.9	23.9	27.6	27.8	16.8	13.4	7.5	8.6	8.5	15.2	16.6	15.8
POWER																	
AVE POWER MW		60	82	90	94	116	112	129	130	82	68	38	44	43	77	82	76
PEAK POW MW		517	509	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	791.5	21.7	13.8	19.4	67.6	86.6	80.6	96.0	96.8	58.9	50.4	13.7	7.4	8.3	57.0	60.8	52.7
--FORT RANDALL--																	
NAT INFLOW	447	87	40	52	108	77	147	32	19	-13	-38	-16	-7	-9	-51	-26	45
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	137							10	32	37	26	10	5	5	12		
REG INFLOW	13909	464	283	393	1297	1596	1557	1698	1682	943	760	197	107	120	868	993	950
RELEASE	13909	173	149	393	1297	1596	1557	1698	1682	1590	1365	197	107	120	715	693	576
STOR CHANGE	0	291	134					0	0	-647	-605	0	0	0	153	300	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	2902	2297	2297	2296	2297	2450	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1347.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	9.9	5.8	10.8	22.0	21.8	26.0	26.2	27.6	27.4	26.7	22.2	6.6	7.7	7.6	11.6	11.3	10.0
POWER																	
AVE POWER MW		48	91	186	184	219	221	233	231	218	168	49	57	56	86	86	80
PEAK POW MW		351	356	356	356	356	356	356	356	328	284	285	285	285	297	319	339
ENERGY GWH	1375.7	17.4	15.3	40.2	132.7	163.0	159.0	173.2	171.6	156.8	125.0	17.5	9.5	10.7	64.0	64.1	55.7
--GAVINS POINT--																	
NAT INFLOW	1297	89	42	53	124	140	151	86	70	76	108	52	24	27	76	76	103
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	8	-9	-22	0	-8	0	-3	1	1	8	29	-2	0	-8	1	2
EVAPORATION	45							3	8	11	10	4	2	2	5		
REG INFLOW	15046	270	182	425	1416	1709	1684	1740	1735	1661	1470	268	125	143	769	769	681
RELEASE	15046	270	182	425	1416	1709	1684	1740	1722	1636	1470	268	125	143	769	769	719
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	12.5	9.1	13.1	23.8	23.8	27.8	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		32	46	82	82	95	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	629.3	11.5	7.7	17.6	58.7	70.4	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	1038	129	60	77	134	178	96	104	59	52	37	26	12	14	7	22	30
DEPLETION	277	7	3	4	23	36	32	40	38	25	11	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	15807	392	238	498	1527	1851	1748	1804	1743	1663	1496	287	134	153	762	776	734
KCFS		13.2	17.2	27.9	25.7	30.1	29.4	29.3	28.3	28.0	24.3	9.7	9.7	9.7	12.4	12.6	12.8
--TOTAL--																	
NAT INFLOW	19200	1192	556	715	1789	2764	4728	2373	947	657	950	427	199	227	341	449	887
DEPLETION	2796	11	5	6	138	618	1517	1209	352	-190	-119	-152	-71	-81	-180	-161	-106
CHAN STOR	-1	89	-9	-22	-65	-53	24	-3	1	41	47	30	-2	-10	-55	-15	2
EVAPORATION	1682							106	329	406	348	156	73	83	181		
STORAGE	39737	40615	40918	41106	41165	41407	42894	42145	40669	39487	38760	38925	38985	39047	38570	38390	38651
SYSTEM POWER																	
AVE POWER MW		481	615	773	882	1095	1035	1108	1105	857	682	416	442	456	672	715	692
PEAK POW MW		2103	2103	2106	2107	2110	2129	2114	2090	2085	2038	2042	2044	2045	2010	2027	2038
ENERGY GWH	7234.3	173.0	103.3	166.9	635.4	814.9	744.9	824.2	821.8	617.2	507.7	149.7	74.3	87.5	500.1	532.1	481.3
DAILY GWH		11.5	14.8	18.5	21.2	26.3	24.8	26.6	26.5	20.6	16.4	10.0	10.6	10.9	16.1	17.2	16.6
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB16	2016												2017			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	6017	216	101	129	524	942	1331	680	301	273	356	176	82	94	256	234	323
DEPLETION	511	-23	-11	-14	49	275	482	275	37	-96	-84	-34	-16	-18	-109	-119	-84
EVAPORATION	388							26	80	100	87	25	12	13	46		
MOD INFLOW	5118	239	111	143	475	667	849	379	184	269	353	185	86	98	319	353	407
RELEASE	5371	119	56	71	476	492	536	553	553	394	277	134	62	71	523	553	500
STOR CHANGE	-253	120	56	72	-1	175	313	-174	-370	-125	76	51	24	27	-203	-200	-93
STORAGE	9576	9695	9751	9823	9822	9997	10310	10136	9766	9641	9718	9768	9792	9819	9616	9415	9322
ELEV FTMSL	2205.1	2205.9	2206.3	2206.7	2206.7	2207.8	2209.8	2208.7	2206.4	2205.6	2206.0	2206.4	2206.5	2206.7	2205.4	2204.1	2203.5
DISCH KCFS	8.5	4.0	4.0	4.0	8.0	8.0	9.0	9.0	9.0	6.6	4.5	4.5	4.5	4.5	8.5	9.0	9.0
POWER																	
AVE POWER MW		49	49	49	97	98	110	111	110	80	55	55	55	55	103	108	108
PEAK POW MW		134	135	135	135	137	139	138	135	134	135	135	135	135	134	132	132
ENERGY GWH	789.9	17.5	8.2	10.5	70.0	72.6	79.6	82.4	81.7	57.9	40.7	19.7	9.2	10.5	76.6	80.5	72.4
--GARRISON--																	
NAT INFLOW	9260	457	213	274	720	1320	2759	1351	451	200	488	185	86	98	169	169	319
DEPLETION	1240	4	2	3	11	203	823	694	133	-155	-43	-125	-58	-67	-91	-59	-35
CHAN STOR	-5	49			-44		-11			25	23				-43	-5	
EVAPORATION	464							31	97	120	104	30	14	16	54		
REG INFLOW	12922	621	267	343	1141	1609	2461	1180	775	655	727	414	193	221	686	776	854
RELEASE	13231	387	180	232	1131	1476	1250	1230	1230	1012	830	402	187	238	1107	1230	1111
STOR CHANGE	-309	235	86	111	11	133	1211	-50	-455	-357	-103	12	6	-17	-421	-454	-257
STORAGE	11713	11947	12034	12145	12156	12289	13500	13450	12995	12638	12535	12547	12553	12535	12114	11660	11403
ELEV FTMSL	1813.5	1814.5	1814.9	1815.3	1815.4	1816.0	1820.9	1820.7	1818.9	1817.4	1817.0	1817.0	1817.1	1817.0	1815.2	1813.3	1812.2
DISCH KCFS	20.0	13.0	13.0	13.0	19.0	24.0	21.0	20.0	20.0	17.0	13.5	13.5	13.5	15.0	18.0	20.0	20.0
POWER																	
AVE POWER MW		139	139	140	204	257	230	223	221	186	147	147	147	163	194	213	210
PEAK POW MW		384	385	387	387	389	407	407	400	394	393	393	393	386	379	375	
ENERGY GWH	1733.0	49.9	23.4	30.2	146.6	191.3	165.4	165.6	164.4	134.1	109.5	52.9	24.7	31.3	144.4	158.1	141.2
--OAHE--																	
NAT INFLOW	1305	222	104	133	193	130	289	142	57	74	6	9	4	5	-113	-23	74
DEPLETION	752	25	12	15	52	77	160	195	132	32	-12	1	0	1	13	19	30
CHAN STOR	0	35			-30	-25	15	5		16	18			-8	-16	-10	
EVAPORATION	400							27	83	102	89	25	12	14	47		
REG INFLOW	13385	619	272	350	1241	1504	1394	1154	1072	968	778	384	179	220	918	1177	1155
RELEASE	13702	437	252	340	1190	1406	1423	1700	1733	1030	853	226	121	136	950	1022	883
STOR CHANGE	-317	182	20	11	52	98	-30	-546	-662	-63	-76	158	58	85	-32	155	272
STORAGE	12276	12458	12478	12488	12540	12638	12608	12062	11401	11338	11262	11420	11478	11563	11531	11686	11958
ELEV FTMSL	1582.6	1583.4	1583.5	1583.5	1583.8	1584.2	1584.1	1581.6	1578.5	1578.2	1577.8	1578.6	1578.9	1579.3	1579.1	1579.9	1581.1
DISCH KCFS	15.8	14.7	18.2	19.0	20.0	22.9	23.9	27.6	28.2	17.3	13.9	7.6	8.7	8.6	15.4	16.6	15.9
POWER																	
AVE POWER MW		166	205	215	226	259	271	310	311	190	152	83	96	95	170	183	177
PEAK POW MW		584	585	585	586	589	588	575	559	557	555	559	561	563	562	566	573
ENERGY GWH	1848.5	59.7	34.5	46.4	162.7	192.4	194.9	230.7	231.2	136.6	113.1	30.0	16.1	18.2	126.7	136.5	118.7
--BIG BEND--																	
EVAPORATION	120							8	24	31	27	8	4	4	14		
REG INFLOW	13582	437	252	340	1190	1406	1423	1692	1709	999	826	218	117	132	936	1022	883
RELEASE	13582	437	252	340	1190	1406	1423	1692	1709	999	826	218	117	132	936	1022	883
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
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	15.8	14.7	18.2	19.0	20.0	22.9	23.9	27.5	27.8	16.8	13.4	7.3	8.5	8.3	15.2	16.6	15.9
POWER																	
AVE POWER MW		70	85	89	94	107	112	129	130	82	68	37	43	42	77	82	76
PEAK POW MW		517	509	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	786.1	25.1	14.3	19.2	67.4	79.6	80.6	95.8	96.8	58.9	50.5	13.4	7.2	8.1	57.0	60.8	51.2
--FORT RANDALL--																	
NAT INFLOW	453	88	41	53	110	78	149	33	19	-13	-39	-16	-7	-9	-52	-26	45
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	129							10	32	37	26	6	3	3	12		
REG INFLOW	13826	524	293	391	1296	1475	1560	1697	1681	943	760	195	106	119	868	993	925
RELEASE	13826	232	159	391	1296	1475	1560	1697	1681	1590	1365	195	107	119	715	693	551
STOR CHANGE	0	291	134		0	0		0	0	-647	-605	0	0	0	153	300	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	2902	2297	2297	2297	2297	2450	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1347.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	10.0	7.8	11.4	21.9	21.8	24.0	26.2	27.6	27.3	26.7	22.2	6.6	7.7	7.5	11.6	11.3	9.9
POWER																	
AVE POWER MW		65	97	185	184	203	221	233	231	218	168	48	56	55	86	86	79
PEAK POW MW		351	356	356	356	356	356	356	356	328	284	285	285	285	297	319	339
ENERGY GWH	1367.5	23.3	16.2	40.0	132.6	150.7	159.3	173.1	171.5	156.8	125.0	17.3	9.5	10.6	64.0	64.1	53.3
--GAVINS POINT--																	
NAT INFLOW	1303	90	42	54	125	141	152	87	71	76	108	52	24	27	76	76	103
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	4	-7	-20	0	-4	-4	-3	0	1	8	29	-2	0	-8	1	3
EVAPORATION	41							3	8	11	10	3	1	1	5		
REG INFLOW	14972	326	194	425	1416	1593	1684	1740	1735	1661	1470	268	125	143	769	769	656
RELEASE	14972	326	194	425	1416	1593	1684	1740	1722	1636	1470	268	125	143	769	769	694
STOR CHANGE									13	25							-38
STORAGE	342	342	342	342	342	342	342	342	355	380	380	380	380	380	380	380	342
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	12.5	11.0	13.9	23.8	23.8	25.9	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		38	49	82	82	88	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	626.5	13.8	8.2	17.6	58.7	65.8	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	1062	132	62	79	136	182	99	106	61	53	38	27	12	14	8	23	30
DEPLETION	280	7	3	4	24	37	32	40	38	25	12	7	3	3	14	15	15
REGULATED FLOW AT SIOUX CITY																	
KAF	15754	451	252	500	1528	1738	1751	1806	1745	1664	1496	288	134	154	763	777	709
KCFS		15.2	18.1	28.0	25.7	28.3	29.4	29.4	28.4	28.0	24.3	9.7	9.7	9.7	12.4	12.6	12.8
--TOTAL--																	
NAT INFLOW	19400	1205	562	722	1808	2793	4779	2399	960	663	957	431	201	230	344	453	894
DEPLETION	2977	15	7	9	145	620	1533	1261	365	-192	-124	-146	-68	-78	-160	-140	-71
CHAN STOR	-6	89	-7	-20	-73	-29	0	2	0	42	49	30	-2	-8	-67	-15	3
EVAPORATION	1542							104	324	400	342	97	45	52	178		
STORAGE	38651	39478	39775	39968	40029	40436	41930	41160	39687	38520	37813	38034	38121	38215	37711	37512	37771
SYSTEM POWER																	
AVE POWER MW		526	624	759	886	1011	1040	1101	1098	851	674	402	429	442	674	717	694
PEAK POW MW		2085	2085	2087	2089	2094	2114	2099	2074	2069	2022	2027	2029	2031	1996	2012	2024
ENERGY GWH	7151.5	189.4	104.8	164.0	638.2	752.5	749.1	819.3	816.9	613.1	501.2	144.9	72.1	84.8	501.7	533.1	466.4
DAILY GWH		12.6	15.0	18.2	21.3	24.3	25.0	26.4	26.4	20.4	16.2	9.7	10.3	10.6	16.2	17.2	16.7

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB