US Army Corps
of Engineers

Northwestern Division
Missouri River Basin
Water Management Division

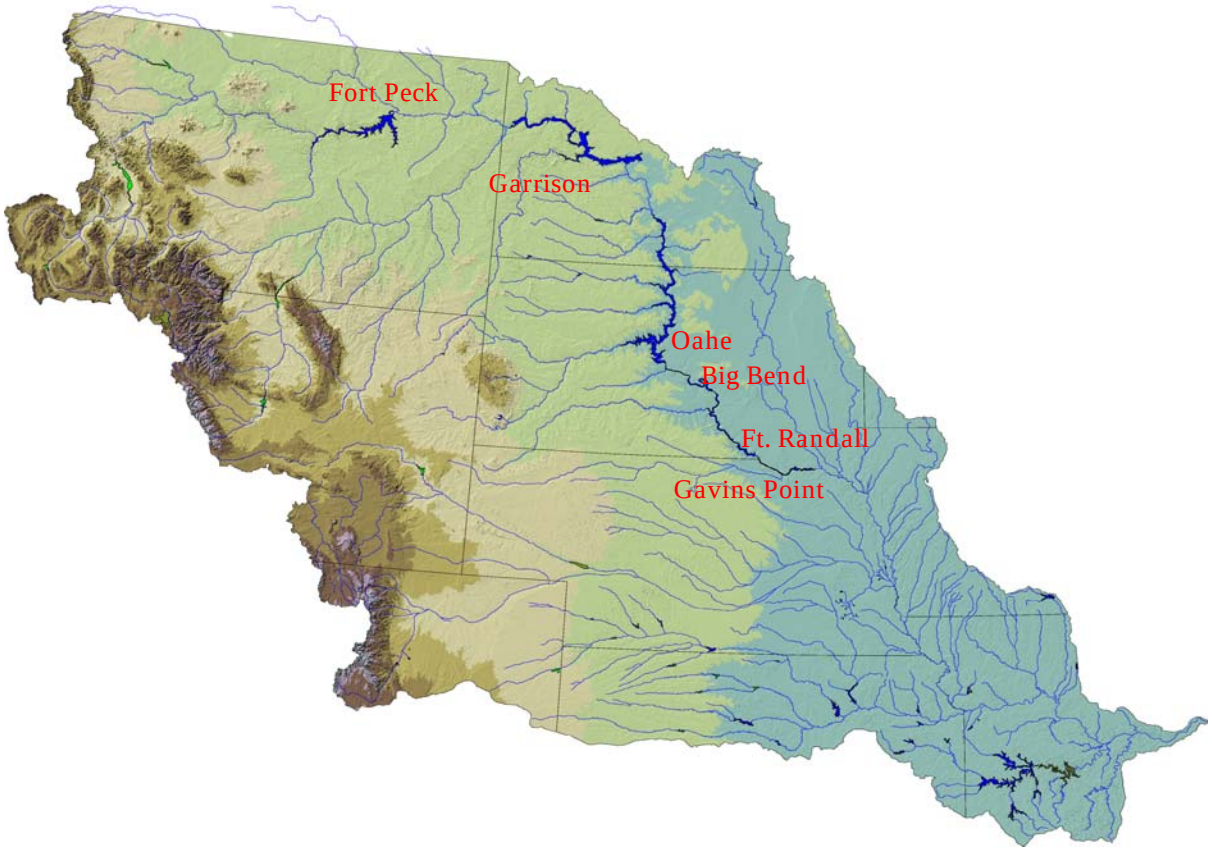
Final

AOP

2006-2007

Missouri River Mainstem System

2006-2007 Annual Operating Plan



Annual Operating Plan Process
54 Years Serving the Missouri River Basin

December 2006

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

REPLY TO ATTENTION OF

December 21, 2006

Office of the Commander

Dear Stakeholders and Concerned Citizens,

This Annual Operating Plan (AOP) presents information regarding the Corps of Engineers' regulation of the Missouri River Mainstem Reservoir System (System) through December 2007. The information provided in this AOP is based on water management guidelines designed to meet the regulation objectives of the Missouri River Master Water Control Manual (Master Manual). These guidelines are applied to computer simulations of System regulation, assuming inflow scenarios based on water supply records from 1898 to 1997. This approach provides a wide range of water management simulations for dry, average, and wet conditions.

The AOP provides a framework for the development of detailed monthly, weekly, and daily regulation schedules for the System's six individual dams during the upcoming year, to serve its Congressionally-authorized project purposes, meet our Tribal Trust and Treaty responsibilities, and comply with law to include the Endangered Species Act. In addition, 5-year extensions to the AOP water management simulations, through March 2013, are presented to serve as guides for longer range planning. System water management 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 2006. Six fall public meetings on the Draft 2006-2007 AOP were held as follows: October 10 in Omaha, Nebraska; October 11 in St. Louis and Kansas City, Missouri; October 12 in Fort Peck, Montana and Bismarck, North Dakota; and October 13 at Pierre, South Dakota. The primary purposes of these meetings were to present a synopsis of the Draft AOP and to allow those in attendance to make comments in person to Corps of Engineers' staff. Attendees included representatives from the Tribes, Missouri River basin states, public and industry interest groups and private citizens. In addition, during the summer and fall of 2006, three Tribal informational meetings were held as follows: August 15-16, 2006 in Pierre, South Dakota; September 12, 2006 in Rapid City, South Dakota; and November 9, 2006 in Pierre, South Dakota. A report presenting Draft AOP meeting comments and including copies of all the comment letters received is available upon request.

This year was the seventh consecutive year of drought in the Missouri River Basin, resulting in a record low System Storage level. At these low storage levels it is more important than ever to implement appropriate water conservation measures to ensure continued service to project purposes, should the drought continue. We realize that the benefits provided by the System are

vitally important to the Nation and the people that live and work in the Basin. We believe that the continued implementation of the 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 System. Thank you for your interest in the regulation of the System.

Sincerely,

Gregg F. Martin
Brigadier General, U.S. Army
Division Engineer

MISSOURI RIVER MAINSTEM RESERVOIR SYSTEM

Annual Operating Plan
2006 - 2007

TABLES

PLATES

ABBREVIATIONS

AOP	-	annual operating plan
ac.ft.	-	acre-feet
ACHP	-	Advisory Council on Historic Preservation
AF	-	acre-feet
B	-	Billion
BiOp	-	Biological Opinion
BOR	-	Bureau of Reclamation
cfs	-	cubic feet per second
COE	-	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)
GIS	-	Geographic Information System
GWh	-	gigawatt hour
KAF	-	1,000 acre-feet
Kcfs	-	1,000 cubic feet per second
kW	-	kilowatt
kWh	-	kilowatt hour
M	-	million
MAF	-	million acre-feet
MRBA	-	Missouri River Basin Association
MRNRC	-	Missouri River Natural Resources Committee
msl	-	mean sea level
MW	-	megawatt
MWh	-	megawatt hour
NEPA	-	National Environmental Policy Act
plover	-	piping plover
pp	-	powerplant
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
tern	-	interior least tern
T&E	-	Threatened and Endangered

THPO	-	Tribal Historic Preservation Officers
tw	-	tailwater
USFWS	-	United States Fish and Wildlife Service
USGS	-	United States Geological Survey
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.

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MISSOURI RIVER MAINSTEM RESERVOIR SYSTEM

Annual Operating Plan
2006 – 2007

I. FOREWORD

This Annual Operating Plan (AOP) presents pertinent information and plans for regulating the Missouri River Mainstem Reservoir System (System) through December 2007 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 Reservoir Control Center in the Missouri River Basin Water Management Division, Northwestern Division, U. S. Army Corps of Engineers (Corps). 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.

Due to the current drought, virtually all comments received on the Draft AOP requested the Corps to conserve water to the extent possible. System storage is currently at a record low and the outlook for winter precipitation is below normal. Therefore, during the coming year the Corps will look at all available options to conserve water while meeting the authorized project purposes and the needs of the protected species. In particular, maintaining adequate river and reservoir levels to protect human health and safety will be a primary consideration. A wide variety of options will be examined including many that have been implemented in the past including the following: not supporting navigation target flows in river reaches where there is no commercial navigation, utilizing available flexibility to conserve water during the nesting season while meeting the needs of the species and staying within the incidental take identified in the BiOp, intrasystem adjustments, minimum releases

needed to meet downstream requirements and utilizing the Kansas River Reservoir System as appropriate to conserve System storage. Water conservation benefits all uses of the System (except flood control) through higher reservoir levels which result in increased service to authorized purposes. More normal reservoir levels also reduce potential impacts to water intakes, reduce exposure of some historic and cultural resources, provide better access to recreation sites, reduce noxious weeds, and reduce the likelihood of experiencing a non-navigation year in the future.

Prior to the 1998-1999 AOP, a System description and discussion of the typical System regulation, a historic summary of the previous year's regulation, and the plan for future System regulation was included in one document. Since the 1998-1999 AOP, this information has been published in separate reports available upon request. This document provides the plan for future regulation of the System. To receive a copy of either the "System Description and Operation," dated Spring 2002, or the "Summary of Actual Calendar Year 2005 Regulation," dated April 2006, contact the Missouri River Basin Water Management Division at 12565 West Center Road, Omaha, Nebraska 68144-3869, phone (402) 697-2676. Both reports are currently available at the "Reports and Publications" link on our web site at: **www.nwd-mr.usace.army.mil/rcc**. The "Summary of Actual Calendar Year 2006 Regulation" will be available at the same site in May of 2007.

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 a draft of the AOP, which typically is published in early October 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 planning process for consultation on the Draft 2006-2007 AOP consisted of a series of informational meetings and government to government consultation with Tribes requesting such meetings. During the summer and fall of 2006 three informational meetings were held on August 15-16, 2006 in Pierre, South Dakota, September 12, 2006 in Rapid City, South Dakota, and November 9, 2006 in Pierre, South Dakota.

Last spring's public meetings were held at the following locations and dates: April 10, 2006 at Omaha, Nebraska; April 11, 2006 at St. Louis and Jefferson City, Missouri; April 12, 2006 at Williston, North Dakota and Pierre, South Dakota; and April 13, 2006 at St. Joseph, Missouri. The attendees were given an update regarding the outlook for 2006 runoff and projected System regulation for the remainder of 2006. Similar information was provided at a Fort Peck Advisory Committee meeting in Lewistown, Montana the following week on April, 18, 2006. Six 2006 fall public meetings on the Draft 2006-2007 AOP were held as follows: October 10 in Omaha, Nebraska; October 11 in St. Louis and Kansas City, Missouri; October 12 in Fort Peck, Montana and Bismarck, North Dakota; and October 13 in Pierre, South Dakota.

In the spring of 2007, public and Tribal 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 2006-2007 AOP.

III. MAINSTEM MASTER MANUAL AND ESA CONSULTATIONS

The Missouri River 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 again 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.

IV. FUTURE RUNOFF: AUGUST 2006 - DECEMBER 2007

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 (Simulation) in the AOP studies for the period August 2006 to February 2007. The August 1 runoff forecast for 2006 was 18.1 million acre-feet (MAF). Two other runoff scenarios based on the August 1 runoff forecast were developed for the same period. These are the 80 percent and 120 percent of the August 1 runoff forecast scenarios, which are input to the 80 percent and 120 percent of Basic Simulations for the August 2006 to February 2007 period.

Simulations for the March 1, 2007 to February 29, 2008 time period use five statistically derived inflow scenarios based on an analysis of historic water supply records from 1898 to 1997. This approach 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 (34.5 MAF) has a 1 in 10 chance of being exceeded, Upper Quartile (30.6 MAF) has a 1 in 4 chance of being exceeded, and Median (24.6 MAF) has a 1 in 2 chance of being exceeded. Lower Quartile runoff (19.5 MAF) has a 1 in 4 chance of the occurrence of less runoff, and Lower Decile (15.5 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 that actual runoff could be lower than Lower Decile, and a 10 percent chance that actual runoff could be greater than Upper Decile.

The Upper Decile and Upper Quartile simulations extend from the end of the 120 percent of Basic simulation through February 2008. 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 80 percent of Basic simulation through February 2008.

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 2006 through February 2008. The natural water supply for calendar year (CY) 2005 totaled 20.1 MAF.

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

	Natural 1/	Post-1949 Depletions	Net 2/
	(Volumes in 1,000 Acre-Feet)		
August 2006 through February 2007 (Basic Runoff Scenario)			
Basic	5,600	300	5,900
120% Basic	6,700	300	7,000
80% Basic	4,500	300	4,800
Runoff Year March 2007 through February 2008 (Statistical Analysis of Past Records)			
Upper Decile	34,500	-2,600	31,900
Upper Quartile	30,600	-2,500	28,100
Median	24,600	-2,500	22,100
Lower Quartile	19,500	-2,800	16,700
Lower Decile	15,500	-2,700	12,800

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 2006-2007

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. The paragraphs below summarize some of the specific technical criteria included in the Master Manual. 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 plan relies on a wealth of regulation experience. Reservoir regulation experience available for preparation of the 2006-2007 AOP includes 13 years of

regulation at Fort Peck (1940) by itself, plus 53 years of System experience as Fort Randall (1953), Garrison (1955), Gavins Point (1955), Oahe (1962), and Big Bend (1964) have been brought progressively into System regulation. This regulation experience includes lessons learned during the six consecutive years of drought from 1987 through 1992, the high runoff period that followed, and the current seven-year drought that began in 2000. Runoff during the period 1993 to 1999 was greater than the Upper Quartile level in five of those seven years, including the record 49.0 MAF of runoff 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.

As described in the Master Manual, flow support for navigation and other downstream purposes is defined based on service level. A "full-service" level of 35,000 cfs results in target flows of 31,000 cfs at Sioux City and Omaha, 37,000 cfs at Nebraska City and 41,000 cfs at Kansas City. Similarly, a "minimum service" level of 29,000 cfs results in target flow values of 6,000 cfs less than the full service levels. Selection of the appropriate service level is based on the actual volume of water-in-storage (storage) in the System on March 15 and July 1.

The relation of System storage to navigation service level is presented in ***Table II***. The volumes presented in ***Table II*** were derived from long-range model simulations that helped identify how the System should be regulated to best serve the authorized purposes during significant multi-year droughts. Straight-line interpolation defines intermediate service levels between full and minimum service. These service level determinations are for conservation and normal System regulation. During years when flood evacuation is required, the service level is calculated monthly or more frequently if required to facilitate a smooth transition in System release adjustments.

As shown in ***Table II***, the water control plan calls for suspension of Missouri River navigation if System storage is at or below 31 MAF on March 15 of any year. It should be noted that the occurrence of System storage at or below 31 MAF would likely coincide with a national drought emergency. If any of the reservoir regulation studies performed for the development of an AOP indicate that System storage will be at or below 31 MAF by the upcoming March 15, the Corps will notify the Secretary of the Army. Per the revised Master Manual, the Corps will obtain approval from the Secretary of the Army prior to implementation of back-to-back non-navigation years.

TABLE II
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)

The System storage check for navigation season length is made on July 1 of each year. Assuming the System storage is above 31 MAF on March 15, a navigation season will be supported. A full 8-month navigation season will be provided if System storage is 51.5 MAF or above on July 1, unless the navigation season is extended to evacuate flood control storage. However, if System storage falls below 51.5 MAF on July 1, a shortened navigation season will be provided to conserve water. The specific technical criteria for season length are shown in ***Table III***. Straight-line interpolation between 51.5 and 46.8 MAF of storage on July 1 provides the closure date for a season length between 8 and 7 months. If System storage on July 1 is between 46.8 and 41.0 MAF, a 7-month navigation season is provided. A straight-line interpolation is again used between 41.0 and 36.5 MAF, providing for a season length between 7 and 6 months. For System storage on July 1 at or below 36.5 MAF, a 6-month season is provided.

TABLE III
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)

The System release required to meet minimum and full service target flows varies by month in response to downstream tributary flows. An analysis of the average monthly Gavins Point release needed to meet flow targets was completed in 1999. As part of that study, the relationship between annual runoff upstream of Sioux City and

the average Gavins Point release required for the navigation season was analyzed. The study showed that generally more water was needed downstream to meet flow targets during years with below normal upper basin runoff than during years with higher upper basin runoff. Therefore, regulation studies performed since 1999 use two levels of System release requirements; one for Median, Upper Quartile, and Upper Decile runoff scenarios, and another for Lower Quartile and Lower Decile scenarios. The updated release requirements for full and minimum service flow support are given in ***Table IV***. Releases required for minimum service flow support are 6,000 cfs less than full service support. A final report detailing the procedures used in this study is available on our web site.

An examination of the data presented in ***Table IV*** reflects that, early in the season, the target location is generally at Sioux City with adequate tributary flows meeting the other downstream flow targets. Tributary contributions normally decline during the summer, and the target location moves from Sioux City to Nebraska City and then to Kansas City. This requires higher flow support from the System as the season progresses through summer. Often the target moves upstream during the fall when higher downstream tributary flows return. This seasonal tributary flow pattern is reflected in the Gavins Point release data presented below.

The releases presented in ***Table IV*** are average monthly values during the period studied for various runoff conditions and do not reflect the range of daily releases that may be required during any given month to meet flow targets. Actual regulation, therefore, requires daily adjustments to fully serve the Congressionally authorized project purpose of navigation.

In general, releases from Gavins Point are adjusted as needed to meet target flow levels on the lower Missouri River. However, during the nesting season of the endangered interior least tern (tern) and the threatened piping plover (plover), care must be taken to avoid impacts to nesting areas. These two bird species are listed as threatened and endangered under the ESA and are protected under that Act. Several scenarios have been used in past years to regulate the System during the nesting season. Under the Steady-Release (SR) scenario, when the birds begin to initiate nesting activities in early to mid-May, the release from Gavins Point is set to the level expected to be required to meet downstream flow targets through August and maintained at that level until the end of the nesting season. This regulation results in releases that exceed the amount necessary to meet downstream flow targets during the early portion of the nesting season, and may result in targets being missed if downstream basin conditions are drier than expected during the summer.

TABLE IV
GAVINS POINT RELEASES NEEDED TO MEET TARGET FLOWS
FOR INDICATED SERVICE LEVEL
1950 to 1996 Data
(Discharges in 1,000 cfs)

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

Gavins Point releases, under the Flow-to-Target (FTT) scenario, are adjusted as needed throughout the nesting season to meet downstream flow targets and would typically result in increasing releases as the nesting season progresses. This is due to reduced tributary inflows downstream as the summer heat builds, evaporation increases, and precipitation wanes. Increasing releases as the nesting season progresses can inundate nests and chicks on low-lying emergent sandbar habitat. Compared to the SR scenario, this scenario conserves more water in the System, which keeps the pool levels at the upper three System projects at relatively higher levels. However, this scenario also increases the risk of inundating nests. The FTT scenario also ensures that targets on the lower river are met throughout the nesting season.

A third scenario for Gavins Point releases, which has been used during nesting seasons since 2003, combines features of the other two options. This scenario, called the Steady Release – Flow-to-Target (SR-FTT) scenario, sets Gavins Point releases at an initial steady rate, and then allows releases to be adjusted upward or downward during the nesting season to meet downstream flow targets, if necessary. Depending on where the initial steady release is set, this regulation makes a larger amount of habitat available early in the nesting season and saves additional water in the upper three reservoirs when compared to the SR scenario. The SR-FTT scenario also reduces the potential for flooding nests and exceeding the allowable incidental take for listed terns and plovers when compared to the FTT scenario.

During the late 1980 to early 1990 drought years, a two-day-down, one-day-up peaking cycle from Gavins Point was utilized during the nesting season. This regulation provided for lower flows for two out of three days to conserve water in the System while ensuring that T&E bird species did not nest on low-lying habitat. This

cycling was successfully utilized during nest initiation periods in 2004 through 2006 as a water conservation measure. Depending on hydrologic conditions, a peaking cycle may be used to conserve water at the beginning of the nesting season in 2007. It may also be necessary to cycle releases for flood control regulation during the T&E species' nesting season.

The 2003 Amended BiOp recommended the implementation of a bimodal Gavins Point spring pulse plan by 2006. Working with the USFWS, Tribes, states and basin stakeholders, the Corps developed technical criteria for the bimodal spring pulse releases. ***Table V*** summarizes the spring pulse technical criteria included in the March 2006 Master Manual revision. The spring pulse drought precludes for both the March and May spring rises were initially set at 36.5 MAF. After the first occurrence of each pulse, its respective preclude was to be increased to 40.0 MAF. In 2006 there was no March spring pulse due to the low System storage, so the March preclude remains at 36.5 MAF for 2007. However, there was a May spring pulse in 2006, therefore, the May spring preclude for the 2007 and beyond has been increased to 40.0 MAF.

TABLE V
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	36.5 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, this decision will be made with consideration for the potential '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 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.

Water for the spring pulses ultimately comes from storage in the upper three reservoirs. During normal to wet basin conditions, runoff into the System will be sufficient to maintain steady-to-rising pool levels at the upper three reservoirs. However, during periods of drought the spring rise could cause a pool level decline at one or more of the upper three reservoir(s). As in 2006, primary consideration will be given to withdrawing the water needed for the May spring pulse from Fort Randall reservoir in 2007, rather than from one or more of the upper three reservoirs. This

would avoid further declines at Fort Peck, Garrison and Oahe reservoirs, which are already drawn down substantially due to the ongoing drought. If using Fort Randall in this manner is not feasible, the Corps would then give consideration to distributing the upstream storage reductions due to the May pulse equally among the upper three reservoirs. Prior to implementing the May pulse, the Corps will coordinate with the affected Tribes and States to evaluate the options and determine the best course of action to minimize adverse impacts, including those associated with water quality due to low reservoir levels, water intakes, historic and cultural sites and reservoir fisheries.

B. <u>2006-2007 AOP Simulations</u>. AOP simulations for the five runoff scenarios are shown in the final section of this AOP as studies 4 through 8. The March 1 System storage is below the 36.5 MAF March spring pulse preclude for all five runoff scenarios, so no March pulses are shown. Under the two highest runoff scenarios, the Upper Decile and Upper Quartile, System storage on May 1 is above the 40.0 MAF May spring pulse drought preclude, so May pulses are shown for those runoff scenarios, but not for the Median, Lower Quartile or Lower Decile scenarios. It is important to note, however, that the actual System storage on March 1 and May 1, 2007 will determine whether or not spring pulses will be implemented. Results of the simulations are shown in ***Plates 3 and 4*** for the System storage and the Fort Peck, Garrison and Oahe pool elevations. The March 15 and July 1 System storage checks from ***Tables II*** and ***III*** were used to determine the level of downstream flow support for navigation and other purposes as well as the navigation season length. For modeling purposes in this AOP, the SR-FTT regulation scenario with an initial steady release of 25,000 cfs is shown during the 2007 nesting season for Median runoff or above. The monthly average May release used in the simulations was determined using the May minimum service release of 22,000 cfs for two-thirds of the days and 25,000 cfs for the other third to reflect an every third day peaking cycle from Gavins Point. The June release was modeled as a steady 25,000 cfs due to the presence of chicks along the river at that time, and the ***Table IV*** releases were used for July and August to indicate flowing to target. For the two lower runoff conditions, Lower Quartile and Lower Decile, the SR-FTT regulation scenario with an initial steady release of 28,000 cfs was shown during the nesting season. The monthly average May releases was determined using the May minimum service release of 25,300 cfs for two-thirds of the days and 28,000 cfs for the other third to reflect an every third day peaking cycle from Gavins Point. The June release was modeled as a steady 28,000 cfs due to the presence of chicks along the river at that time. ***Table IV*** values were used for July and August to indicate flowing to target. Once the majority of the birds have nested on the newly constructed, high elevation habitat, releases will be made to meet downstream targets. 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. Although these modeled Gavins Point releases represent our best estimate of required releases during 2007, actual releases will be based on hydrologic conditions and the availability of habitat at that time. In addition, due to the extended drought and record low storage, consideration will also be given to ensure

adequate river and reservoir levels to protect human health and safety. The Corps will be examining a wide variety of options to conserve water which may include utilizing available flexibility during the nesting season while meeting the needs of the species and staying within the incidental take identified in the BiOp. Water conservation benefits all uses of the System (except flood control) through higher reservoir levels which result in increased service to authorized purposes. More normal reservoir levels also reduce potential impacts to water intakes, reduce exposure of some historic and cultural resources, provide better access to recreation sites, and reduce the likelihood of experiencing a non-navigation year in the future.

Table IV values were used in all the AOP studies for navigation support during the spring and fall months. Winter 2006-2007 and winter 2007-2008 Gavins Point releases of 12,500 cfs are shown in the simulations. This is lower than actual winter releases required for downstream powerplants and water supply intakes prior to 2004, but completed and on-going modification of intakes will permit lower winter releases as a conservation measure when System storage is low. Non-winter, non-navigation Gavins Point releases were modeled at 9,000 cfs as a further water conservation measure as described in the Master Manual, provided downstream tributary flows are adequate to serve water supply requirements. Adequate tributary flows in the Missouri River reach below the System allowed this goal to be achieved in the fall of 2004 and spring of 2005 and 2006. However, during the late fall of 2005 and 2006 System releases had to be increased to meet downstream water supply requirements because of low downstream tributary flows in critical reaches.

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 to meet the Missouri River target flows presented in the Master Manual.

Application of the July 1 System storage check shown on ***Table III*** indicates that the 2007 navigation season will be shortened 29 days for Upper Decile, 31 days for Upper Quartile, 31 days for Median, 59 days for Lower Quartile, and 61 days for Lower Decile runoff. Minimum service navigation flows are provided for all runoff conditions due to low System storage. None of the simulations reach the desired 57.0 MAF System storage level on March 1, 2008.

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. The Median, Upper Quartile, and Upper Decile simulations include releases that provide a steady to rising pool level in the three large upper reservoirs during the spring forage fish spawn period. The Lower Quartile and Lower Decile simulations are based on favoring steady to rising reservoir levels at Fort Peck and Oahe during the

spring forage fish spawn as part of the overall plan to rotate emphasis among the upper three reservoirs during low runoff years. This regulation is discussed in more detail later in this document.

Actual System regulation from January 1 through July 31, 2006 and the regulating plans for each project through CY 2007 using the five runoff scenarios described on Page 5 are presented on ***Plates 5 through 10***, 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 11 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 2005 through July 2006. ***Plate 12*** presents past and simulated gross average monthly power generation and gross peaking capability for the System.

C. Regulation Plan for the Balance of the 2006 Navigation Season and Fall of 2006. The regulation of the System for the period of August though November 2006 is presented in the following paragraphs.

Fort Peck Dam. Releases averaged 8,000 cfs during August and the first half of September. In mid-September they were reduced to 6,000 cfs and were held at that level until early November when they were increased to 7,000 cfs. The Fort Peck pool rose slightly through the period ending at 2201.3 on the last day of November. The record low pool is 2198.3 feet msl set in January 2005. The lowest elevation during the previous drought was 2208.7 feet msl set in April 1991.

Garrison Dam. Releases were increased from 21,000 cfs to 24,000 cfs after mid-August, averaging 22,000 cfs for the month. They continued at 24,000 cfs until mid-September when irrigation ceased, and were then reduced to 12,000 cfs through late October to facilitate intrasystem balance. Releases were increased to 13,000 in late October and held at that level through November. The Garrison pool level declined to 1808.9 feet msl at the end of November. The record low pool is 1805.8 feet msl set in May 2005. The lowest elevation during the previous drought was 1815.0 feet msl in May 1991.

Oahe Dam. Releases averaged 29,500 cfs in August, and were reduced in September to initiate an early fall drawdown of the Fort Randall pool as the navigation season closed 44 days early in 2006. Low releases continued in October and November to complete the annual fall draw of Fort Randall. Releases will be increased in December for winter power production. The Oahe pool ended November at elevation 1573.2 feet msl. A new record low Oahe pool of 1570.6 feet msl was set in August 2006.

The previous record low during the current drought was 1572.0 set in August 2004. The lowest elevation during the previous drought was 1580.7 feet msl set in November 1989.

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

Fort Randall Dam. Releases averaged 29,500 cfs in August and 26,300 cfs in September to back up the releases from Gavins Point Dam. When the navigation season ended in mid-October, releases were gradually reduced to as low as 7,000 cfs in October and November. The majority of the Fort Randall fall pool drawdown occurred in September and October. The reservoir ended November at elevation 1337.8 feet msl.

Gavins Point Dam. Releases were scheduled to support downstream minimum service flows throughout the remainder of the navigation season, which was shortened 44 days in 2006 in accordance with the technical criteria for the July 1 System storage check presented in the Master Manual. The last day of flow support for the commercial navigation season ranged from October 8 at Sioux City to October 17 at the mouth near St. Louis. Releases were reduced by 3,000 cfs per day beginning on October 8 until they reached 10,000 cfs. The 10,000 cfs release was maintained for 9 days to allow sufficient travel time for the release changes to reach the critical downstream locations. Releases were then reduced to 9,500 cfs for 5 days, before being increased to 10,500 cfs due to low downstream tributary flows. Intakes were closely monitored during this period to ensure their operability. Downstream tributary flow was adequate to allow a reduction to the 9,000 cfs level in the fall of 2004 and from mid-October to early November 2005. System releases were increased in November 2005 and October and November 2006 to meet downstream water supply requirements because of low downstream tributary flows. The 9,000 cfs fall non-navigation season release rate is based on sufficient incremental downstream tributary flows. We believe that this 9,000 cfs minimum spring-fall release represents a reasonable long-term goal for water intake owners to strive for as they make improvements to their facilities. The Gavins Point pool level was raised 1.5 feet to elevation 1207.5 feet msl in August when it was determined that T&E species were not nesting along the reservoir. The pool level remained near that elevation during the fall and winter months.

D. Regulation Plan for Winter 2006-2007. The September 1 System storage check is used to determine the amount of the winter System release. During the winter of 2006-2007, we will strive to average a 12,000 cfs System release. If mild weather conditions prevail, System releases may be set lower than 12,000 cfs, but only if downstream water supply intakes can remain operable at those levels. Conversely, 12,000 cfs may be less than is required for downstream water supply intakes without sufficient incremental tributary inflow below the System, and therefore, releases may need to be set at levels higher than 12,000 cfs at times to ensure downstream water

supply intakes are operable. However, we believe that this minimum winter flow represents a reasonable long-term goal for water intake 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 which temporarily restrict flows, therefore the model results indicate an average winter System release of 12,500 cfs to allow for these increases. Based on past experiences, these events are expected to occur infrequently and be of short duration. It is anticipated that this year's winter release will be adequate to serve all downstream water intakes except for very short periods during significant river ice formation or ice jamming.

Fort Peck Dam. Releases are expected to average 10,000 cfs to serve winter power loads and balance System storage from December through February. Average winter release rates are about 11,000 cfs. The Basic simulation shows that the Fort Peck pool level will drop from about 2201 feet msl to about 2197 feet msl during the winter period, ending February about 37 feet below the base of the annual flood control storage zone. Carryover multiple purpose storage in the three large upper reservoirs will be near a balanced condition on March 1, 2007. The pool level is expected to rise during March to near elevation 2199 feet msl.

Garrison Dam. Releases will be adjusted to serve winter power loads and balance System storage. Releases will be scheduled at 15,000 to 16,000 cfs at the time of freeze-in and will then be increased to 17,500 cfs as conditions improve. Releases may have to be reduced for a short period during any freeze-in in the Bismarck area since warmer temperatures can melt a significant portion of the downstream ice cover. This reduction in releases is scheduled to prevent exceeding a targeted 13-foot stage at the Bismarck gage. Flood stage is 16 feet. Average winter release rates for Garrison are 20,700 cfs in December, 23,300 cfs in January and 24,700 cfs in February. The Garrison pool level is expected to fall from near elevation 1810 feet msl to near elevation 1807 feet msl by March 1, 30.5 feet below the base of the annual flood control storage zone. The Median simulation indicates the pool level will rise to elevation 1809 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 15,000 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 gradually rise from elevation 1574.5 feet msl at the end of November to elevation 1576 feet msl by the beginning of March, 31.5 feet below the base of the annual flood control storage zone. The pool is expected to rise to elevation 1579 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 near 11,000 cfs. The Fort Randall pool level is expected to rise from a low 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 remains quite low, measures will be taken to raise the Fort Randall pool level to near elevation 1353.0 feet msl by March 1. It is likely that a pool level above elevation 1353.0 feet msl, to as high as 1355.2 feet msl, will 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 likely 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, primarily from the Niobrara River along the Fort Randall to Gavins Point reach.

System storage for all runoff conditions will be substantially below the base of the annual flood control zone by March 1, 2007, the beginning of next year's runoff season.

E. Regulation During the 2007 Navigation Season. The Upper Decile, Upper Quartile, Median, Lower Quartile, and Lower Decile runoff scenarios modeled for this year's AOP follow the specific technical criteria presented in the current Master Manual for downstream flow support. The normal 8-month navigation season is shortened as a water conservation measure for all runoff scenarios as shown in ***Table VI***. 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. As previously stated, the planned regulation for the 2007 nesting season will be SR-FTT. The initial steady release, which is estimated to be 25,000 to 28,000 cfs, will be based on hydrologic conditions and the availability of habitat at that time. In addition, due to the extended drought and record low storage, consideration will also be given to ensure adequate river and reservoir levels to protect human health and safety. The Corps will be examining a wide variety of options to conserve water which may include utilizing available flexibility during the nesting season while meeting the needs of the species and staying within the incidental take identified in the BiOp.

Model runs included in this AOP have a Gavins Point release peaking cycle of two days down and one day up during May to keep birds from nesting at low elevations. Once the majority of the birds have nested, releases will be adjusted to meet downstream targets. 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.

TABLE VI
NAVIGATION SERVICE SUPPORT
FOR THE 2007 SEASON

	Runoff Scenario (MAF)	System Storage March 15 (MAF)	System Storage July 1 (MAF)	Flow Level Above or Below Full Service (cfs) Spring	Flow Level Above or Below Full Service (cfs) Summer/Fall	Season Shortening (Days)
U.D.*	34.5	37.8	47.0	-6,000	-6,000	29
U.Q.*	30.6	37.5	45.1	-6,000	-6,000	31
Med	24.6	35.9	41.3	-6,000	-6,000	31
L.Q.	19.5	34.3	36.9	-6,000	-6,000	59
L.D.	15.5	34.2	34.7	-6,000	-6,000	61

* Includes a May Spring Pulse

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. The studies show that inflows are sufficient to maintain steady to rising pools at Fort Peck and Oahe in April and May for Lower Quartile and Lower Decile runoff scenarios, however Garrison may fall during this period. 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. If runoff is not sufficient to keep all the pool levels rising during the fish spawn in 2007, the Corps will, to the extent reasonably possible, set releases to result in a steady to rising pools at Fort Peck and Oahe during April and May. This will be accomplished at Fort Peck by setting releases at a level that would maintain the rising pool, but no less than the minimum required to supply downstream irrigation. At Oahe this will accomplished through adjustments in Garrison releases, however, these adjustments may be restricted when the terns and plovers begin nesting in May. If the drought continues, emphasis during the fish spawn will be rotated with Garrison being favored one year, followed by Oahe and Fort Peck the next. 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. The plan may also be adjusted to be opportunistic in regard to runoff potential, and will continue to evolve as additional information becomes available.

All five runoff scenarios studied for this year's AOP provide gradually increasing Gavins Point releases to provide Missouri River navigation season flow support at the mouth of the Missouri near St. Louis on April 1, 2007, 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 there is no commercial navigation scheduled to use the upper reaches of the navigation channel, we will consider eliminating navigation flow support in those reaches to conserve water in the System, as was done in 2004 through 2006. The studies illustrated on ***Plates 5 through 10*** and summarized in ***Table VI*** are based on providing a shortened navigation season and minimum service flows for all runoff scenarios, except May through July when flows may exceed minimum service due regulation for T&E species. The simulation of March spring pulses are not indicated for any runoff scenario, however the Upper Quartile and Upper Decile runoff scenarios include the simulation of a May spring pulse for the benefit of the endangered pallid sturgeon. The magnitude of the May pulses in the Upper Decile and Upper Quartile runoff scenarios are 15,300 cfs and 15,000 cfs, respectively. The actual System storage on March 1 and May 1, 2007 will be used to determine whether or not spring pulses will be implemented. If a May pulse is to be implemented, the actual May 1 System storage and the May 1 runoff forecast will be used to determine the magnitude of that pulse.

Navigation flow support for the 2007 season will be determined by actual System storage on March 15 and July 1. Although all runoff scenarios modeled indicate minimum service flow support throughout the navigation season, if the July 1 System storage check indicates an increase in service level, any increase may be delayed until the end of the T&E bird species' nesting season, depending on the potential for 'take' of those species. Gavins Point releases may be quite variable during the 2007 navigation season but are expected to range from 22,000 to 32,000 cfs. Release reductions necessary to minimize downstream flooding are not reflected in these monthly averages but will be instituted 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 but this storage will be utilized to the extent possible to provided basin water conservation. Simulated storages and releases for the System and individual reservoirs within the System are shown on ***Plates 5 through 10.*** Ample storage space exists in the System to control flood inflows under all scenarios simulated for this AOP.

Two modified reservoir regulation plans shown in previous AOPs, the Fort Peck "mini-test" and unbalancing the upper three reservoirs, will not be implemented in 2007 due to low System storage. Both these plans may be implemented when System storage recovers to more normal levels.

The first of these two modified plans is a test of flow modifications for the endangered pallid sturgeon. When Fort Peck has adequate water above the spillway crest by mid to late-May of any year, a flow modification "mini-test" may be conducted in early June to monitor effects of higher spring releases and warmer water released from the spillway. The purposes of the "mini-test" are to allow for an evaluation of the integrity of the spillway structure, to test data collection methodology, and to gather information on river water temperatures with various combinations of flow from the spillway and powerhouse. Streambank erosion and fishing impacts will also be monitored. Stop protocol for the "mini-test" is identified in the Fort Peck Flow Modification Mini-Test Environmental Assessment, dated March 2004. Before either test is run, the Corps will fully coordinate with the Assiniboine and Sioux Tribes of the Fort Peck Reservation, the State of Montana, and potentially affected stakeholders.

During the Fort Peck "mini-test," which would last about four weeks, flows will vary from 8,000 to 15,000 cfs as various combinations of spillway and powerplant releases are monitored. The maximum spillway release of 11,000 cfs will combine with a minimum powerplant release of 4,000 cfs for six days. This test will be timed to avoid lowering the pool level during the forage fish spawn. The "mini-test" will not be conducted if sufficient flows will not pass over the spillway crest (elevation 2225 feet msl). A minimum pool level of about 2229 feet msl is needed during the test to avoid unstable flows over the spillway. Results of the AOP simulations show that this elevation will not be achieved in 2007 for any of the five runoff scenarios. A more extensive test with a combined 23,000 cfs release from Fort Peck is scheduled to be conducted beginning in early June in the year following the "mini-test" to allow further tests of the integrity of the spillway and to determine if warm water releases will benefit the native river fishery. Peak outflows during the full test would be maintained for two weeks within the four-week test period. The median extension studies included in this AOP indicate the soonest Fort Peck pool elevation would be sufficient to run the Fort Peck "mini-test" would be in 2011.

The second modified regulation plan involves unbalancing the three large upper reservoirs as shown on ***Table VII*** to benefit reservoir fishery and the three protected species. Reservoir unbalancing is computed based on the percentage of the carryover multiple purpose pool that remains in Fort Peck, Garrison and Oahe Reservoirs. The unbalancing would alternate at each project; high one year, float (normal regulation) the next year, and low the third year, as shown on ***Table VII***. ***Table VIII*** shows the pool levels proposed by the MRNRC below which unbalancing would not be implemented. ***Table VIII*** indicates that the upper three projects should be balanced on March 1, 2007 and again on March 1, 2008. Due to the desire to conduct the Fort Peck mini-test as soon as possible, when the System begins to recover from the drought, Fort Peck will be the first reservoir to be favored in the reservoir unbalancing schedule. As indicated in ***Table VII***, when Fort Peck is high, Garrison is low (approximately 3 feet) and Oahe is at the balanced elevation.

TABLE VII
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.

TABLE VIII
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

F. Regulation Activities for T&E Species and Fish Propagation Enhancement. As discussed in the previous section, the 2006-2007 AOP includes no provisions for unbalancing the Fort Peck, Garrison, and Oahe reservoirs on March 1, 2007 for any of the runoff scenarios. The criteria for unbalancing are based on recommendations provided by the MRNRC and the USFWS. Under all simulations, System storage will be below the minimum levels under which unbalancing is recommended by either the MRNRC or the USFWS.

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 habitat, and thus were not expected to be impacted by the potential range of releases from Fort Peck during the summer. Releases during the 2007 nesting season will not be restricted by the repetitive daily pattern unless habitat conditions or nesting patterns change. This regulation should result in habitat conditions for nesting terns and plovers that are similar to those that were available in 2006.

If flood flows enter the Missouri River below the project during the nesting season, hourly releases will 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. When possible, releases will be maintained above 4,000 cfs as requested by the State of Montana for the protection of game and native river fish populations. April releases should be adequate for trout spawning below the project. If runoff is not sufficient to keep all the pool levels rising during the fish spawn in 2007, 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 Fort Peck during May and June. This will be accomplished by limiting the Fort Peck release during this time period. 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. The T&E flow modification "mini-test" would not be run under any runoff scenario. The Fort Peck pool level must be at elevation 2229 feet msl to allow releases required for the "mini-test" through the spillway.

Garrison Dam. Daily average releases from Garrison will be much less than full powerplant capacity during the tern and plover nesting season under all runoff scenarios. Monthly average releases will decline 500 to 1,000 cfs during the summer nesting season. Hourly peaking will be restricted during the nesting season to limit peak stages below the project for nesting birds.

The Garrison pool level may again approach a level that jeopardizes the volume of cold-water habitat in 2007. The Corps will continue to work with the State of North Dakota to limit the release of cold water through the power plant using a combination of operational and physical means. If runoff is not sufficient to keep all the pool levels rising during the fish spawn in 2007, 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 Oahe during April and May and Fort Peck during May and June. Maintaining a rising pool at Oahe will be accomplished through increased releases from Garrison. Adjustments to Garrison's releases, however, may be necessary 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 with all runoff simulations except the Lower Decile simulation.

Oahe Dam. Releases in the spring and summer will back up those from Gavins Point Dam. If runoff is not sufficient to keep all the pool levels rising during the fish spawn in 2007, 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 Oahe during April and May. Given Median or higher runoff, the pool level should be steady to rising in the spring; with Lower Quartile or Lower Decile runoff, it appears possible to maintain a steady pool during the forage fish spawn, but it will be dependent on the timing and distribution of runoff as well as the need to maintain reasonable releases from Garrison to avoid adverse impacts to other authorized purposes. Under all AOP simulations, the Oahe pool will fall during the remainder of the summer.

Fort Randall Dam. If System storage is high enough for the implementation of a May Gavins Point spring pulse, primary consideration will be being given to staging or storing extra water in Fort Randall reservoir prior to the pulse. This will reduce the risk of impacts at the upper three reservoirs including those associated with water quality due to lower reservoir levels, water intake access problems and historic and cultural site exposure. A May spring pulse is shown for the Upper Quartile and Upper Decile runoff scenarios.

To the extent 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. Hourly releases from Fort Randall during the 2007 nesting season will be restricted 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 if drier downstream conditions occur.

Gavins Point Dam. Assuming System storage is above the spring pulse precludes, March and May spring pulses will be made from Gavins Point Dam for the benefit of the endangered pallid sturgeon. Specific technical criteria related to the spring pulses, are presented in Table V. A May spring pulse is shown for the Upper Quartile and Upper Decile runoff scenarios. Although it is highly unlikely that a future spring rise will occur that will have a peak flow during the pulse at the same level as the initial steady release, as occurred in 2006, the Corps will consider the elimination of cycling releases in the recession limb of future spring pulses if such a regulation does not significantly increase the likelihood of exceeding the incidental take provided in the BiOp.

Based on 2003 through 2006 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 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 SR 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 tows and river conditions at intakes would also be monitored to determine if an increase could be temporarily delayed without impact. Cycling releases every third day may be used to conserve water early in the nesting season if extremely dry conditions develop. In addition, cycling may be used during downstream flood control regulation. The initial steady release, which is estimated to be 25,000 to 28,000 cfs, will be based on hydrologic conditions and the availability of habitat at that time. In addition, due to the extended drought and record low storage, consideration will also be given to ensure adequate river and reservoir levels to protect human health and safety. The Corps will be examining a wide variety of options to conserve water which may include utilizing available flexibility during the nesting season while meeting the needs of the species and staying within the incidental take identified in the BiOp.

The Gavins Point pool will be regulated near 1206.0 feet msl in the spring and early summer with day-to-day variations due to rainfall runoff. Greater fluctuations occur in the river, increasing the risk of nest inundation in the upper end of the Gavins Point pool. Several factors contribute to the increased risk of nest 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, Gavins Point releases are restricted during the nesting season to minimize loss of nests or chicks. Second, rainfall runoff between Fort Randall Dam and Gavins Point Dam can result in sudden pool rises because the Gavins Point project has a smaller storage capacity than the other System reservoirs. Third, the regulation of Gavins Point for downstream flood control may necessitate sudden release reductions to prevent downstream T&E bird species losses. And finally, high releases required in wet years make nest inundation more likely.

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. It is anticipated that planned habitat creation projects in Lewis and Clark Lake may reduce these risks to T&E bird species by providing higher secure habitat for nesting. 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 System reservoir pools results in erosion along the banks of the reservoirs. With the recent drought conditions additional sites have become exposed as the pool levels have declined. The Corps will continue working 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 adverse effects along the System reservoirs. Under all simulations System storage will be below normal levels and pool elevation at the upper three reservoirs will remain low, continuing to expose cultural sites along the shorelines. Actions to avoid, minimize or mitigate adverse impacts and expected results of the actions are covered under Chapter VI of this AOP. ***Plate 15*** shows the locations of the Tribal Reservations.

Fort Peck Dam. Depending on runoff in the Missouri River basin, System regulation during 2007 could result in a Fort Peck pool elevation variation from a high of 2225 feet msl to a low of 2188 feet msl. This is based on the Upper and Lower Decile runoff scenarios (see ***Plate 7*** and the studies included at the end of this report). Based on a review of existing information, approximately 25 to 50 known sites could be affected during this period.

Garrison Dam. Based on the Upper and Lower Decile runoff scenarios (see ***Plate 8*** and the studies included at the end of this report), Garrison pool elevations could range between 1831 and 1800 feet msl during 2007. Based on a review of existing information, approximately 100 to 150 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 between 1599 and 1565 feet msl (see ***Plate 9*** and the studies included at the end of this report). Based on a review of existing information, approximately 200 to 250 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 2007. Short-term increases above

1421 due to local rainfall may also occur. Based on a review of existing information, approximately 40 to 80 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 2007. 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 refill during the winter to elevation 1350 feet msl. Based on a review of existing information, approximately 75 to 100 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 2007. Short-term increases above 1207.5 feet msl may occur due to local rainfall. Based on a review of existing information, approximately 25 to 50 known sites could be affected during this period.

VI. SUMMARY OF RESULTS EXPECTED IN 2007

With regulation of the System in accordance with the 2006-2007 AOP outlined in the preceding pages, the following results can be expected.

A. Flood Control. All runoff scenarios studied will begin the March 1, 2007 runoff season substantially below the desired 57.0 MAF base of annual flood control and multiple use zone. Therefore, the entire System flood control zone, plus an additional 5.7 to 23.9 MAF of the carryover multiple use zone, will be available to store 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.

Remaining storage in the carryover multiple use zone will be adequate to provide support for all of the other multiple purposes of the System, though at reduced levels.

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 current drought have contributed to both intake access and water quality problems for intakes on Garrison and Oahe reservoirs, including several Tribal intakes. The Standing Rock Sioux Tribe's intake at Fort Yates failed in November 2003 leaving the community without water for several days. The

intake, which under normal circumstances is in Oahe reservoir, is presently in an open river situation due to Oahe reservoir receding as the pool level declined. The Bureau of Reclamation (BOR) has installed a temporary intake and drilled a well to ensure continued water supply for that community. The BOR has also lowered the intake at Wakpala on Oahe reservoir. The Corps has used its emergency authority to lower the intake at Parshall on Garrison reservoir. Other intakes that have been identified as having problems or potential problems include Mandaree, Twin Buttes, White Shield, Four Bears, Pick City and Garrison intakes on Garrison reservoir, and the Mni Waste' intake on Oahe reservoir. The Corps is working with the Cheyenne River Sioux Tribe to relocate the Mni Waste' water intake which serves over 14,000 residents of and near the Cheyenne River Indian Reservation in Dewey, Ziebach, and Meade Counties in South Dakota. The new intake location will provide a more reliable water supply and will address many of the water quality issues that have occurred at the current location. If the drought continues, reservoir pool levels and releases may continue to fall below their previous historic lows creating the potential for additional intake access and water quality problems at both river and reservoir intakes. Under the Lower Decile runoff scenario, new record low pool levels would be set at each of the upper three reservoirs and significant efforts may be required to maintain access or identify alternative water supplies for several communities mentioned above.

Although below normal winter releases are being provided for all five 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. Due to the low reservoir levels and releases many intake operators have experienced, and will continue to experience, additional water treatment costs. It is possible with the low winter releases that ice formation or ice jams may temporarily reduce river stages to levels below which some intakes can draw water. Therefore, during severe cold spells, experience has shown that for brief periods it may be necessary to increase Gavins Point releases to help alleviate downstream water supply problems.

During the non-navigation periods in the spring and fall, System releases as low as 9,000 cfs are possible with adequate downstream tributary flow, as was provided in the fall of 2004, the spring and fall of 2005, and the spring of 2006 to conserve water in the System for future use by all authorized purposes. If a non-navigation year would occur, summer releases as low as 18,000 cfs from the System are possible during the summer months. These lower release rates are expected to result in reduced river levels that may impact some downstream intakes that have marginal access to the Missouri River. Historically, water access problems have been associated with several of these intakes; however, in most cases the problems have been a matter of restricted 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 the thermal discharge permits at power plants located along the lower

river. 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.

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 drought conditions persist. Due to the on going drought, many irrigators have made adjustments to their intakes and have experienced additional pumping costs. One example of the additional efforts put forth by irrigators is the purchase of a specialized dredge by conservation districts below Fort Peck that enables irrigators to operate over a wider range of flow conditions. Tributary irrigation water usage is fully accounted for in the estimates of water supply.

D. Navigation. Service to navigation in 2007 will be scheduled at minimum service flow support for all runoff scenarios. Although the AOP simulations provide a comparison of typical flow support under varying runoff conditions, the actual rate of flow support for the 2007 navigation season will be based on actual System storage on March 15 and July 1, 2007.

All simulations have minimum service flow support and a shortened navigation season. The anticipated service level and season length for all runoff conditions simulated are shown in ***Table VI***. While navigation flows target are designed to provide the river depth and width necessary to maintain service to commercial navigation during the vast majority of runoff conditions experienced on the Missouri River, we have always realized that there can be problems during minimum service years when runoff downstream of the Kansas City flow target is low. The Corps has a contingency plan for these low runoff conditions. It includes escorting tows through identified problem areas (upon request); adjustments to river control structures; and dredging where appropriate.

E. Power. ***Tables IX and X*** give the estimated monthly System load requirements and hydropower supply of the Eastern Division, Pick-Sloan Missouri Basin Program (P-S MBP), from August 2006 through December 2007. 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.

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. As a result of the drought, the upper three reservoir levels will remain well below normal and recreation access will be limited at several locations. Special regulation adjustments incorporating

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

2006	Estimated Committed Sales*	Expected C of E Capability					Expected Bureau Capability**					Expected Total System Capability				
			120%	Basic	80%			120%	Basic	80%			120%	Basic	80%	
Aug	2259		2010	2008	2005			241	235	234			2251	2243	2239	
Sep	1844		1981	1977	1969			242	234	233			2223	2211	2202	
Oct	1808		1978	1968	1957			244	236	232			2222	2204	2189	
Nov	1889		1988	1973	1959			242	227	224			2230	2200	2183	
Dec	2055		2008	1981	1964			228	226	222			2236	2207	2186	
2007																
Jan	2240		2026	1999	1974			224	223	221			2250	2222	2195	
Feb	1993		2034	2009	1985			221	222	220			2255	2231	2205	
		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	1903	2077	2067	2032	1993	1991	232	234	237	229	229	2309	2301	2269	2222	2220
Apr	1778	2106	2092	2044	1993	1986	236	236	241	232	232	2342	2328	2285	2225	2218
May	1482	2131	2111	2061	1997	1982	247	244	251	239	239	2378	2355	2312	2236	2221
Jun	1723	2187	2159	2104	2026	1993	261	261	261	249	249	2448	2420	2365	2275	2242
Jul	2310	2209	2175	2109	2016	1973	261	261	261	250	249	2470	2436	2370	2266	2222
Aug	1858	2203	2173	2098	1994	1947	256	256	257	249	243	2459	2429	2355	2243	2190
Sep	1670	2206	2164	2087	1958	1909	256	255	255	249	242	2462	2419	2342	2207	2151
Oct	1488	2174	2137	2053	1964	1911	254	253	253	251	242	2428	2390	2306	2215	2153
Nov	1836	2188	2149	2061	1967	1913	251	250	242	242	244	2439	2399	2303	2209	2157
Dec	2039	2173	2133	2033	1944	1875	237	237	237	238	233	2410	2370	2270	2182	2108

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

2005	Estimated Committed Sales*	Expected C of E Generation					Expected Bureau Generation **					Expected Total System Generation				
			120%	Basic	80%			120%	Basic	80%			120%	Basic	80%	
Aug	846		834	840	846			75	75	76			909	915	922	
Sep	718		529	536	520			70	67	62			598	603	581	
Oct	722		436	438	446			64	47	47			500	485	492	
Nov	783		289	293	289			63	43	41			352	336	331	
Dec	890		515	479	477			68	44	42			583	523	519	
2006																
Jan	903		485	487	467			67	52	43			552	539	510	
Feb	867		403	437	456			63	46	38			465	483	494	
		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	796	404	435	427	462	474	95	107	69	45	45	499	542	496	507	519
Apr	745	460	499	518	613	614	101	108	75	49	48	561	608	593	661	662
May	688	704	720	637	725	733	147	124	92	71	70	851	844	730	796	802
Jun	750	628	641	654	711	721	171	137	105	83	81	799	778	759	794	802
Jul	839	726	732	747	747	734	193	166	112	81	80	919	899	859	829	814
Aug	845	782	748	744	709	693	141	136	115	81	77	923	883	859	789	770
Sep	720	634	570	579	457	409	125	116	109	76	70	759	686	688	533	479
Oct	722	418	516	497	297	293	102	98	93	61	55	520	614	589	358	348
Nov	784	305	323	299	301	289	100	97	93	60	49	405	420	392	361	338
Dec	891	540	534	484	494	445	100	98	97	73	50	640	632	581	567	495
CY TOT	9550	6488	6605	6511	6440	6327	1404	1316	1058	761	705	7892	7922	7569	7200	7032

* 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.

specific objectives for these purposes will be accomplished whenever possible. Conditions in the lower three reservoirs 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.

Boat ramps that were lowered and low water ramps that were constructed during the drought of the late 1980's to early 1990's and the further improvements made in 2003 through 2006 should provide adequate reservoir access in 2007 for runoff scenarios above the Lower Quartile. For the Lower Quartile runoff scenario, reservoir levels would be approaching the levels where many boat ramps become unusable. Under the Lower Decile runoff scenario, all three of the upper reservoirs would be at or below previous record lows during next summer's recreation season and significant efforts would be needed to maintain access. However, boat ramps in some areas where the ramps cannot be extended may become unusable. This will affect the normal use patterns as visitors will have to seek out areas with usable boat ramps.

The effects of the simulated System regulation during 2007 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 2006 and 2007 will expose cultural sites due to erosion from the normal fluctuation of pool elevations as well as the recent drought conditions which has exposed previously inundated sites as the waters have receded. 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 PA 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.

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 2006-2007. 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 plans to strategically monitor sites, those sites within the potential operating pool elevations, to document the effects of the implementation of the 2006-2007 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 will result in more accurate data on the current impacts to sites along the river plus it will assist in the identification of sites for mitigation.

Secondly, it is expected that the monitoring of the implementation of the AOP will identify sites that will require immediate mitigation. The Corps plans to compile the data from the monitoring efforts and determine which sites will require immediate mitigation, most likely stabilization, during the implementation of this AOP. It is expected that there will be more sites than funding will allow, so the Corps will work with the affected Tribes, Tribal Historic Preservation Officers, the Advisory Council on Historic Preservation, State Historic Preservation Officers, and other consulting parties in the prioritization of those sites that need stabilization.

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 2007 on cultural sites are included in the Chapter V, section G., entitled, "Regulation Activities for Historic and Cultural Properties."

H. System Storage. If presently anticipated runoff estimates based upon the August 1, 2006 Basic runoff forecast materialize, System storage will fall below the previous record low in December 2006 and total only 34.6 MAF by the close of CY 2006. This would be 0.2 MAF lower than the all-time record low storage of 34.8 MAF set on January 21, 2005, and 0.6 MAF lower than the previous record low end-of-year storage of 35.2 MAF set in 2004. This end-of-year storage is 19.0 MAF less than the 1967 to 2005 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 2004 minimum of 35.2 MAF. Forecasted System storage on December 31, 2007 is presented in ***Table XI*** for the runoff scenarios simulated.

I. Summary of Water Use by Functions. Anticipated water use in CY 2006, under the regulation plan with the Basic forecast of water supply is shown in ***Table XII***. Actual water use data for CY 2005 are included for information and comparison**.** Under the reservoir regulation simulations in this AOP, estimated water use in CY 2007 also is shown in ***Table XII.***

TABLE XI
ANTICIPATED DECEMBER 31, 2007 SYSTEM STORAGE

Water Supply Condition	Total (12/31/07)	Carryover Storage Remaining 1/	Unfilled Carryover Storage 2/	Total Change CY 2007
	(Volumes in 1,000 Acre-Feet)			
Upper Decile	49,200	31,200	7,800	13,600
Upper Quartile	46,200	28,200	10,800	10,600
Median	40,000	22,000	17,000	5,400
Lower Quartile	34,300	16,300	22,700	600
Lower Decile	31,100	13,100	25,900	-2,600

1/ Net usable storage above 18.0 MAF System minimum pool level established for power, recreation, irrigation diversions, and other purposes.

2/ System base of annual flood control zone containing 57.0 MAF.

TABLE XII
MISSOURI RIVER MAINSTEM SYSTEM
WATER USE FOR CALENDAR YEARS 2005, 2006, AND 2007 ABOVE SIOUX CITY, IOWA
in Million Acre-Feet (MAF)

		CY 2005 Actual	CY 2006 Basic Simulation	Simulations for Calendar Year 2007 Upper Decile	Upper Quartile	Median	Lower Quartile	Lower Decile
Upstream Depletions	(1)							
Irrigation, Tributary Reservoir Evaporation & Other Uses		2.2	2.3					
Tributary Reservoir Storage Change		0.2	-0.2					
Total Upstream Depletions		2.4	2.1	2.9	2.8	2.8	3.0	2.7
System Reservoir Evaporation	(2)	2.4	1.9	1.1	1.1	1.4	1.6	1.4
Sioux City Flows								
Navigation Season								
Unregulated Flood Inflows Between Gavins Point & Sioux City	(3)	0.0	0.0					
Navigation Service Requirement	(4)	10.4	11.7	12.9	12.1	11.2	10.3	10.0
Supplementary Releases								
T&E Species	(5)	0.4	0.2	0.5	0.5	0.2	0.2	0.2
Flood Evacuation	(6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-navigation Season Flows		3.8	3.6	3.5	3.5	3.5	3.8	3.8
Flood Evacuation Releases	(7)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
System Storage Change		0.7	-1.4	13.6	10.6	5.4	0.6	-2.6
Total		20.1	18.1	34.5	30.6	24.6	19.5	15.5
Project Releases								
Fort Peck		4.1	4.9	5.2	5.4	5.3	5.1	5.2
Garrison		10.6	12.1	12.6	12.7	12.2	12.2	11.8
Oahe		10.9	12.1	11.0	11.5	12.0	12.8	12.8
Big Bend		10.0	11.4	10.9	11.4	11.9	12.7	12.6
Fort Randall		11.1	12.1	12.2	12.5	12.7	12.8	12.8
Gavins Point		12.6	13.2	14.3	14.3	14.0	13.9	13.9

(1) Tributary uses above the 1949 level of development including agricultural depletions and tributary storage effects.
(2) Net evaporation is shown for 2007.
(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 in 2007 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 15,000 cfs Fort Randall release.

VII. TENTATIVE PROJECTION OF REGULATION THROUGH MARCH 2013

The 5-year extensions to the AOP (March 2008 to March 2013) 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 Section V.A. were applied to the extensions. The March 15 and July 1 System storage checks shown in ***Tables II and III*** 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. ***Table IV*** releases, 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 XIII***. The criteria considered as each year of the extensions was modeled are listed, along with the results, in ***Tables XIV through XVI*** for the Median, Lower Quartile, and Lower Decile extension studies, respectively.

A. Median Runoff. Studies 9 through 13 present the results of simulating Median runoff (24.6 MAF) from 2008 through 2012. The March 1, 2008 System storage would be 40.3 MAF and would rise to 52.9 MAF by March 1, 2012, 4.1 MAF below the desired March 1 storage of 57.0 MAF, the base of the annual flood control and multiple use pool. The navigation service level would gradually increase from minimum service in 2008 to full service after the July 1 storage check in 2012. The 2008 navigation season would be shortened 31 days; a full 8-month navigation season would be supported in 2009 through 2012. Winter System releases would increase slightly from an average of the minimum 12,500 cfs to 12,600 cfs beginning the winter of 2011-2012. The winter of 2012-2013 releases would be 13,900 cfs. March and May spring pulses would occur each year, with the magnitude of the May pulse increasing from 12,800 cfs in 2008 to 16,000 cfs in 2012. Fort Peck, Garrison, and Oahe pools rise to the elevations described in ***Table VII*** that permit unbalancing by March 1, 2011. The Fort Peck "mini-test" could be conducted in 2011 by unbalancing the upper three reservoirs as shown in ***Table XIII***. The Fort Peck release would average 12,800 cfs in June 2011. Fort Peck would not have to be favored again in 2012 to accommodate the full test, which would have a monthly average release of 18,200 cfs in June 2012.

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

	2008	2009	2010	2011	2012
MEDIAN					
Spring Pulse					
March (kcfs)	5.0	5.0	5.0	5.0	5.0
May (kcfs)	12.8	14.2	15.1	15.7	16.0
Flow Level Below Full Service					
Spring (kcfs)	-6.0	-6.0	-5.0	-2.5	-1.2
Summer/Fall (kcfs)	-6.0	-5.1	-2.2	-0.7	0.0
Season Length (Months)	8-31 days	8	8	8	8
Reservoir Unbalancing (ft)					
Fort Peck	0	0	0	+4.2	0
Garrison	0	0	0	-3.0	+3.0
Oahe	0	0	0	0	-3.0
Dec 31 Storage (MAF)	45.0	48.6	50.9	52.1	52.8
Winter Release (kcfs)	12.5	12.5	12.5	12.6	13.9
LOWER QUARTILE					
Spring Pulse					
March (kcfs)	0	0	0	5.0	5.0
May (kcfs)	0	0	0	9.4	9.8
Flow Level Below Full Service					
Spring (kcfs)	-6.0	-6.0	-6.0	-6.0	-6.0
Summer/Fall (kcfs)	-6.0	-6.0	-6.0	-6.0	-6.0
Season Length (Months)	8-48 days	8-33 days	8-31days	8-31 days	8-31 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)	36.4	38.1	39.9	41.6	44.1
Winter Release (kcfs)	12.5	12.5	12.5	12.5	12.5
LOWER DECILE					
Spring Pulse					
March (kcfs)	0	0	0	0	0
May (kcfs)	0	0	0	0	0
Flow Level Below Full Service					
Spring (kcfs)	-6.0	N/A	-6.0	-6.0	-6.0
Summer/Fall (kcfs)	-6.0	N/A	-6.0	-6.0	-6.0
Season Length (Months)	6	0	6	6	6
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)	29.6	33.5	33.2	33.6	34.3
Winter Release (kcfs)	12.5	12.5	12.5	12.5	12.5

Table XIV							
Median Extension Studies - Criteria Considered in the Modeling Effort							
Study Number			**9**	**10**	**11**	**12**	**13**
	Units	**Criteria**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**	**2012-2013**
March 1 Storage	**MAF**	**Initially 36.5/40**	40.331	45.324	48.933	51.154	52.373
March Spring Pulse?	**N/A**		yes	yes	yes	yes	yes
March 15 Storage	**MAF**	**31/49/54.5**	41.305	46.327	49.949	52.162	53.412
Service Level	**N/A or kcfs**	**No Sea/Min/Full Thresholds**	Minimum	Minimum	Full -5.0	Full -2.5	Full -1.2
3rd Period March GP Q	**kcfs**		20.7+2.2	20.7+2.2	21.7+2.2	24.2+2.2	25.5+2.2
April Gavins Point Q	**kcfs**		20.7	20.7	21.7	24.2	25.5
May 1 Storage	**MAF**	**40**	42.809	47.841	51.375	53.379	54.499
May Spring Pulse?	**N/A**		yes	yes	yes	yes	yes
Pulse Magnitude	**kcfs**		12.77	14.16	15.14	15.69	16.00
Gavins Point Cycling Qs	**kcfs**		22.0/25.0	22.9/25.9	25.8/28.8	27.3/30.3	28.0/31.0
May Gavins Point Q	**kcfs**		25.5	26.7	29.7	31.4	32.1
June Gavins Point Q	**kcfs**		25.0	25.9	28.8	30.3	31.0
July 1 Storage	**MAF**	**50.5/57**	46.430	51.422	54.566	56.304	57.257
Service Level	**N/A**	**Min/Full Thresholds**	Minimum	Full -5.1	Full -2.2	Full -0.7	Full
July Gavins Point Q	**kcfs**		25.6	26.5	29.4	30.9	31.6
Aug Gavins Point Q	**kcfs**		27.2	28.1	31.0	32.5	33.2
Sept Gavins Point Q	**kcfs**		26.6	27.5	30.4	31.9	32.6
July 1 Storage	**MAF**	**36.5/41&46.8/51.5**	46.430	51.422	54.566	56.304	57.257
Season Length Shortening	**days**	**61/31&31/0 Thresholds**	31	0	0	0	0
Oct Gavins Point Q	**kcfs**		22.4	26.9	29.8	31.3	32.0
Nov Gavins Point Q	**kcfs**		9.0	26	28.9	30.4	31.1
Nov last period Gavins Q	**kcfs**		9.0	15.5	17.2	18.1	19.0
September 1 Storage	**MAF**	**55/58**	45.970	50.794	53.522	55.052	55.915
Winter Gavins Point Q	**kcfs**	**12/17 Thresholds**	12.5	12.5	12.5	12.6	13.9
December 31 Storage	**MAF**		45.040	48.644	50.870	52.118	52.809
Ft. Peck Level 2/28/end of WY	**ft msl**		2216.2	2222.0	2229.7	2227.3	2224.0
Garrison Level 2/28/end of WY	**ft msl**		1822.8	1827.6	1827.4	1832.0	1832.3
Oahe Level 2/28/end of WY	**ft msl**		1592.5	1597.4	1600.4	1601.9	1605.6
Balance/Unbalance	**N/A**	**Bal <2227/1827/1600 ft msl**	Balance	Balance	4.2 P -3.0 G	3.0 G -3.0 O	-4.2 P 3.0 O
Peck Rise 3/31-6/30 Odd Yrs	**N/A**		Yes	Yes	Yes	Yes	Yes
Garr Rise 3/31-6/30 Even Yrs	**N/A**		Yes	Yes	Yes	Yes	Yes
Oahe Rise 3/31-6/30 Odd Yrs	**N/A**		Yes	Yes	Yes	Yes	Yes
Special Information	**N/A**					Peck Mini T	Peck Full T

Table XV							
Lower Quartile Extension Studies - Criteria Considered in the Modeling Effort							
Study Number			**14**	**15**	**16**	**17**	**18**
	Units	**Criteria**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**	**2012-2013**
March 1 Storage	**MAF**	**Initially 36.5/40**	34.152	36.410	38.146	40.015	41.708
March Spring Pulse?	**N/A**		No	No	Yes	Yes	Yes
March 15 Storage	**MAF**	**31/49/54.5**	34.969	37.288	39.054	40.933	42.671
Service Level	**N/A or kcfs**	**No Sea/Min/Full Thresholds**	Minimum	Minimum	Minimum	Minimum	Minimum
3rd Period March GP Q	**kcfs**		23.8	23.8	23.8	23.8+2.2	23.8+2.2
April Gavins Point Q	**kcfs**		23.8	23.8	23.8	23.8	24.8
May 1 Storage	**MAF**	**40**	35.738	38.116	39.878	41.763	43.659
May Spring Pulse?	**N/A**		No	No	No	Yes	Yes
Pulse Magnitude	**kcfs**		0	0	0	9.37	9.77
Gavins Point Cycling Qs	**kcfs**		25.3/28	25.3/28	25.3/28	25/28	25/29
May Gavins Point Q	**kcfs**		26.2	26.2	26.2	28.5	28.5
June Gavins Point Q	**kcfs**		28.0	28.0	28.0	28.0	28.0
July 1 Storage	**MAF**	**50.5/57**	38.446	40.726	42.597	44.39	46.569
Service Level	**N/A**	**Min/Full Thresholds**	Minimum	Minimum	Minimum	Minimum	Minimum
July Gavins Point Q	**kcfs**		28.3	28.3	28.3	28.3	28.3
Aug Gavins Point Q	**kcfs**		28	28	28	28	28
Sept Gavins Point Q	**kcfs**		27.5	27.5	27.5	27.5	27.5
July 1 Storage	**MAF**	**36.5/41&46.8/51.5**	38.446	40.726	42.597	44.390	46.569
Season Length Shortening	**days**	**61/31&31/0 Thresholds**	48	33	31	31	31
Oct Gavins Point Q	**kcfs**		13.4	22.1	23.3	23.3	23.3
Nov Gavins Point Q	**kcfs**		9	9	9	9	9
Nov last period Gavins Q	**kcfs**		9	9	9	9	9
September 1 Storage	**MAF**	**55/58**	37.250	39.493	41.369	43.128	45.394
Winter Gavins Point Q	**kcfs**	**12/17 Thresholds**	12.5	12.5	12.5	12.5	12.5
December 31 Storage	**MAF**		36.361	38.079	39.930	41.63	44.053
Ft. Peck Level 2/28/end of WY	**ft msl**		2200.3	2203.6	2207.0	2210.0	2214.3
Garrison Level 2/28/end of WY	**ft msl**		1809.7	1812.5	1815.3	1817.8	1821.3
Oahe Level 2/28/end of WY	**ft msl**		1578.5	1579.1	1584.5	1587.1	1590.8
Balance/Unbalance	**N/A**	**Bal <2227/1827/1600 ft msl**	Balance	Balance	Balance	Balance	Balance
Peck Rise 3/31-6/30 Odd Yrs	**N/A**		Yes	Yes	Yes	Yes	Yes
Garr Rise 3/31-6/30 Even Yrs	**N/A**		Yes	Yes	Yes	Yes	Yes
Oahe Rise 3/31-6/30 Odd Yrs	**N/A**		May down	Yes	May down	Yes	May down
Special Information	**N/A**						

Table XVI							
Lower Decile Extension Studies - Criteria Considered in the Modeling Effort							
Study Number			**19**	**20**	**21**	**22**	**23**
	Units	**Criteria**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**	**2012-2013**
March 1 Storage	**MAF**	**Initially 36.5/40**	30.757	29.420	33.426	33.191	33.664
March Spring Pulse?	**N/A**		No	No	No	No	No
March 15 Storage	**MAF**	**31/49/54.5**	31.362	30.181	34.117	33.981	34.459
Service Level	**N/A or kcfs**	**No Sea/Min/Full Thresholds**	Minimum	No Season	Minimum	Minimum	Minimum
3rd Period March GP Q	**kcfs**		23.8	9	23.8	23.8	23.8
April Gavins Point Q	**kcfs**		23.8	9	23.8	23.8	23.8
May 1 Storage	**MAF**	**40**	31.767	---	34.751	34.734	35.244
May Spring Pulse?	**N/A**		No	No	No	No	No
Pulse Magnitude	**kcfs**		0	0	0	0	0
Gavins Point Cycling Qs	**kcfs**		28/25.3	--	28/25.3	28/25.3	28/25.3
May Gavins Point Q	**kcfs**		26.2	15.0	26.2	26.2	26.2
June Gavins Point Q	**kcfs**		28.0	18.0	28.0	28.0	28.0
July 1 Storage	**MAF**	**50.5/57**	32.747	---	35.715	35.955	36.51
Service Level	**N/A**	**Min/Full Thresholds**	Minimum	No Season	Minimum	Minimum	Minimum
July Gavins Point Q	**kcfs**		28.3	18.0	28.3	28.3	28.3
Aug Gavins Point Q	**kcfs**		28	18.0	28	28	28
Sept Gavins Point Q	**kcfs**		24.2	12.0	24.2	24.2	24.2
July 1 Storage	**MAF**	**36.5/41&46.8/51.5**	32.747	---	35.715	35.955	36.510
Season Length Shortening	**days**	**61/31&31/0 Thresholds**	61	---	61	61	61
Oct Gavins Point Q	**kcfs**		9	9	9	9	9
Nov Gavins Point Q	**kcfs**		9	9	9	9	9
Nov last period Gavins Q	**kcfs**		9	9	9	9	9
September 1 Storage	**MAF**	**55/58**	30.505	33.384	33.772	34.113	34.629
Winter Gavins Point Q	**kcfs**	**12/17 Thresholds**	12.5	12.5	12.5	12.5	12.5
December 31 Storage	**MAF**		29.551	33.453	33.199	33.638	34.290
Ft. Peck Level 2/28/end of WY	**ft msl**		2185.8	2193.7	2193.9	2194.9	2196.1
Garrison Level 2/28/end of WY	**ft msl**		1797.5	1804.1	1804.4	1805.2	1806.2
Oahe Level 2/28/end of WY	**ft msl**		1565.1	1572.5	1572.7	1573.6	1574.7
Balance/Unbalance	**N/A**	**Bal <2227/1827/1600 ft msl**	Balance	Balance	Balance	Balance	Balance
Peck Rise 3/31-6/30 Odd Yrs	**N/A**		Yes	Yes	Yes	Yes	Yes
Garr Rise 3/31-6/30 Even Yrs	**N/A**		Yes	Yes	Yes	Yes	Yes
Oahe Rise 3/31-6/30 Odd Yrs	**N/A**		May down	Yes	No	Yes	No
Special Information	**N/A**						

B. Lower Quartile Runoff. Studies 14 through 18 show the results of Lower Quartile runoff extensions. System storage on March 1, 2008 is 34.2 MAF and rises to 44.2 MAF by March 1, 2013, with navigation service levels remaining at minimum service during the simulation period. The navigation season is shortened 48 days in 2008, 33 days in 2009, and 31 days in 2010 through 2012, as System storage increases. A 12,500-cfs average winter release is shown for the entire study period. Spring pulses would occur in March 2010 and in both March and May 2011 and 2012. The magnitude of these two May pulses are about 75 percent of those in the early years of the Median runs because of the reduction in the magnitude made for the runoff forecasts at and below Lower Quartile. Since the upper three reservoirs do not refill enough to meet the criteria in ***Table VII*** under Lower Quartile runoff, the carryover multiple use storage is balanced each March 1.

C. Lower Decile Runoff. Studies 19 through 23 show the results of Lower Decile runoff extensions. System storage is 30.8 MAF on March 1, 2008, reaching a low of 29.3 MAF on February 1, 2009, and then rising through much of the remainder of the period, ending at 34.3 MAF on March 1, 2013. Since the System storage is only 30.2 MAF (less than 31.0 MAF) on March 15, 2009, there would be no navigation season in 2009 under the Lower Decile runoff extensions. The Gavins Point releases would average 9,000 cfs in the spring and fall months and 18,000 cfs in the summer months (early May through early September). The higher summer releases are required to ensure that thermal power generation downstream from Gavins Point Dam remains near full capacity in the heavy energy use summer period. In the other 4 years of the Lower Decile runoff extensions (2008, 2010, 2011, and 2012), the navigation service level remains at minimum service and the navigation season is shortened 2 months each year. A 12,500-cfs average winter release is shown for the entire study period. No spring pulses or intrasystem unbalancing are shown due to the low system storage.

Plate 13 presents System storage, Gavins Point, and System peaking capability for Median, Lower Quartile, and Lower Decile runoff for the period 2008 through February 2013. Peak power, or peaking capability, is the amount of power available when all powerplants are operating at maximum.

Plate 14 presents reservoir pool elevations for Fort Peck, Garrison, Oahe, and Fort Randall for Median, Lower Quartile, and Lower Decile runoff for the period 2008 through February 2013.

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MISSOURI RIVER BASIN

PLATE 1

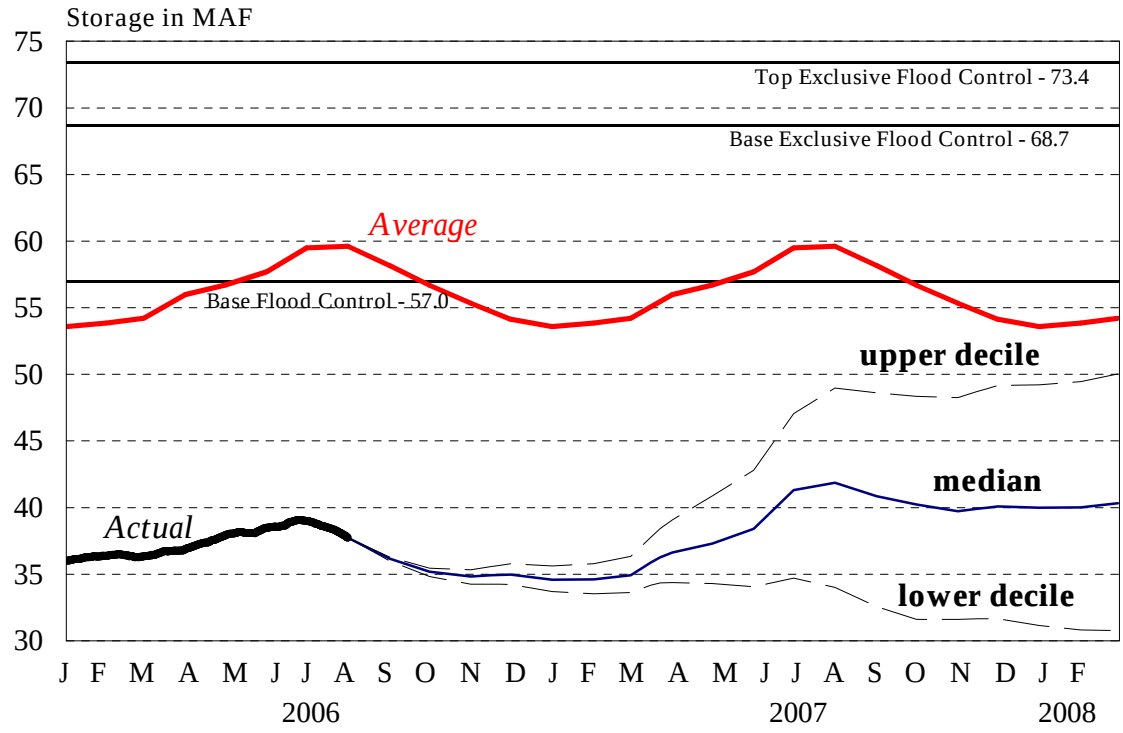
Summary of Engineering Data -- Missouri River Mainstem System

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 246,000 acres	1854 msl 380,000 acres	1620 msl 374,000 acres
27	Max. normal op. pool elev. & area	2246 msl 240,000 acres	1850 msl 364,000 acres	1617 msl 360,000 acres
28	Base flood control elev & area	2234 msl 212,000 acres	1837.5 msl 307,000 acres	1607.5 msl 312,000 acres
29	Min. operating pool elev. & area	2160 msl 90,000 acres	1775 msl 128,000 acres	1540 msl 117,000 acres
	Storage allocation & capacity			
30	Exclusive flood control	2250-2246 975,000 a.f.	1854-1850 1,489,000 a.f.	1620-1617 1,102,000 a.f.
31	Flood control & multiple use	2246-2234 2,717,000 a.f.	1850-1837.5 4,222,000 a.f.	1617-1607.5 3,201,000 a.f.
32	Carryover multiple use	2234-2160 10,785,000 a.f.	1837.5-1775 13,130,000 a.f.	1607.5-1540 13,461,000 a.f.
33	Permanent	2160-2030 4,211,000 a.f.	1775-1673 4,980,000 a.f.	1540-1415 5,373,000 a.f.
34	Gross	2250-2030 18,688,000 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	18,100 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)	1,097	2,339	2,749
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

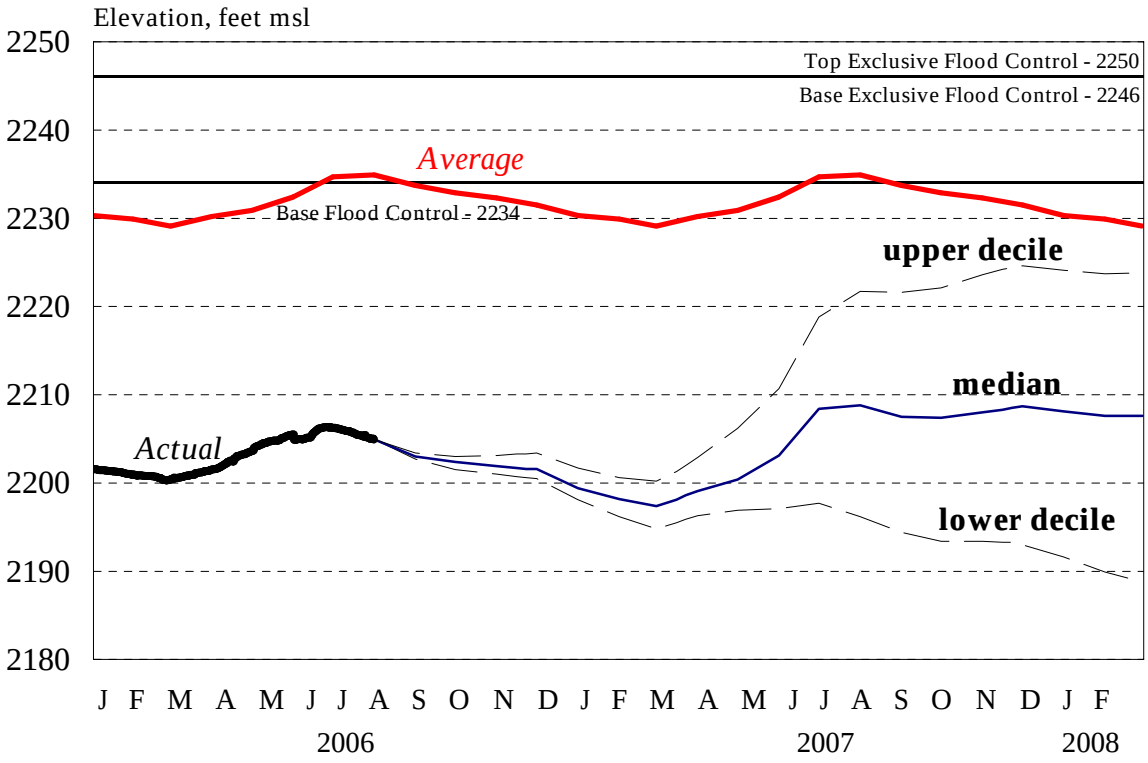
Big Bend Dam - Lake Sharpe	Fort Randall Dam - Lake Francis Case	Gavins Point Dam - Lewis & Clark Lake	Total	Item No.	Remarks
21 miles upstream Chamberlain, SD	Near Lake Andes, SD	Near Yankton, SD		1	(1) Includes 4,280 square miles of non-contributing areas.
Mile 987.4	Mile 880.0	Mile 811.1		2	
249,330 (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	
					(10) Affected by level of Lake Francis case. Applicable to pool at elevation 1350.
Left bank - adjacent	Left bank - adjacent	Right bank - adjacent		20	
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) 1967-2005 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	
					(14) Based on Study 8-83-1985
1423 msl 61,000 acres	1375 msl 102,000 acres	1210 msl 31,000 acres	1,194,000 acres	26	
1422 msl 60,000 acres	1365 msl 95,000 acres	1208 msl 28,000 acres	1,147,000 acres	27	
1420 msl 57,000 acres	1350 msl 77,000 acres	1204.5 msl 24,000 acres	989,000 acres	28	
1415 msl 51,000 acres	1320 msl 38,000 acres	1204.5 msl 24,000 acres	450,000 acres	29	
1423-1422 60,000 a.f.	1375-1365 985,000 a.f.	1210-1208 59,000 a.f.	4,670,000 a.f.	30	
1422-1420 117,000 a.f.	1365-1350 1,309,000 a.f.	1208-1204.5 90,000 a.f.	11,656,000 a.f.	31	
	1350-1320 1,607,000 a.f.		38,983,000 a.f.	32	
1420-1345 1,621,000 a.f.	1320-1240 1,517,000 a.f.	1204.5-1160 321,000 a.f.	18,023,000 a.f.	33	
1423-1345 1,798,000 a.f.	1375-1240 5,418,000 a.f.	1210-1160 470,000 a.f.	73,332,000 a.f.	34	
November 1963	January 1953	August 1955		35	
25 March 1964	24 November 1953	22 December 1955		36	
4,300 a.f. 430 yrs.	18,300 a.f. 250 yrs.	2,600 a.f. 180 yrs.	92,500 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	
	32,000 cfs - 128,000 cfs				
1351-1355(10) 25,000-100,000 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	2,435,650 kw	52	
497,000	293,000	74,000	1,967,000 kw	53	Corps of Engineers, U.S. Army
1,010	1,793	744	9,731 million kWh	54	Compiled by
October 1964 - July 1966	March 1954 - January 1956	September 1956 - January 1957	July 1943 - July 1966	55	Northwestern Division
				56	Missouri River Region
$107,498,000	$199,066,000	$49,617,000	$1,166,404,000		February 2006

System Storage
2006-2007 Final AOP



Average: 1967-2005

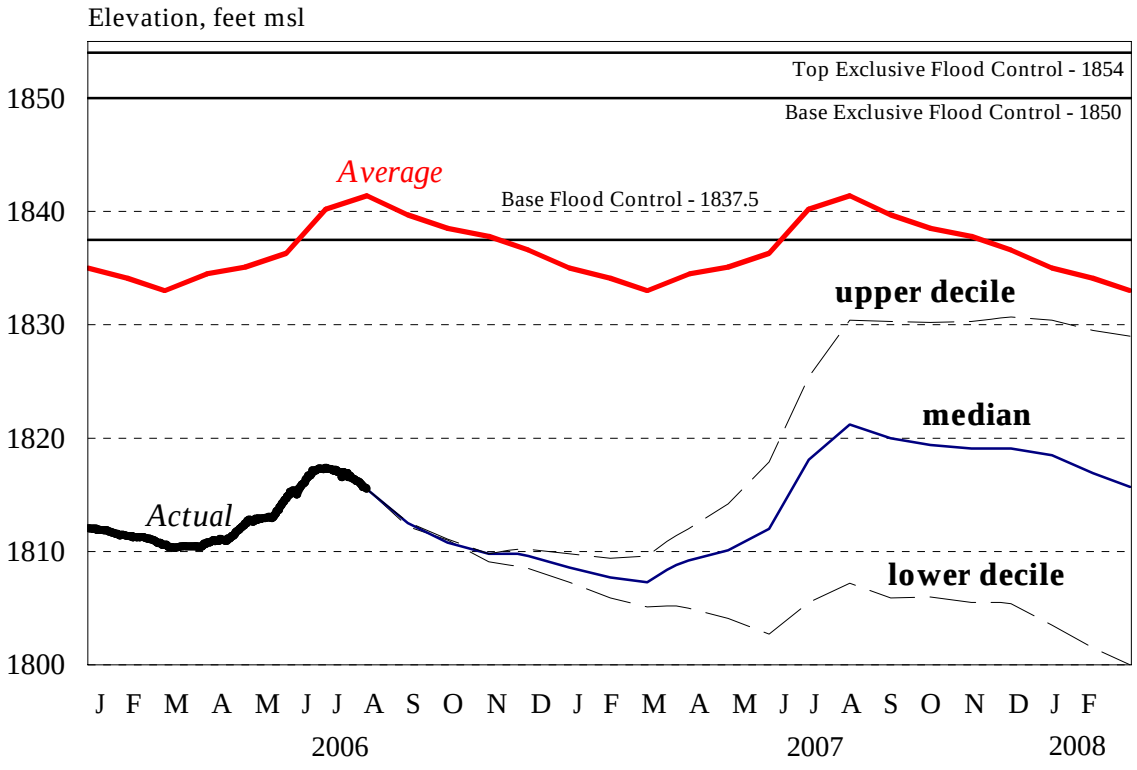
Fort Peck
2006-2007 Final AOP



Average: 1967-2005

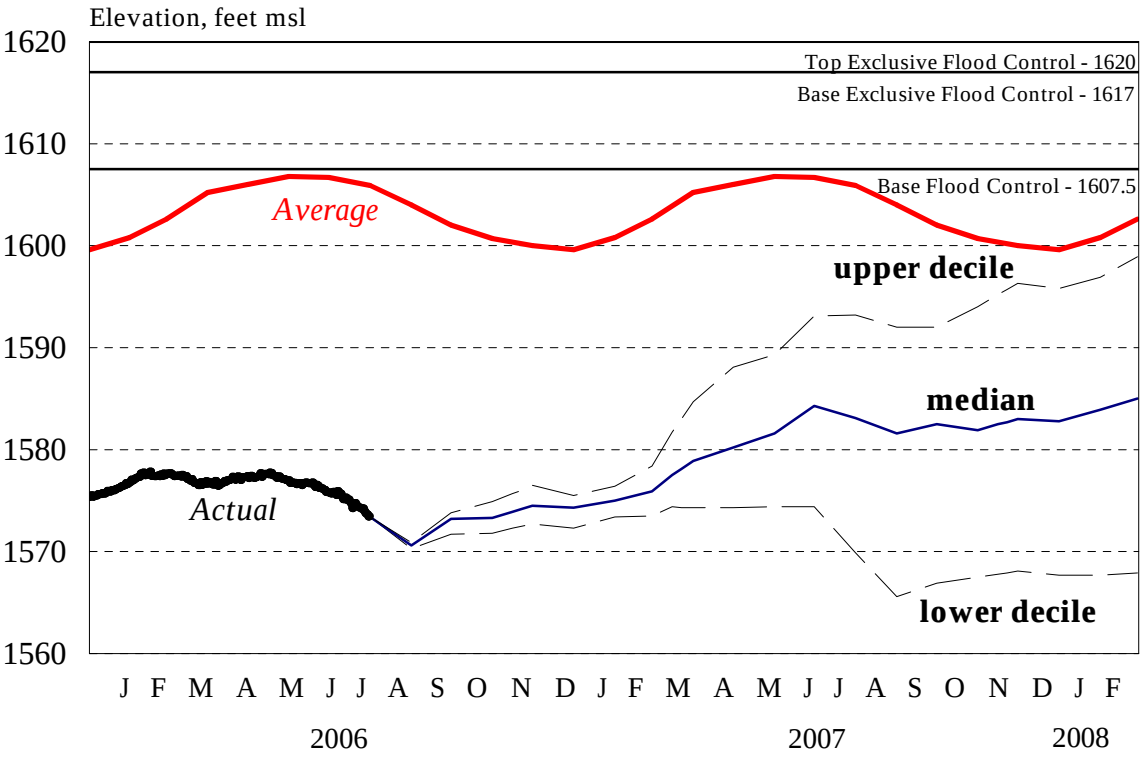
Plate 3

Garrison
2006-2007 Final AOP



Average: 1967-2005

Oahe
2006-2007 Final AOP



Average: 1967-2005

Plate 4

System Storage

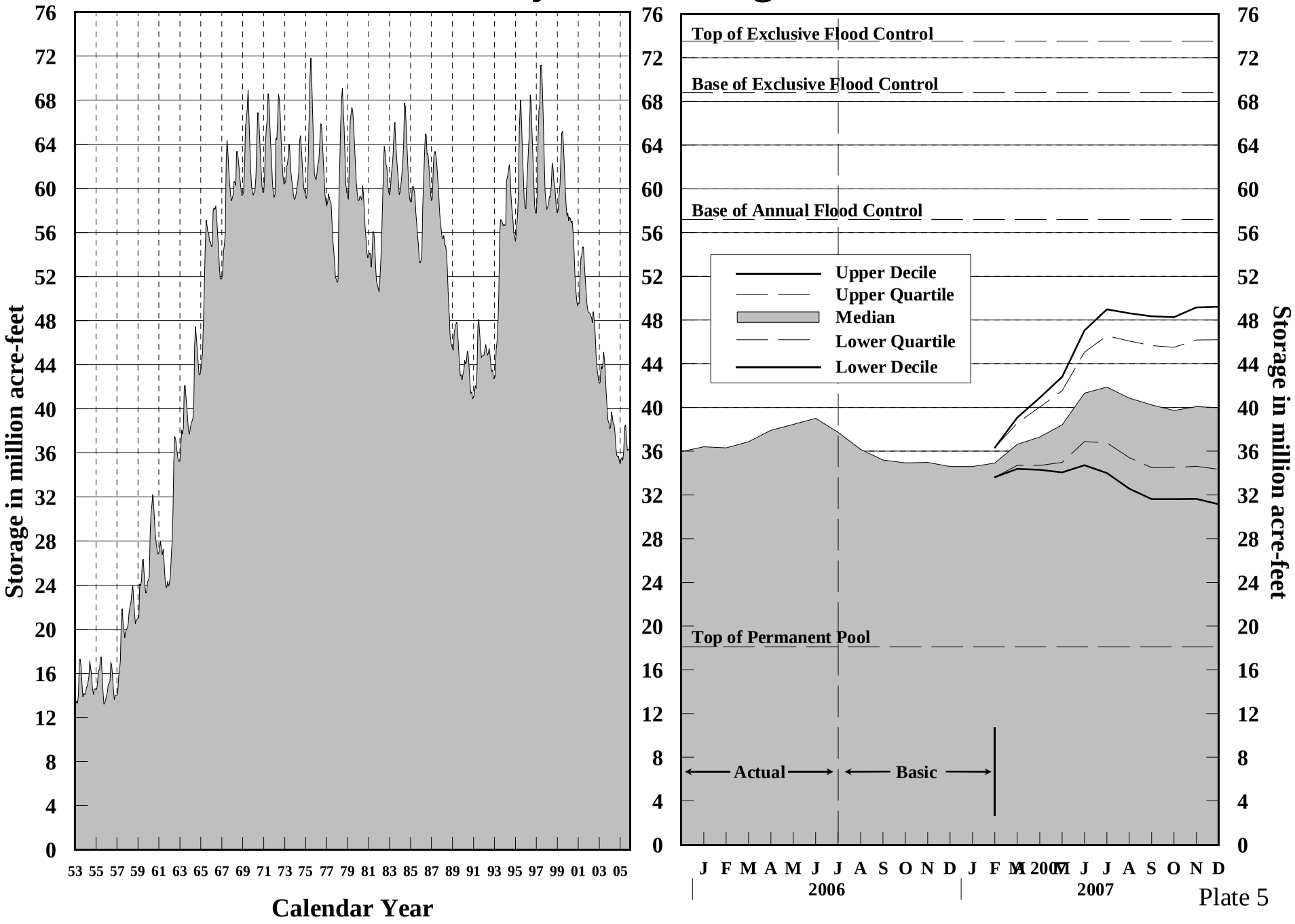


Plate 5

Gavins Point Releases

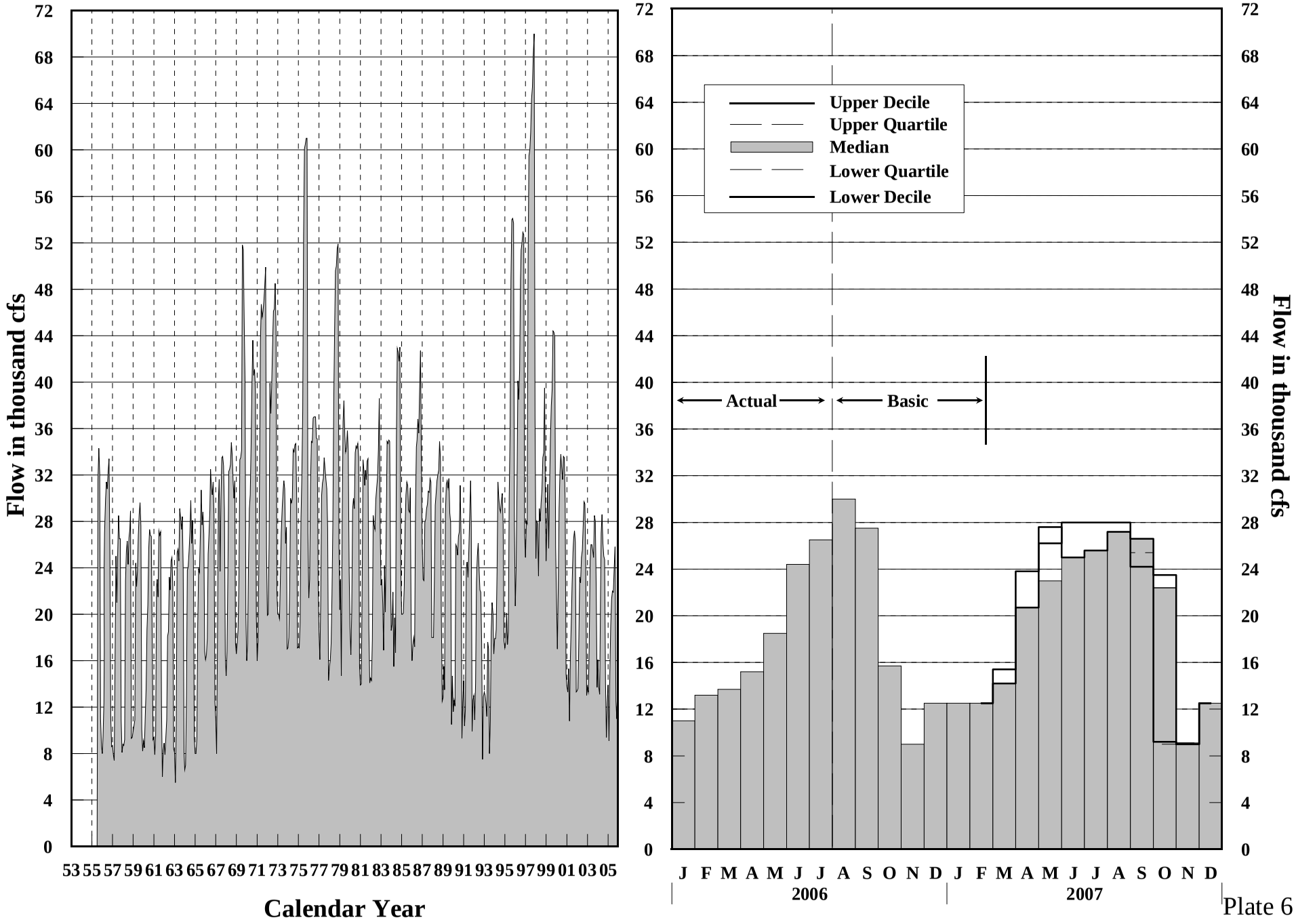
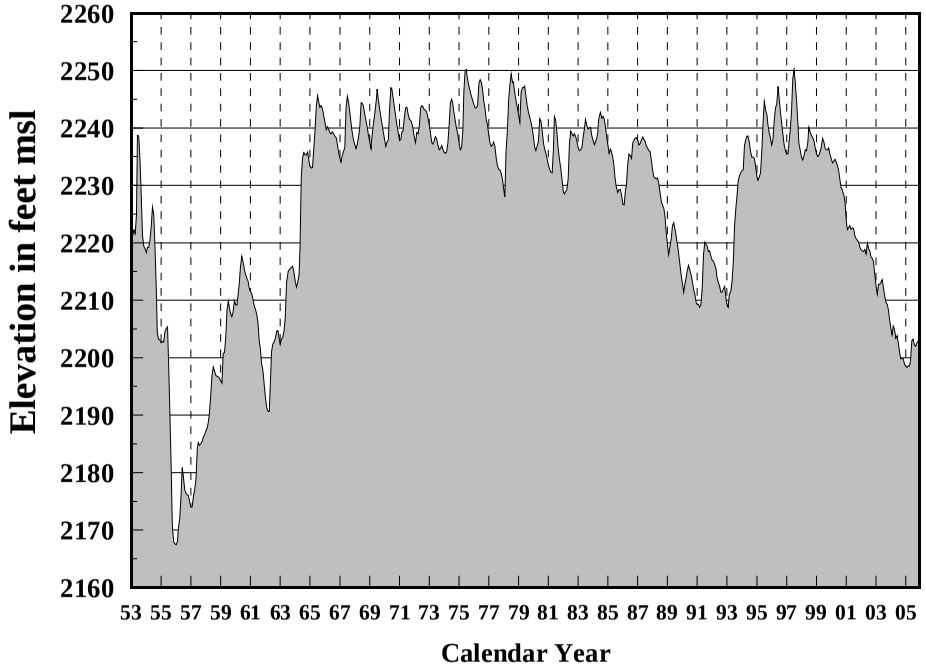
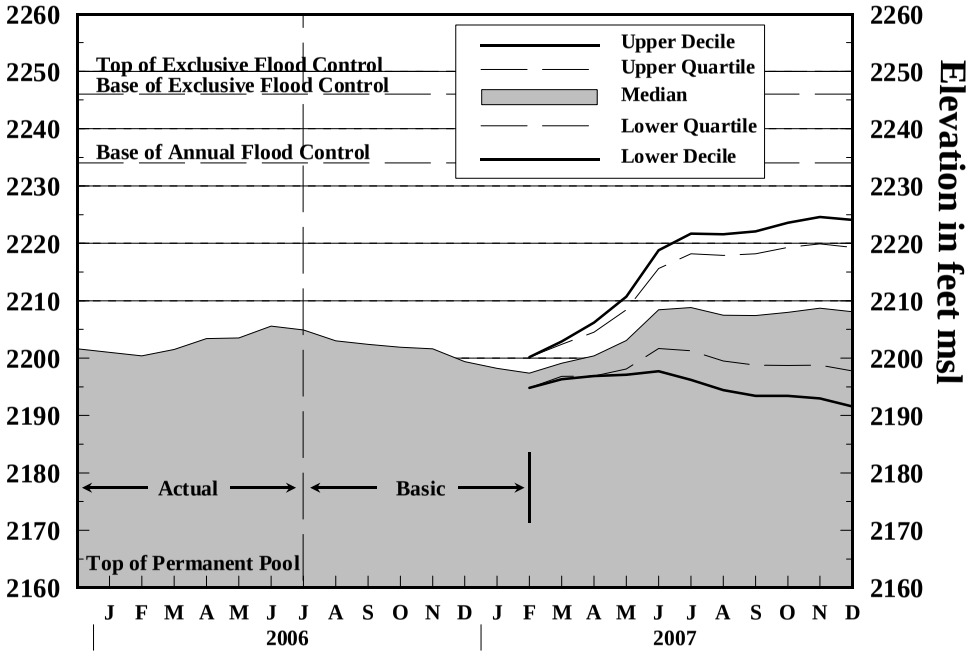
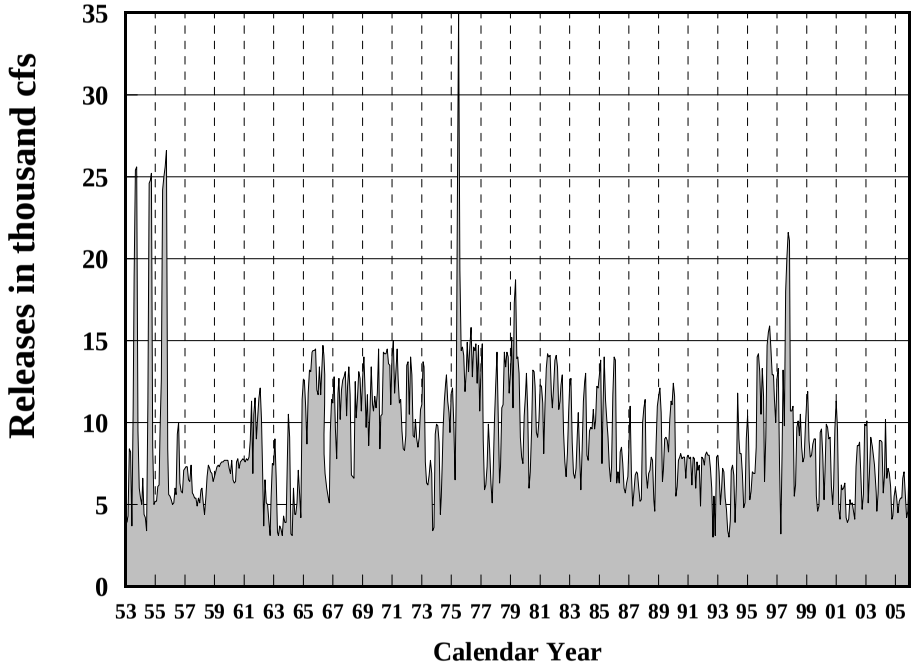


Plate 6

Fort Peck
Elevations and Releases







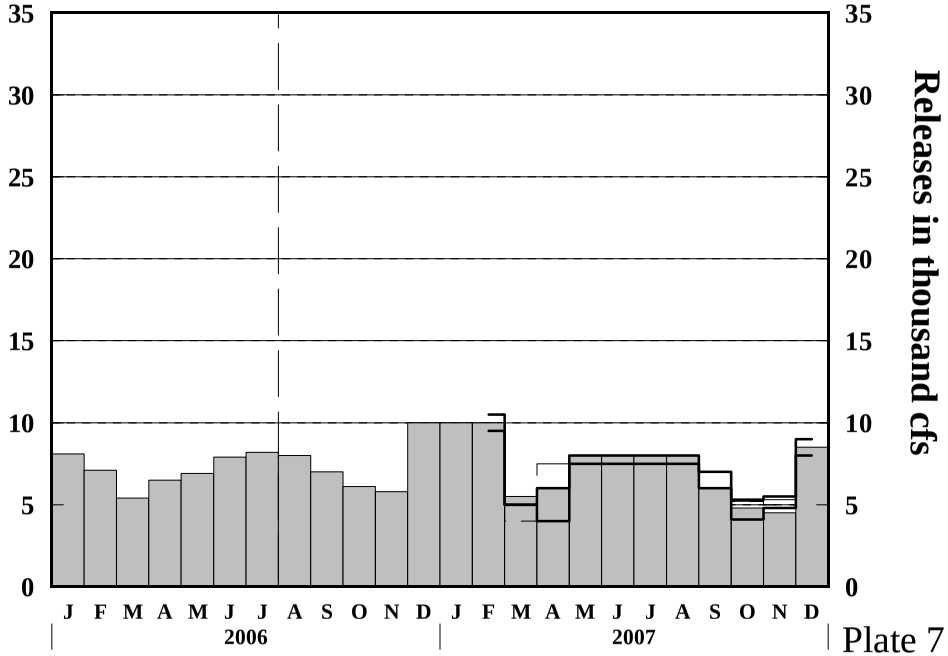
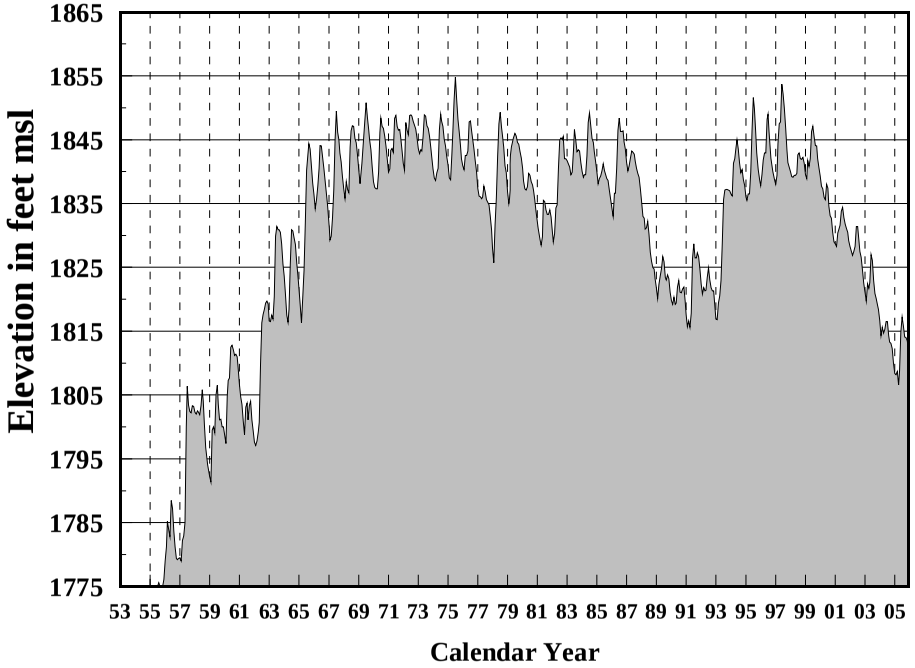
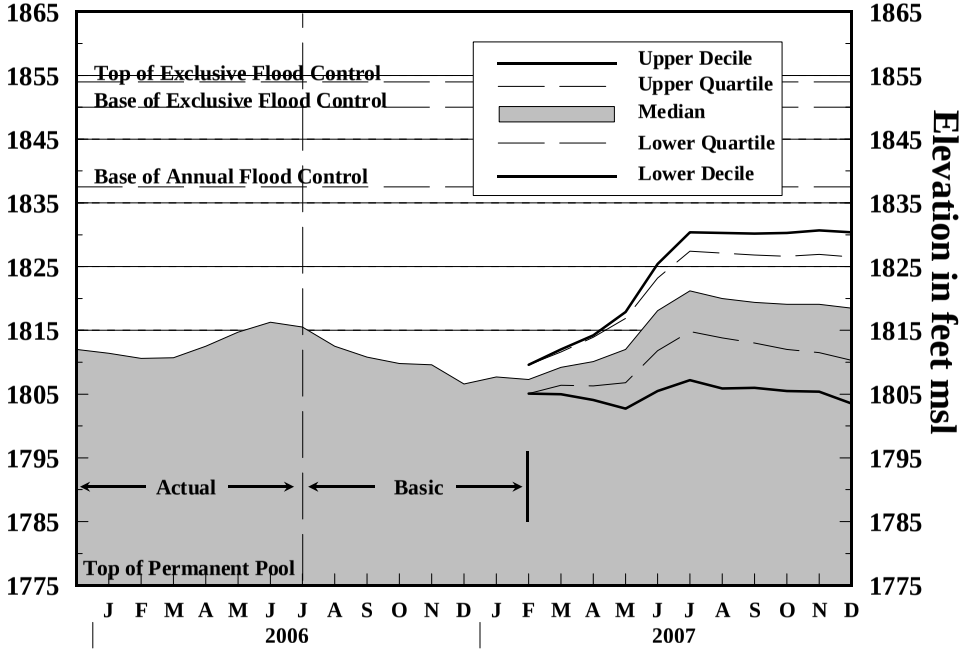
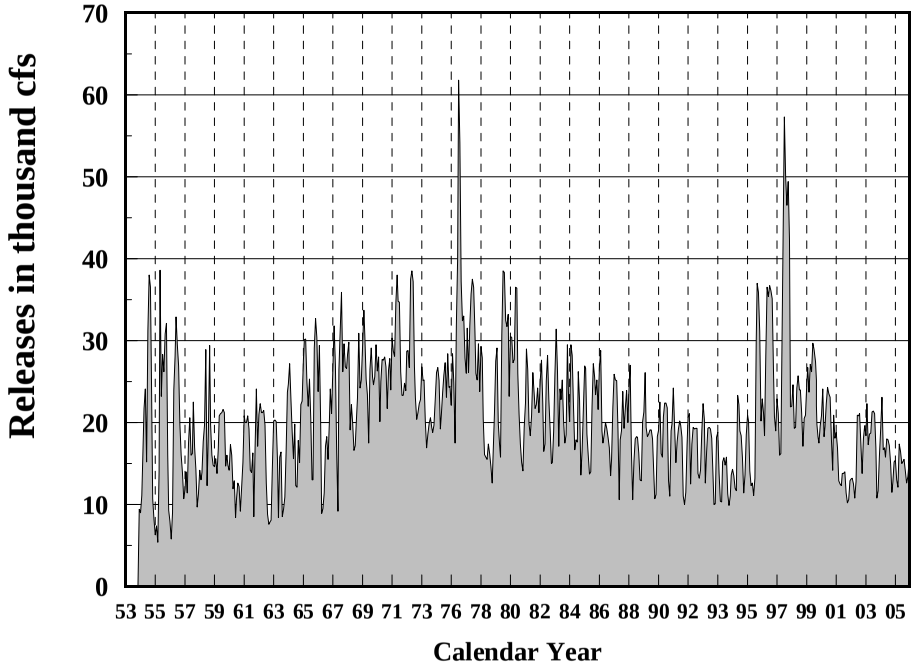


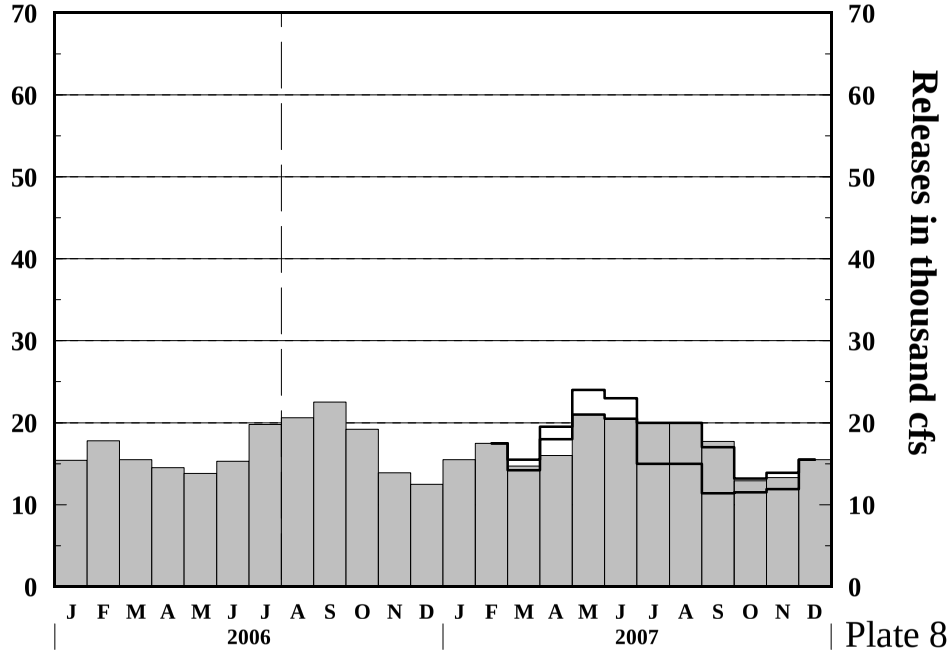
Plate 7

Garrison
Elevations and Releases



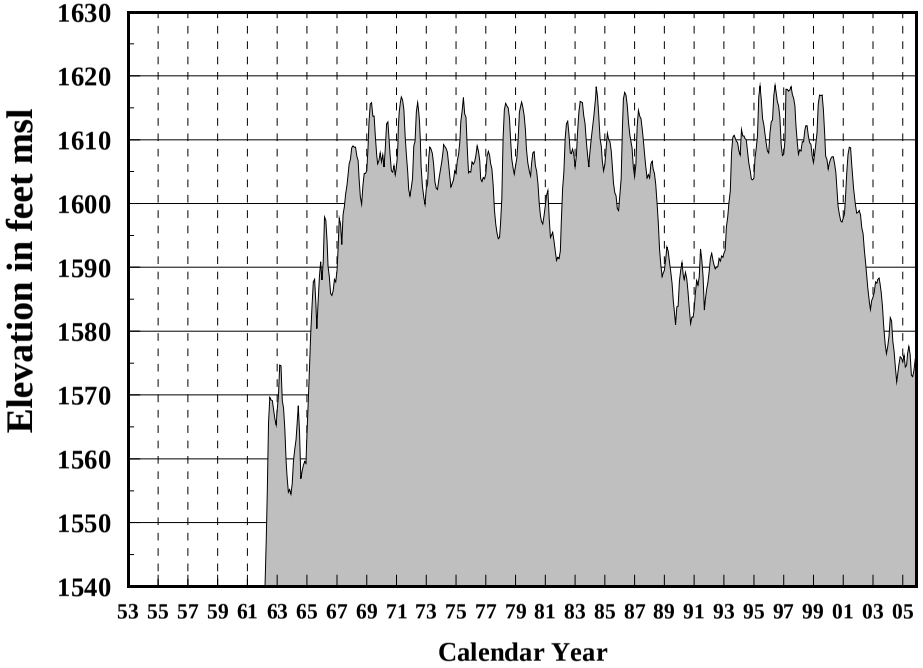


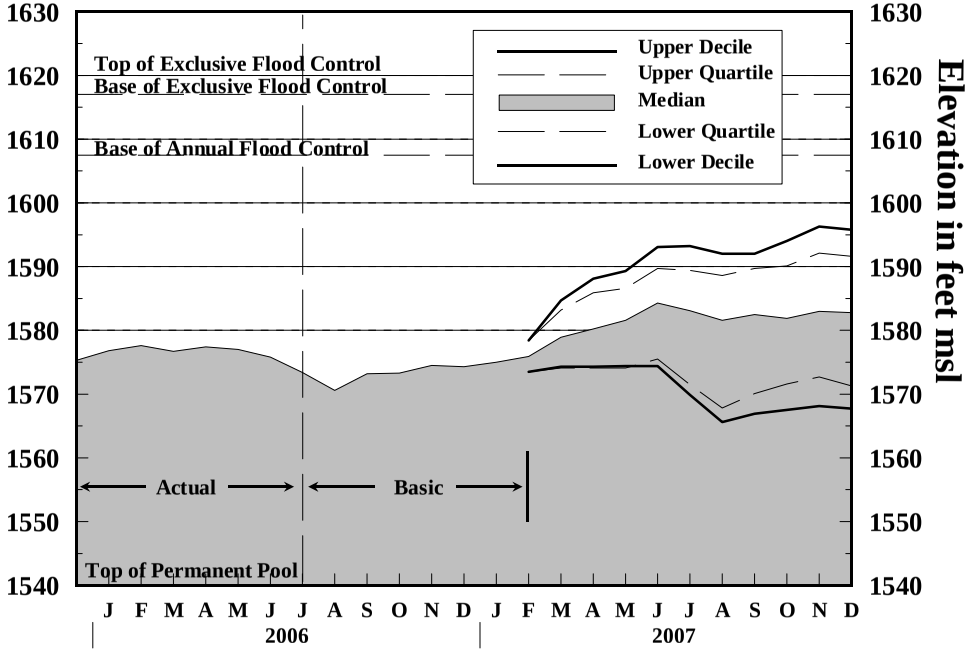


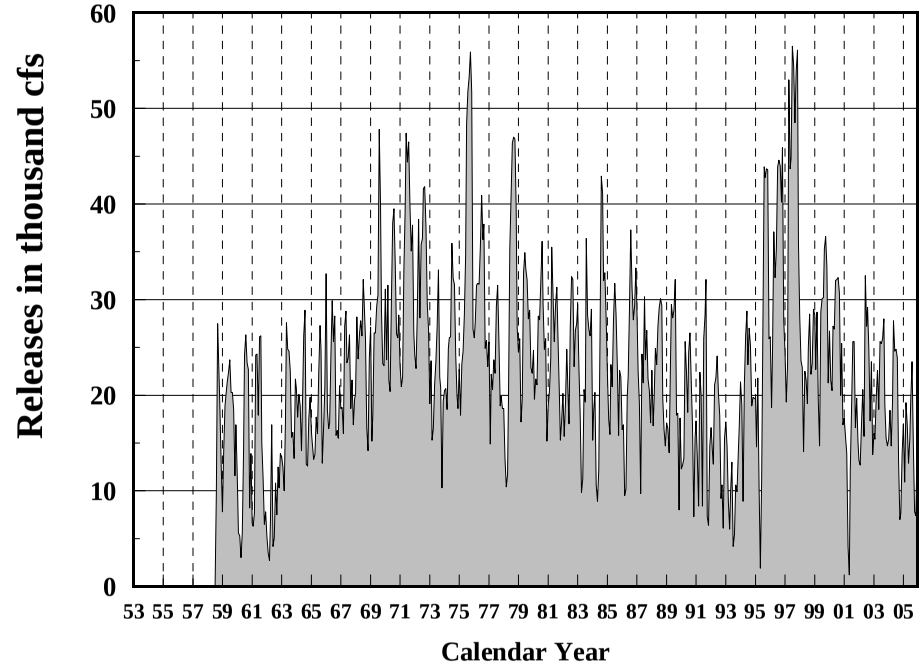


Oahe

Elevations and Releases







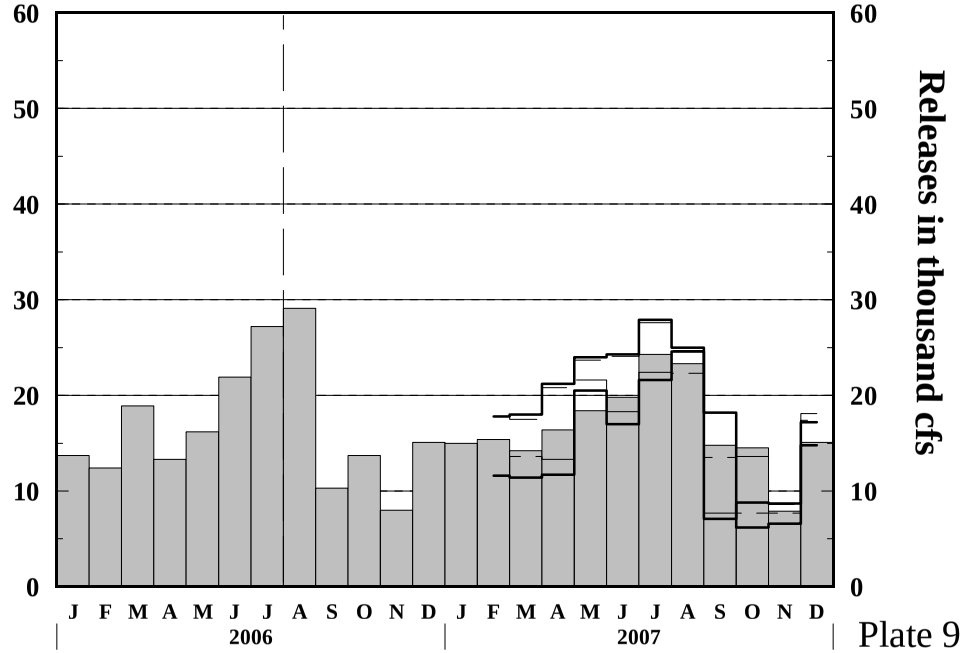
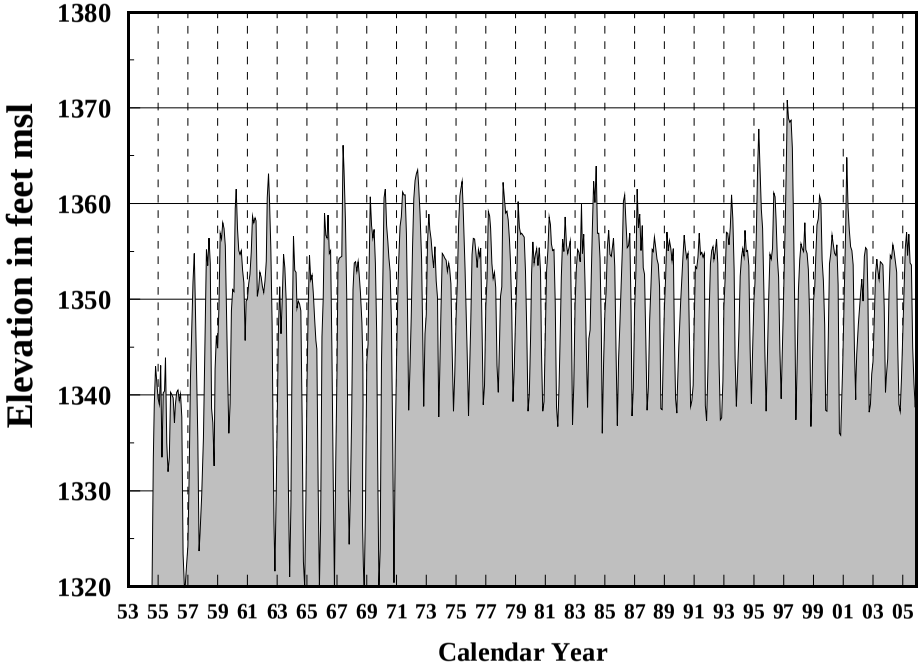
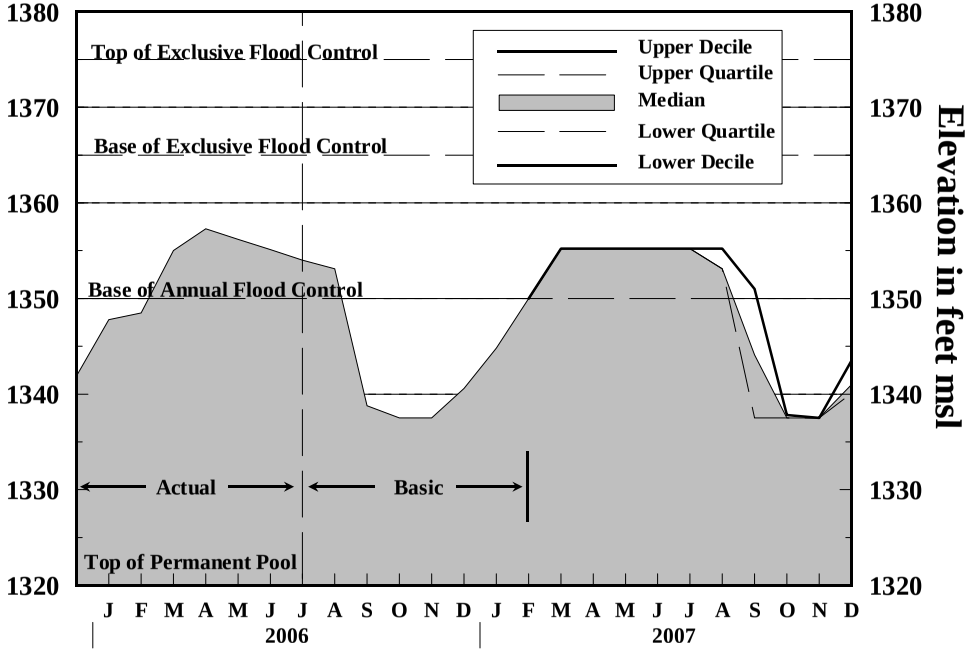
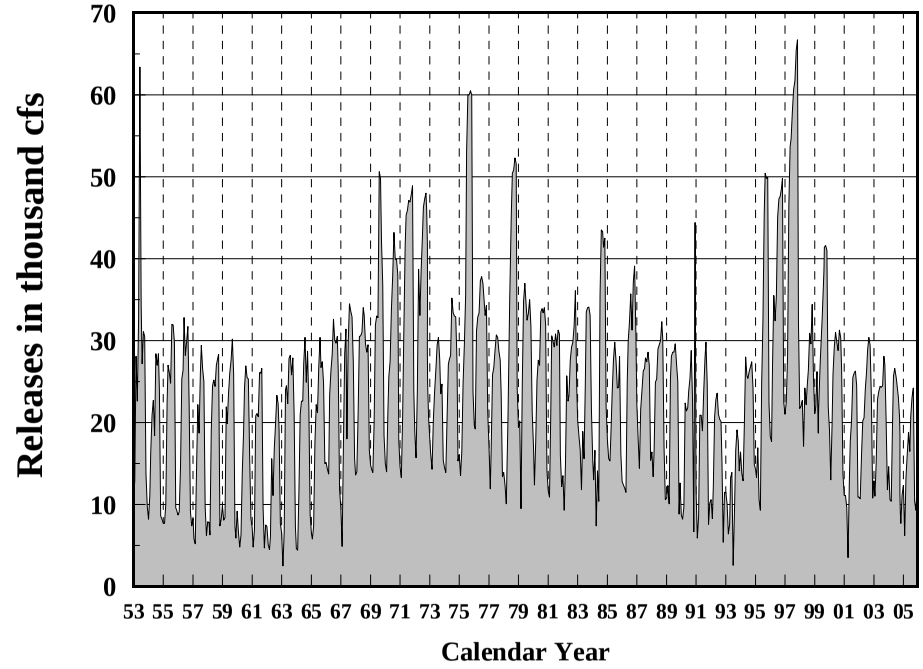


Plate 9

Fort Randall
Elevations and Releases







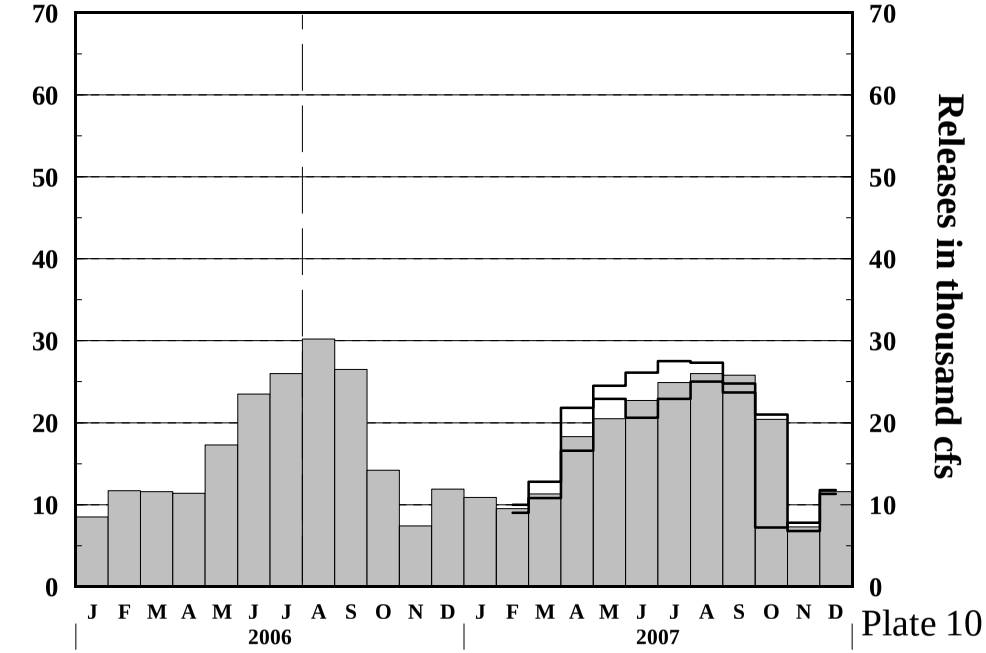
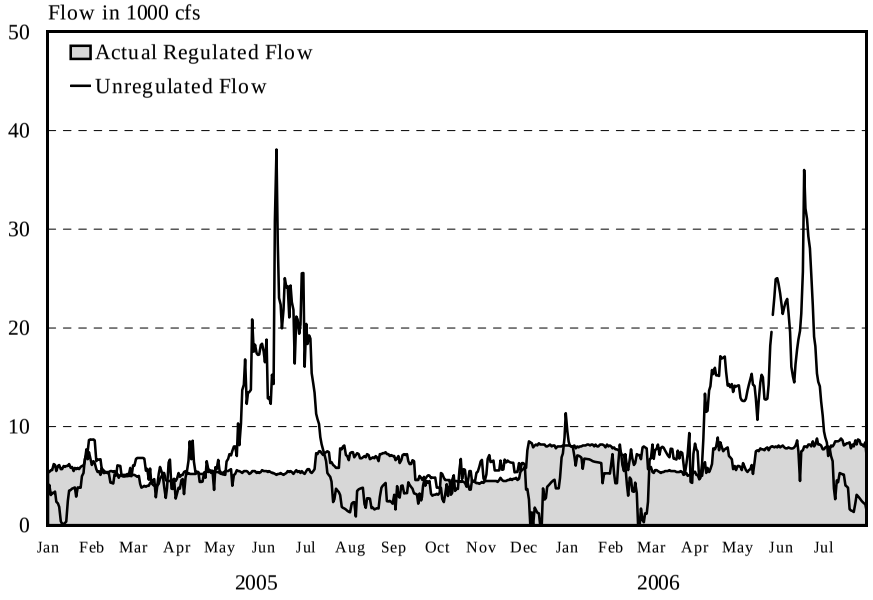


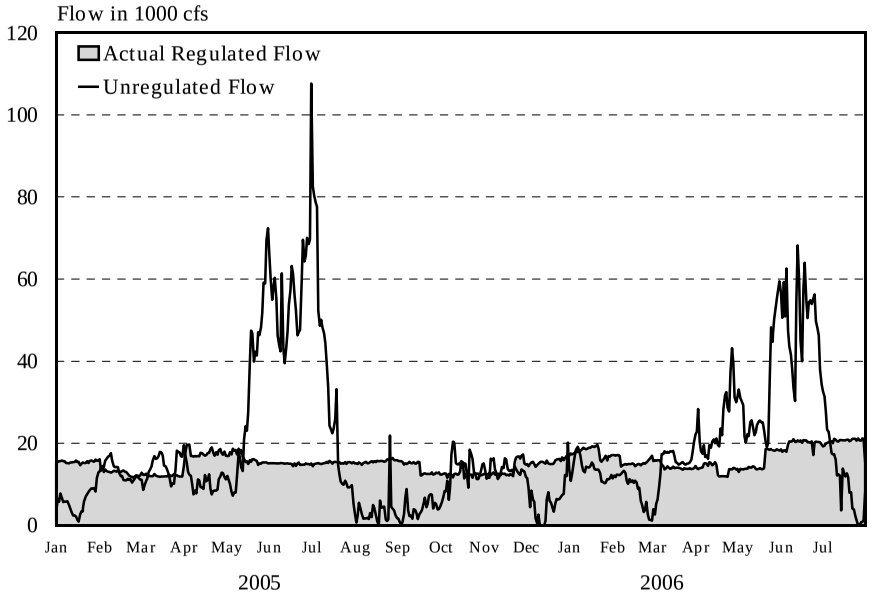
Plate 10

Reservoir Release and Unregulated Flow

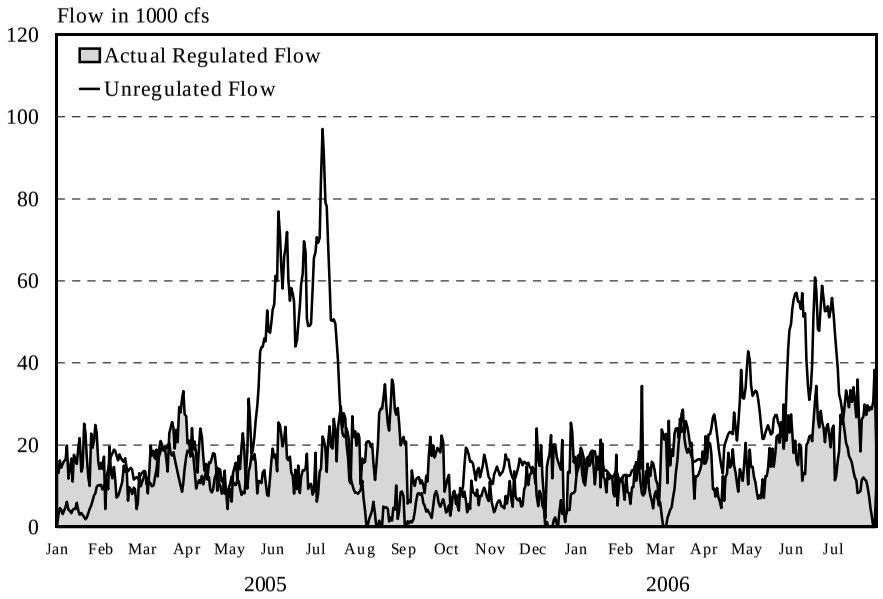
Fort Peck



Garrison



Oahe



Gavins Point

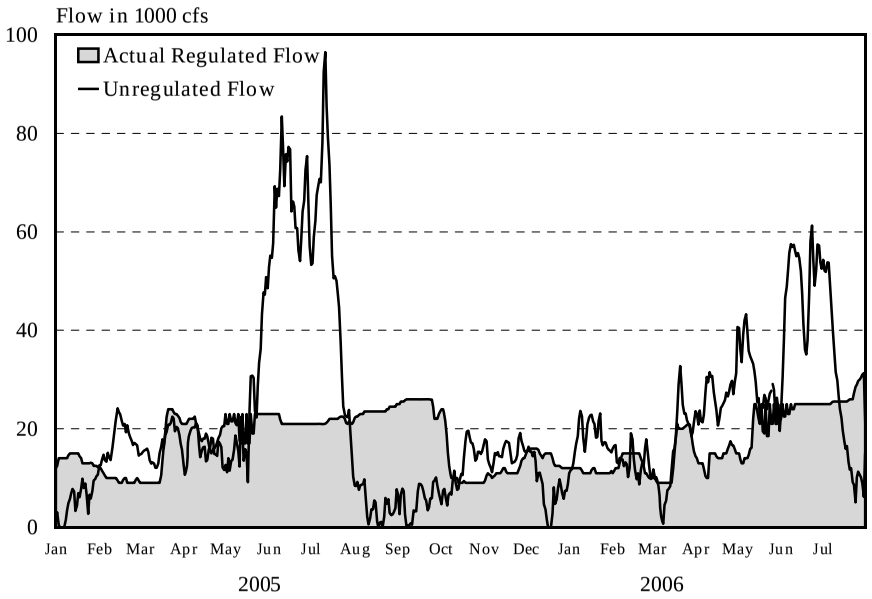


Plate 11

System Gross Capability and Average Monthly Generation

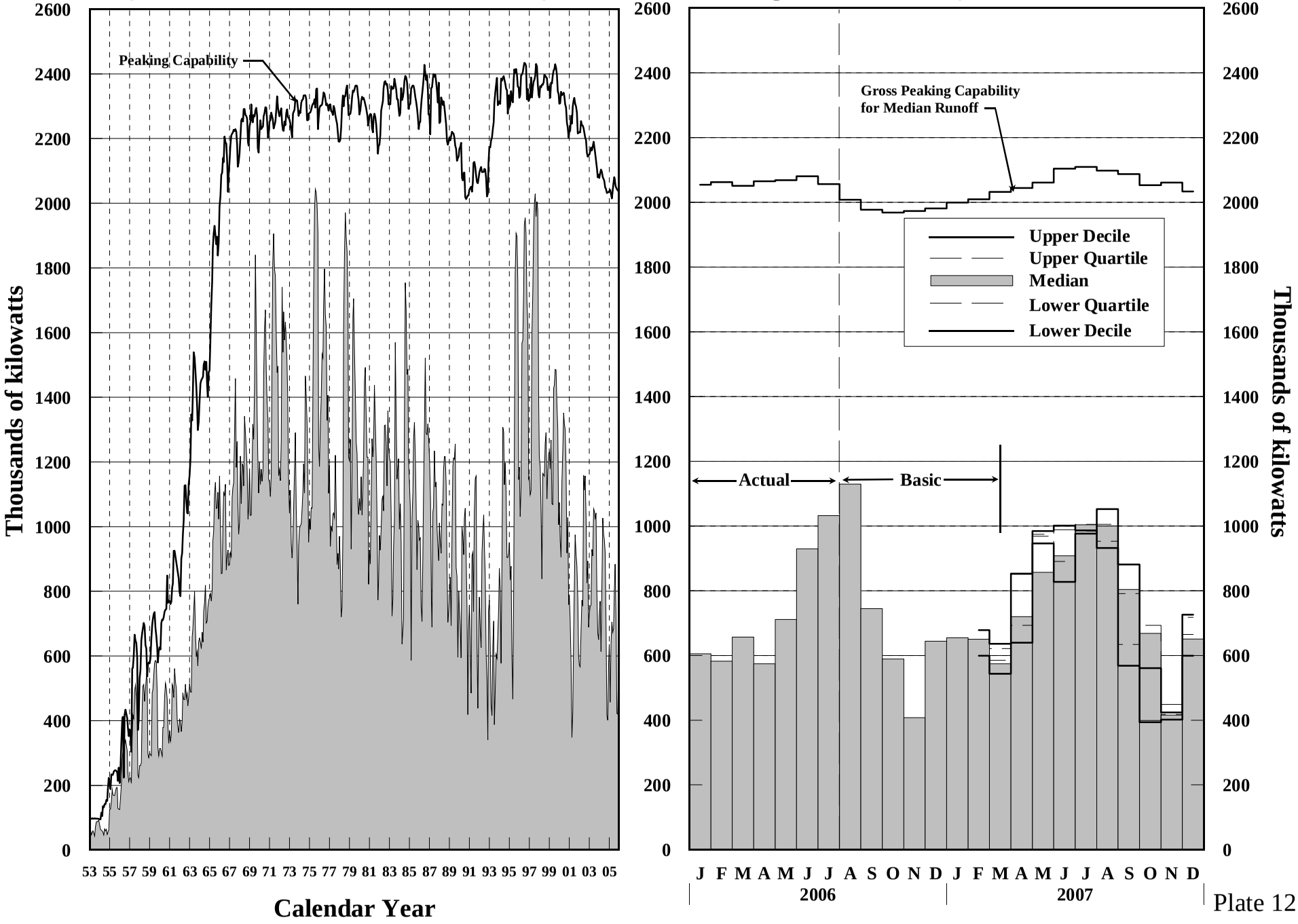


Plate 12

Tentative Five Year Extensions of 2006-2007 AOP

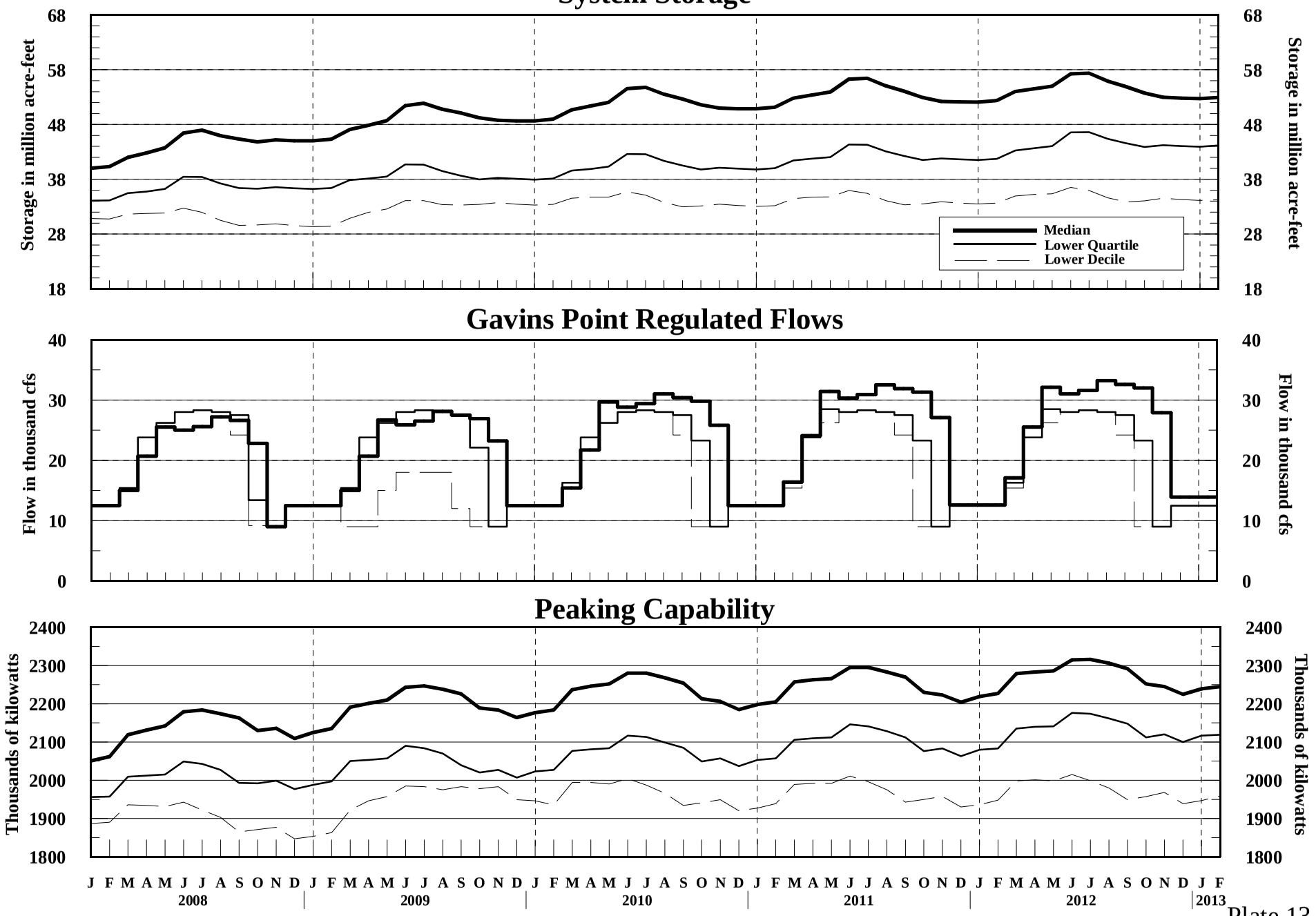


Plate 13

Tentative Five Year Extensions of 2006-2007 AOP

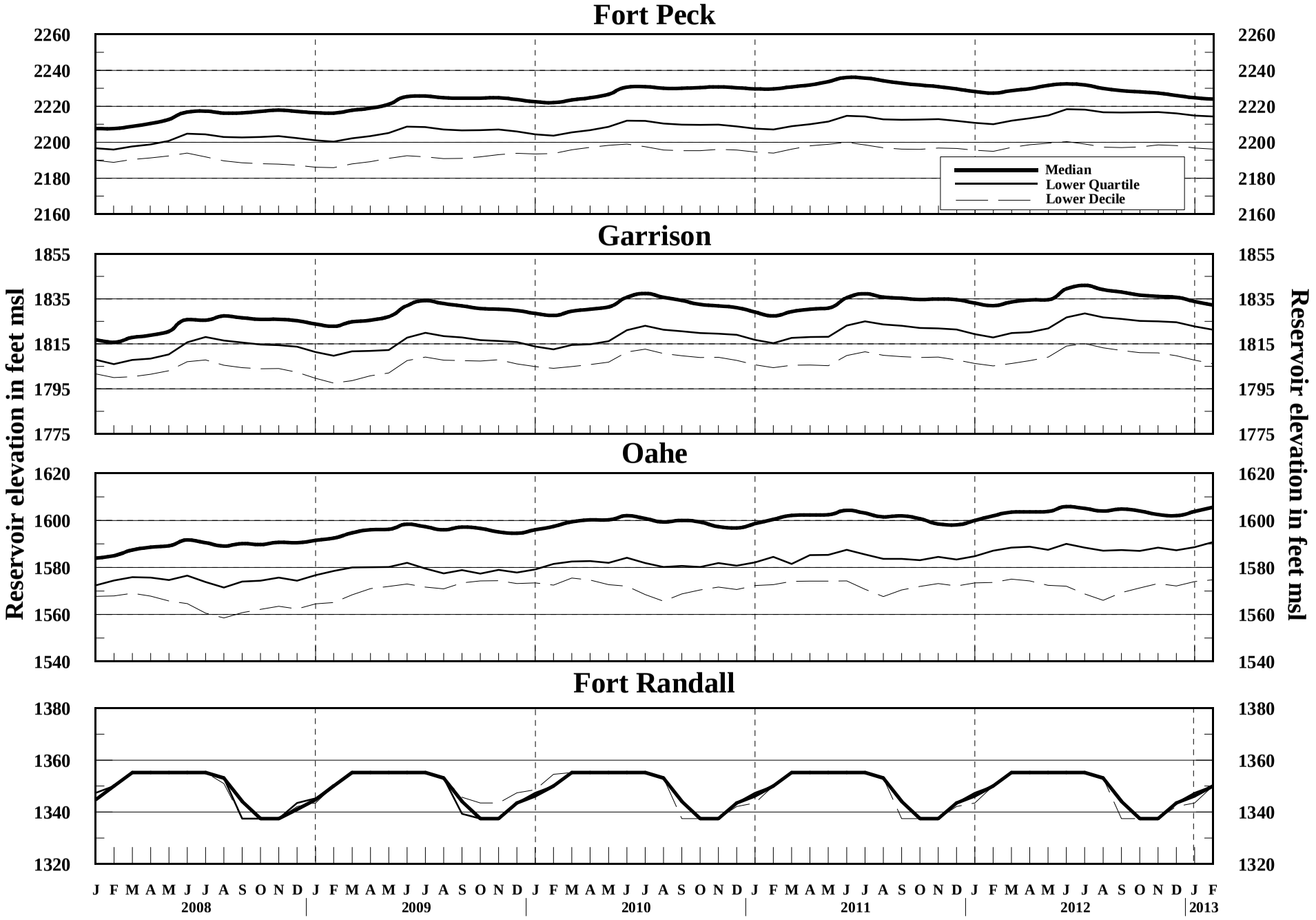
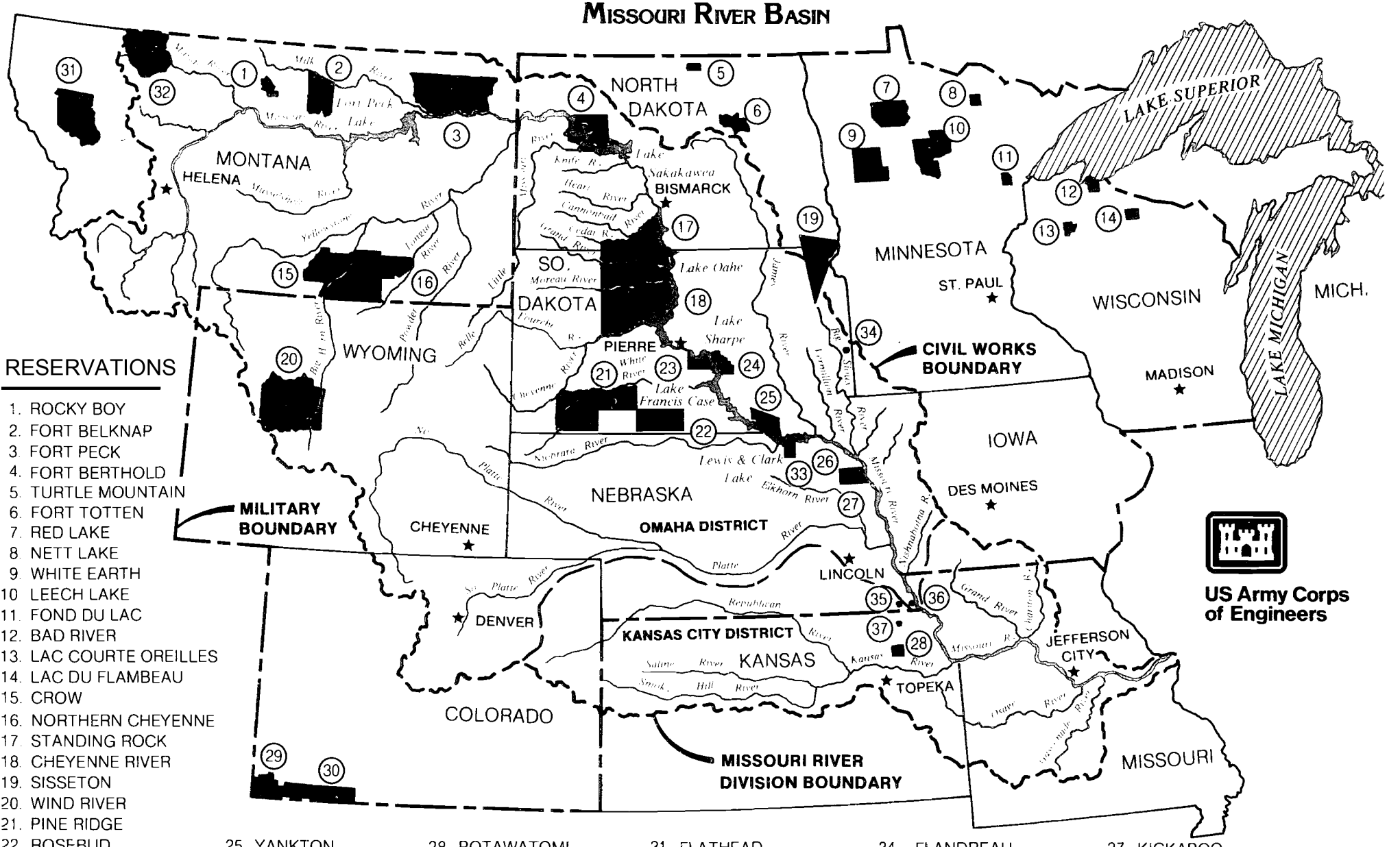


Plate 14

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

US Army Corps of Engineers

For illustrative purposes. No legal boundaries are implied.

	31JUL06 INI-SUM	31AUG	2006 30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	2007 31JAN	28FEB
--FORT PECK--										
NAT INFLOW	1980	200	240	290	150	70	80	270	315	365
DEPLETION	-599	-61	-161	-74	-26	-12	-14	-59	-113	-79
EVAPORATION	308	63	79	69	31	14	16	35		
MOD INFLOW	2271	198	322	295	145	68	77	294	428	444
RELEASE	3409	492	417	375	177	76	87	615	615	555
STOR CHANGE	-1138	-294	-94	-79	-32	-9	-10	-321	-187	-111
STORAGE	9750	9456	9362	9283	9250	9242	9232	8911	8724	8612
ELEV FTMSL	2204.9	2203.0	2202.4	2201.9	2201.7	2201.6	2201.6	2199.4	2198.2	2197.4
DISCH KCFS	8.2	8.0	7.0	6.1	6.0	5.5	5.5	10.0	10.0	10.0
POWER										
AVE POWER MW		96	83	72	71	65	65	115	114	113
PEAK POW MW		131	131	130	130	130	130	127	126	124
ENERGY GWH	481.5	71.4	60.1	53.9	25.5	11.0	12.5	85.9	85.0	76.2
--GARRISON--										
NAT INFLOW	2170	350	320	370	150	70	80	210	260	360
DEPLETION	-73	75	-94	48	-59	-27	-31	-15	7	23
CHAN STOR	-20	2	11	10	1	5	0	-50		
EVAPORATION	340	72	88	75	34	16	18	39		
REG INFLOW	5291	697	754	631	353	163	180	751	868	892
RELEASE	7125	1383	1140	855	357	167	222	953	1076	972
STOR CHANGE	-1834	-686	-386	-223	-4	-4	-42	-202	-208	-80
STORAGE	12172	11486	11100	10876	10873	10869	10828	10626	10417	10338
ELEV FTMSL	1815.5	1812.5	1810.8	1809.8	1809.8	1809.8	1809.6	1808.6	1807.7	1807.3
DISCH KCFS	20.6	22.5	19.2	13.9	12.0	12.0	14.0	15.5	17.5	17.5
POWER										
AVE POWER MW		238	200	144	124	124	144	159	178	177
PEAK POW MW		377	370	367	367	367	366	363	359	358
ENERGY GWH	890.7	177.3	143.9	107.2	44.6	20.8	27.7	118.2	132.2	118.8
--OAHE--										
NAT INFLOW	245	35	50	30	15	7	8		10	90
DEPLETION	183	96	24	-7	3	1	1	14	20	31
CHAN STOR	18	-10	19	29	10		-11	-8	-11	
EVAPORATION	293	58	74	66	30	14	16	35		
REG INFLOW	6912	1254	1111	855	350	158	202	896	1055	1031
RELEASE	6424	1788	613	841	229	114	129	930	923	857
STOR CHANGE	488	-534	498	14	121	44	72	-34	132	174
STORAGE	10378	9844	10342	10356	10477	10521	10594	10560	10692	10866
ELEV FTMSL	1573.4	1570.6	1573.2	1573.3	1573.9	1574.2	1574.5	1574.3	1575.0	1575.9
DISCH KCFS	27.2	29.1	10.3	13.7	7.7	8.2	8.2	15.1	15.0	15.4
POWER										
AVE POWER MW		305	109	145	82	88	87	162	161	166
PEAK POW MW		517	531	531	535	536	538	537	540	545
ENERGY GWH	825.9	226.6	78.3	108.1	29.6	14.8	16.8	120.4	119.7	111.6
--BIG BEND--										
EVAPORATION	97	20	25	22	10	5	5	11		
REG INFLOW	6327	1768	589	819	219	110	124	919	923	857
RELEASE	6358	1799	589	819	219	110	124	918	923	857
STORAGE	1652	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL	1420.5	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	23.7	29.3	9.9	13.3	7.4	7.9	7.8	14.9	15.0	15.4
POWER										
AVE POWER MW		138	50	67	37	40	40	75	74	74
PEAK POW MW		518	538	538	538	538	538	538	538	529
ENERGY GWH	377.3	102.8	36.1	50.0	13.4	6.7	7.6	55.9	55.0	49.7
--FORT RANDALL--										
NAT INFLOW	135	25	25	5	3	1	1	5	20	50
DEPLETION	34	15	7	1	1	0	1	3	3	3
EVAPORATION	95	25	26	18	8	4	4	10		
REG INFLOW	6353	1785	569	804	213	106	121	911	940	904
RELEASE	6677	1858	1577	873	213	107	121	732	670	528
STOR CHANGE	-325	-73	-1007	-68	0	0	0	179	270	376
STORAGE	3448	3375	2368	2299	2299	2299	2299	2477	2747	3123
ELEV FTMSL	1354.0	1353.1	1338.8	1337.5	1337.5	1337.5	1337.5	1340.6	1344.8	1350.0
DISCH KCFS	26.0	30.2	26.5	14.2	7.2	7.7	7.6	11.9	10.9	9.5
POWER										
AVE POWER MW		251	207	104	53	56	56	88	84	76
PEAK POW MW		349	290	285	285	285	285	299	318	339
ENERGY GWH	630.9	186.7	148.8	77.5	19.0	9.5	10.7	65.6	62.2	51.0
--GAVINS POINT--										
NAT INFLOW	595	60	70	80	50	23	27	60	100	125
DEPLETION	28	10	-5	2	5	2	3	10	1	
CHAN STOR	30	-8	7	23	13	-1	0	-8	2	3
EVAPORATION	36	7	9	8	4	2	2	4		
REG INFLOW	7239	1893	1649	965	268	125	143	769	771	655
RELEASE	7217	1845	1636	965	268	125	143	769	771	694
STOR CHANGE	22	48	13							-39
STORAGE	336	384	397	397	397	397	397	397	397	358
ELEV FTMSL	1205.1	1207.0	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS	26.5	30.0	27.5	15.7	9.0	9.0	9.0	12.5	12.5	12.5
POWER										
AVE POWER MW		101	96	56	32	32	32	44	45	44
PEAK POW MW		116	117	117	117	117	117	117	117	114
ENERGY GWH	304.5	75.1	69.1	41.4	11.6	5.4	6.2	33.1	33.1	29.6
--GAVINS POINT - SIOUX CITY--										
NAT INFLOW	430	90	70	60	30	14	16	30	35	85
DEPLETION	115	34	22	10	6	3	3	12	13	13
REGULATED FLOW AT SIOUX CITY										
KAF	7532	1901	1684	1015	292	136	156	787	793	766
KCFS		30.9	28.3	16.5	9.8	9.8	9.8	12.8	12.9	13.8
--TOTAL--										
NAT INFLOW	5555	760	775	835	398	186	212	575	740	1075
DEPLETION	-312	169	-207	-20	-71	-33	-38	-35	-69	-9
CHAN STOR	17	-16	25	62	26	4	-11	-66	-9	3
EVAPORATION	1169	244	300	258	116	54	62	135		
STORAGE	37736	36166	35189	34832	34917	34949	34970	34592	34599	34919
SYSTEM POWER										
AVE POWER MW		1129	745	589	399	406	425	644	655	650
PEAK POW MW		2008	1977	1968	1971	1972	1973	1981	1999	2009
ENERGY GWH	3510.9	839.9	536.2	438.0	143.7	68.2	81.5	479.1	487.2	437.0
DAILY GWH		27.1	17.9	14.1	9.6	9.7	10.2	15.5	15.7	15.6

	31JUL06		2006						2007	
	INI-SUM	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--										
NAT INFLOW	2376	240	288	348	180	84	96	324	378	438
DEPLETION	-610	-62	-132	-86	-27	-13	-14	-95	-97	-84
EVAPORATION	211	47	59	52	12	6	7	27		
MOD INFLOW	2775	255	361	382	195	91	104	392	475	522
RELEASE	3506	492	417	369	176	83	95	646	646	583
STOR CHANGE	-730	-237	-56	13	19	8	9	-254	-171	-61
STORAGE	9750	9513	9457	9470	9489	9496	9505	9251	9081	9020
ELEV FTMSL	2204.9	2203.4	2203.0	2203.1	2203.3	2203.3	2203.4	2201.7	2200.6	2200.2
DISCH KCFS	8.2	8.0	7.0	6.0	5.9	6.0	6.0	10.5	10.5	10.5
POWER										
AVE POWER MW		96	84	72	71	72	72	121	120	120
PEAK POW MW		132	131	131	131	132	132	130	128	128
ENERGY GWH	496.1	71.4	60.3	53.3	25.4	12.1	13.8	90.1	89.4	80.3
--GARRISON--										
NAT INFLOW	2604	420	384	444	180	84	96	252	312	432
DEPLETION	-54	147	-44	66	-74	-35	-39	-49	-26	
CHAN STOR	-26	2	11	11	1	-1		-50		
EVAPORATION	233	54	66	57	13	6	7	30		
REG INFLOW	5905	713	789	701	417	194	223	867	984	1015
RELEASE	7243	1383	1135	977	357	167	222	953	1076	972
STOR CHANGE	-1338	-670	-346	-276	60	28	1	-86	-92	43
STORAGE	12172	11502	11156	10880	10940	10968	10969	10883	10791	10834
ELEV FTMSL	1815.5	1812.6	1811.1	1809.8	1810.1	1810.2	1810.2	1809.8	1809.4	1809.6
DISCH KCFS	20.6	22.5	19.1	15.9	12.0	12.0	14.0	15.5	17.5	17.5
POWER										
AVE POWER MW		238	199	165	124	124	145	160	180	180
PEAK POW MW		377	371	367	368	368	368	367	365	366
ENERGY GWH	910.3	177.3	143.5	122.5	44.7	20.9	27.8	119.1	133.8	120.7
--OAHE--										
NAT INFLOW	294	42	60	36	18	8	10		12	108
DEPLETION	183	96	24	-7	3	1	1	14	20	31
CHAN STOR	18	-10	19	17	21		-11	-8	-11	
EVAPORATION	202	44	56	50	12	6	7	27		
REG INFLOW	7169	1275	1134	987	381	168	213	904	1057	1049
RELEASE	6172	1758	580	776	213	103	121	1093	882	647
STOR CHANGE	997	-483	555	211	168	65	92	-189	176	402
STORAGE	10378	9895	10450	10661	10829	10895	10987	10798	10973	11375
ELEV FTMSL	1573.4	1570.9	1573.8	1574.9	1575.7	1576.0	1576.5	1575.5	1576.4	1578.4
DISCH KCFS	27.2	28.6	9.7	12.6	7.2	7.4	7.6	17.8	14.3	11.6
POWER										
AVE POWER MW		300	103	135	77	80	83	192	155	127
PEAK POW MW		519	534	540	544	546	548	543	548	558
ENERGY GWH	798.6	223.0	74.2	100.5	27.9	13.5	15.9	142.8	115.3	85.5
--BIG BEND--										
EVAPORATION	66	15	19	16	4	2	2	9		
REG INFLOW	6106	1743	561	760	210	101	119	1085	882	647
RELEASE	6137	1774	561	760	210	101	119	1085	882	647
STORAGE	1652	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL	1420.5	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	23.7	28.8	9.4	12.4	7.0	7.3	7.5	17.6	14.3	11.6
POWER										
AVE POWER MW		136	48	62	36	37	38	87	70	56
PEAK POW MW		518	538	538	538	538	538	538	538	529
ENERGY GWH	363.0	101.4	34.4	46.4	12.9	6.2	7.3	64.9	52.0	37.6
--FORT RANDALL--										
NAT INFLOW	162	30	30	6	3	1	2	6	24	60
DEPLETION	34	15	7	1	1	0	1	3	3	3
EVAPORATION	66	18	20	14	3	1	2	8		
REG INFLOW	6188	1771	553	751	209	100	118	1080	903	704
RELEASE	6514	1844	1560	823	209	100	114	718	646	500
STOR CHANGE	-326	-73	-1007	-72	0	0	4	362	257	204
STORAGE	3448	3375	2368	2296	2295	2295	2299	2661	2918	3122
ELEV FTMSL	1354.0	1353.1	1338.8	1337.5	1337.5	1337.5	1337.5	1343.5	1347.2	1350.0
DISCH KCFS	26.0	30.0	26.2	13.4	7.0	7.2	7.2	11.7	10.5	9.0
POWER										
AVE POWER MW		249	205	98	52	53	53	88	82	73
PEAK POW MW		349	290	285	285	285	285	313	330	339
ENERGY GWH	618.7	185.3	147.3	73.1	18.6	8.9	10.1	65.3	61.3	48.9
--GAVINS POINT--										
NAT INFLOW	714	72	84	96	60	28	32	72	120	150
DEPLETION	28	10	-5	2	5	2	3	10	1	
CHAN STOR	31	-8	7	24	12	0	0	-8	2	3
EVAPORATION	24	5	7	6	1	1	1	3		
REG INFLOW	7207	1893	1649	935	274	125	143	769	767	653
RELEASE	7185	1845	1636	935	274	125	143	769	767	692
STOR CHANGE	22	48	13							-39
STORAGE	336	384	397	397	397	397	397	397	397	358
ELEV FTMSL	1205.1	1207.0	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS	26.5	30.0	27.5	15.2	9.2	9.0	9.0	12.5	12.5	12.5
POWER										
AVE POWER MW		101	96	54	33	32	32	44	44	44
PEAK POW MW		116	117	117	117	117	117	117	117	114
ENERGY GWH	303.2	75.1	69.1	40.1	11.8	5.4	6.2	33.0	33.0	29.5
--GAVINS POINT - SIOUX CITY--										
NAT INFLOW	516	108	84	72	36	17	19	36	42	102
DEPLETION	115	34	22	10	6	3	3	12	13	13
REGULATED FLOW AT SIOUX CITY										
KAF	7586	1919	1698	997	305	139	159	793	796	781
KCFS		31.2	28.5	16.2	10.2	10.0	10.0	12.9	12.9	14.1
--TOTAL--										
NAT INFLOW	6666	912	930	1002	477	223	254	690	888	1290
DEPLETION	-304	240	-128	-14	-87	-41	-46	-105	-86	-37
CHAN STOR	12	-16	26	52	34	-1	-11	-66	-9	3
EVAPORATION	802	184	226	195	46	22	25	103		
STORAGE	37736	36289	35448	35325	35572	35673	35779	35612	35781	36330
SYSTEM POWER										
AVE POWER MW		1120	734	586	392	398	423	692	652	599
PEAK POW MW		2010	1981	1978	1983	1985	1988	2008	2026	2034
ENERGY GWH	3489.9	833.6	528.6	435.9	141.3	66.9	81.1	515.2	484.7	402.5
DAILY GWH		26.9	17.6	14.1	9.4	9.6	10.1	16.6	15.6	14.4

	31JUL06		2006						2007	
	INI-SUM	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--										
NAT INFLOW	1584	160	192	232	120	56	64	216	252	292
DEPLETION	-518	-72	-136	-98	-30	-14	-16	-55	-63	-34
EVAPORATION	381	79	98	85	38	18	20	44		
MOD INFLOW	1721	153	230	245	112	52	60	227	315	326
RELEASE	3230	492	417	328	149	69	79	584	584	528
STOR CHANGE	-1510	-339	-186	-83	-37	-17	-20	-357	-269	-202
STORAGE	9750	9411	9225	9142	9105	9087	9068	8711	8442	8240
ELEV FTMSL	2204.9	2202.7	2201.5	2201.0	2200.7	2200.6	2200.5	2198.1	2196.2	2194.8
DISCH KCFS	8.2	8.0	7.0	5.3	5.0	5.0	5.0	9.5	9.5	9.5
POWER										
AVE POWER MW		96	83	63	59	59	59	110	109	107
PEAK POW MW		131	129	129	129	128	128	125	123	121
ENERGY GWH	455.8	71.3	59.9	47.1	21.3	9.9	11.3	82.1	80.8	72.0
--GARRISON--										
NAT INFLOW	1738	280	258	296	120	56	64	168	208	288
DEPLETION	-164	50	-101	39	-64	-30	-34	-28	-5	9
CHAN STOR	-15	2	11	18	4		0	-50		
EVAPORATION	426	90	110	94	42	20	22	48		
REG INFLOW	4691	634	676	510	295	136	155	682	797	807
RELEASE	6977	1383	952	926	357	167	190	953	1076	972
STOR CHANGE	-2286	-749	-276	-417	-62	-31	-35	-271	-279	-165
STORAGE	12172	11423	11147	10730	10668	10637	10602	10331	10052	9886
ELEV FTMSL	1815.5	1812.2	1811.0	1809.1	1808.8	1808.7	1808.5	1807.3	1805.9	1805.1
DISCH KCFS	20.6	22.5	16.0	15.1	12.0	12.0	12.0	15.5	17.5	17.5
POWER										
AVE POWER MW		238	167	156	123	123	123	157	175	174
PEAK POW MW		376	371	364	363	363	362	358	353	350
ENERGY GWH	866.4	177.1	120.4	115.8	44.4	20.7	23.6	117.0	130.5	116.9
--OAHE--										
NAT INFLOW	196	28	40	24	12	6	6		8	72
DEPLETION	183	96	24	-7	3	1	1	14	20	31
CHAN STOR	18	-10	36	5	17			-19	-11	
EVAPORATION	362	73	91	81	37	17	20	43		
REG INFLOW	6645	1232	913	881	347	154	176	877	1053	1013
RELEASE	6620	1818	647	869	245	122	138	948	846	987
STOR CHANGE	25	-586	266	12	102	32	38	-72	207	26
STORAGE	10378	9792	10058	10070	10171	10204	10242	10170	10377	10403
ELEV FTMSL	1573.4	1570.3	1571.7	1571.8	1572.3	1572.5	1572.7	1572.3	1573.4	1573.5
DISCH KCFS	27.2	29.6	10.9	14.1	8.2	8.8	8.7	15.4	13.8	17.8
POWER										
AVE POWER MW		309	114	149	87	93	92	163	146	189
PEAK POW MW		516	523	523	526	527	528	526	532	533
ENERGY GWH	844.2	230.2	82.1	110.7	31.3	15.6	17.7	121.3	108.5	126.9
--BIG BEND--										
EVAPORATION	121	25	31	27	12	6	7	14		
REG INFLOW	6499	1793	616	842	233	116	131	934	846	987
RELEASE	6529	1824	616	842	233	116	131	934	846	987
STORAGE	1652	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL	1420.5	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	23.7	29.7	10.4	13.7	7.8	8.3	8.3	15.2	13.8	17.8
POWER										
AVE POWER MW		140	52	69	40	42	42	76	68	85
PEAK POW MW		518	538	538	538	538	538	538	538	529
ENERGY GWH	387.8	104.3	37.7	51.4	14.3	7.1	8.1	56.8	50.8	57.3
--FORT RANDALL--										
NAT INFLOW	108	20	20	4	2	1	1	4	16	40
DEPLETION	34	15	7	1	1	0	1	3	3	3
EVAPORATION	119	31	33	23	10	5	5	12		
REG INFLOW	6474	1799	585	822	224	112	126	923	859	1024
RELEASE	6804	1872	1593	891	225	112	126	744	689	553
STOR CHANGE	-330	-73	-1008	-69	0	0	0	179	170	471
STORAGE	3448	3375	2367	2299	2298	2298	2298	2477	2647	3118
ELEV FTMSL	1354.0	1353.1	1338.7	1337.5	1337.5	1337.5	1337.5	1340.6	1343.3	1349.9
DISCH KCFS	26.0	30.4	26.8	14.5	7.5	8.0	8.0	12.1	11.2	10.0
POWER										
AVE POWER MW		253	209	106	55	59	58	90	85	79
PEAK POW MW		349	290	285	285	285	285	299	312	339
ENERGY GWH	641.8	188.1	150.3	79.0	19.9	9.9	11.2	66.7	63.4	53.1
--GAVINS POINT--										
NAT INFLOW	476	48	56	64	40	19	21	48	80	100
DEPLETION	28	10	-5	2	5	2	3	10	1	
CHAN STOR	29	-9	7	23	13	-1	0	-8	2	2
EVAPORATION	45	9	12	10	5	2	2	5		
REG INFLOW	7237	1893	1649	965	268	125	143	769	769	655
RELEASE	7215	1845	1636	965	268	125	143	769	769	694
STOR CHANGE	22	48	13							-39
STORAGE	336	384	397	397	397	397	397	397	397	358
ELEV FTMSL	1205.1	1207.0	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS	26.5	30.0	27.5	15.7	9.0	9.0	9.0	12.5	12.5	12.5
POWER										
AVE POWER MW		101	96	56	32	32	32	44	44	44
PEAK POW MW		116	117	117	117	117	117	117	117	114
ENERGY GWH	304.4	75.1	69.1	41.4	11.6	5.4	6.2	33.1	33.1	29.6
--GAVINS POINT - SIOUX CITY--										
NAT INFLOW	344	72	56	48	24	11	13	24	28	68
DEPLETION	115	34	22	10	6	3	3	12	13	13
REGULATED FLOW AT SIOUX CITY										
KAF	7444	1883	1670	1003	286	134	153	781	784	749
KCFS		30.6	28.1	16.3	9.6	9.6	9.6	12.7	12.8	13.5
--TOTAL--										
NAT INFLOW	4446	608	622	668	318	148	170	460	592	860
DEPLETION	-322	133	-189	-53	-80	-37	-43	-44	-31	22
CHAN STOR	22	-17	43	46	34	-1	0	-77	-9	2
EVAPORATION	1455	306	374	320	144	67	77	166		
STORAGE	37736	36006	34815	34259	34261	34244	34227	33707	33536	33627
SYSTEM POWER										
AVE POWER MW		1137	722	599	396	408	407	641	628	678
PEAK POW MW		2005	1969	1957	1958	1958	1959	1964	1974	1985
ENERGY GWH	3500.4	846.1	519.6	445.5	142.7	68.6	78.1	477.0	467.1	455.8
DAILY GWH		27.3	17.3	14.4	9.5	9.8	9.8	15.4	15.1	16.3

	28FEB07	2007											2008			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	9600	319	149	192	797	1604	2491	1219	456	379	531	210	98	112	346	297	400
DEPLETION	364	-30	-14	-18	52	371	628	179	-73	-129	-57	-40	-19	-21	-156	-176	-133
EVAPORATION	267							17	55	70	62	15	7	8	33		
MOD INFLOW	8969	349	163	210	745	1233	1863	1023	474	438	526	235	110	125	469	473	533
RELEASE	5019	179	56	71	238	492	476	492	492	357	254	123	69	95	553	553	518
STOR CHANGE	3951	171	107	138	507	741	1387	531	-18	81	272	112	40	30	-84	-80	15
STORAGE	9020	9190	9298	9436	9943	10684	12071	12602	12584	12665	12937	13049	13090	13120	13035	12955	12970
ELEV FTMSL	2200.2	2201.3	2202.0	2202.9	2206.2	2210.7	2218.8	2221.7	2221.6	2222.1	2223.6	2224.2	2224.4	2224.6	2224.1	2223.7	2223.8
DISCH KCFS	10.5	6.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	6.0	4.1	4.1	5.0	6.0	9.0	9.0	9.0
POWER																	
AVE POWER MW		71	48	48	48	98	101	104	104	79	54	55	66	79	119	119	118
PEAK POW MW		129	130	131	135	140	149	152	152	152	154	155	155	155	155	154	154
ENERGY GWH	781.6	25.5	8.0	10.3	34.8	73.0	72.9	77.2	77.7	56.6	40.5	19.7	11.1	15.3	88.4	88.2	82.5
--GARRISON--																	
NAT INFLOW	14199	515	240	309	1376	1934	3530	2647	841	574	652	260	121	139	278	348	434
DEPLETION	1135	-18	-9	-11	26	225	869	534	57	-105	7	-100	-46	-53	-100	-87	-54
CHAN STOR	18	50	22			-44				20	19		-9	-10	-31		
EVAPORATION	312							20	65	82	72	17	8	9	38		
REG INFLOW	17789	763	327	392	1588	2157	3137	2585	1211	974	846	465	220	268	863	988	1006
RELEASE	12980	476	208	268	1071	1291	1220	1230	1230	1012	814	394	194	238	953	1230	1150
STOR CHANGE	4809	286	118	124	517	866	1917	1355	-19	-38	32	71	26	30	-90	-241	-145
STORAGE	10834	11121	11239	11363	11880	12746	14663	16018	15999	15961	15993	16064	16090	16120	16029	15788	15643
ELEV FTMSL	1809.6	1810.9	1811.4	1812.0	1814.2	1817.9	1825.4	1830.4	1830.3	1830.2	1830.3	1830.5	1830.6	1830.7	1830.4	1829.5	1829.0
DISCH KCFS	17.5	16.0	15.0	15.0	18.0	21.0	20.5	20.0	20.0	17.0	13.2	13.2	14.0	15.0	15.5	20.0	20.0
POWER																	
AVE POWER MW		165	156	157	190	226	229	233	237	202	158	158	167	179	185	237	236
PEAK POW MW		371	373	375	383	396	424	442	442	441	442	443	443	443	442	439	437
ENERGY GWH	1799.4	59.6	26.3	33.9	136.8	168.1	165.1	173.7	176.5	145.4	117.3	56.8	28.1	34.4	137.4	176.1	164.0
--OAHE--																	
NAT INFLOW	3850	559	261	335	474	347	881	297	123	163	102	109	51	58	22	10	59
DEPLETION	626	23	11	14	47	67	132	156	103	25	-9	2	1	1	12	17	26
CHAN STOR	-11	8	5	0	-15	-14	2	2		14	17		-3	-4	-2	-20	
EVAPORATION	285							19	59	74	66	16	8	9	36		
REG INFLOW	15908	1020	463	589	1483	1557	1971	1354	1191	1089	877	486	234	282	925	1203	1183
RELEASE	10978	321	173	209	694	1259	1014	1326	1511	1085	381	172	103	116	1057	914	641
STOR CHANGE	4930	699	290	380	789	298	957	29	-321	5	496	313	130	167	-132	289	542
STORAGE	11375	12074	12364	12744	13533	13831	14788	14816	14496	14500	14996	15310	15440	15607	15475	15763	16305
ELEV FTMSL	1578.4	1581.7	1583.0	1584.7	1588.1	1589.3	1593.1	1593.2	1592.0	1592.0	1594.0	1595.2	1595.7	1596.3	1595.8	1596.9	1598.9
DISCH KCFS	11.6	10.8	12.5	11.7	11.7	20.5	17.0	21.6	24.6	18.2	6.2	5.8	7.4	7.3	17.2	14.9	11.1
POWER																	
AVE POWER MW		120	140	133	134	238	202	257	292	216	74	70	90	89	209	181	137
PEAK POW MW		575	582	591	609	615	634	635	628	629	638	644	647	650	647	653	662
ENERGY GWH	1577.3	43.1	23.6	28.7	96.8	177.3	145.1	191.4	217.3	155.8	55.3	25.2	15.2	17.0	155.3	134.6	95.4
--BIG BEND--																	
EVAPORATION	71							5	15	19	16	4	2	2	9		
REG INFLOW	10907	321	173	209	694	1259	1014	1321	1496	1066	365	168	102	114	1049	914	641
RELEASE	10907	321	173	209	694	1259	1014	1321	1496	1066	365	168	102	114	1049	914	641
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	11.6	10.8	12.5	11.7	11.7	20.5	17.0	21.5	24.3	17.9	5.9	5.7	7.3	7.2	17.1	14.9	11.1
POWER																	
AVE POWER MW		51	58	55	55	96	80	101	114	85	30	29	37	36	84	72	54
PEAK POW MW		517	509	509	509	509	509	509	509	525	538	538	538	538	538	538	529
ENERGY GWH	629.2	18.4	9.8	11.8	39.3	71.3	57.5	74.8	84.8	61.5	22.4	10.4	6.2	7.0	62.7	53.9	37.3
--FORT RANDALL--																	
NAT INFLOW	1501	190	89	114	298	159	224	111	72	92	60	5	2	3	23	10	49
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	78							6	19	23	16	3	1	2	8		
REG INFLOW	12244	510	261	322	988	1409	1226	1408	1535	1128	402	169	102	114	1061	921	687
RELEASE	12242	217	127	322	988	1409	1226	1408	1535	1475	1289	187	102	114	695	664	483
STOR CHANGE	2	293	134					0	0	-347	-887	-18	0	0	366	257	204
STORAGE	3122	3415	3549	3549	3549	3549	3549	3549	3549	3202	2315	2297	2297	2297	2663	2920	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1351.0	1337.8	1337.5	1337.5	1337.5	1343.5	1347.2	1350.0
DISCH KCFS	9.0	7.3	9.2	18.0	16.6	22.9	20.6	22.9	25.0	24.8	21.0	6.3	7.3	7.2	11.3	10.8	8.4
POWER																	
AVE POWER MW		61	78	153	141	194	174	194	211	206	162	46	54	53	85	85	68
PEAK POW MW		351	356	356	356	356	356	356	356	342	286	285	285	285	313	330	339
ENERGY GWH	1217.9	21.9	13.1	33.1	101.5	144.1	125.6	144.0	156.8	148.2	120.4	16.7	9.0	10.1	63.2	63.1	47.3
--GAVINS POINT--																	
NAT INFLOW	2252	107	50	64	246	319	281	211	170	135	157	60	28	32	95	106	191
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	0	3	-4	-17	3	-12	4	-4	-4	0	7	27	-2	0	-8	1	4
EVAPORATION	26							2	5	7	6	1	1	1	3		
REG INFLOW	14355	328	174	370	1232	1697	1488	1574	1685	1609	1445	268	125	143	769	770	679
RELEASE	14355	328	174	370	1232	1697	1488	1574	1672	1583	1445	268	125	143	769	770	718
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	12.5	20.7	20.7	27.6	25.0	25.6	27.2	26.6	23.5	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	44	71	71	94	86	88	93	92	83	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	601.9	13.9	7.4	15.4	51.4	69.9	61.6	65.1	69.3	66.6	61.4	11.6	5.4	6.2	33.1	33.1	30.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	3100	195	91	117	1006	553	318	246	184	127	66	26	12	14	30	12	105
DEPLETION	254	6	3	4	21	35	30	37	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	17201	516	262	483	2217	2215	1776	1783	1821	1687	1501	288	134	154	787	769	809
KCFS		17.3	18.9	27.0	37.3	36.0	29.8	29.0	29.6	28.3	24.4	9.7	9.7	9.7	12.8	12.5	14.1
--TOTAL--																	
NAT INFLOW	34502	1885	879	1131	4197	4916	7725	4731	1846	1470	1568	670	312	357	794	783	1238
DEPLETION	2573	-18	-9	-11	155	726	1695	963	147	-184	-46	-127	-59	-67	-219	-229	-144
CHAN STOR	2	61	24	-17	-12	-70	7	-2	-4	35	38	27	-14	-14	-40	-19	4
EVAPORATION	1039							68	218	275	238	57	26	30	126		
STORAGE	36330	37779	38429	39071	40884	42789	47050	48964	48620	48347	48259	48738	48935	49161	49220	49444	50022
SYSTEM POWER																	
AVE POWER MW		507	525	617	639	946	872	976	1052	881	561	390	447	468	726	738	657
PEAK POW MW		2058	2065	2077	2106	2131	2187	2209	2203	2206	2174	2181	2184	2188	2173	2191	2198
ENERGY GWH	6607.3	182.4	88.1	133.3	460.4	703.8	627.7	726.4	782.4	634.0	417.5	140.3	75.0	89.9	540.0	549.0	457.0
DAILY GWH		12.2	12.6	14.8	15.3	22.7	20.9	23.4	25.2	21.1	13.5	9.4	10.7	11.2	17.4	17.7	15.8

TIME OF STUDY 11:33:54 SR-FTT SHTN NAV SEAS 31-DAYS, SP MAR 0 MAY 15.0 STUDY NO 5
VALUES IN 1000 AF EXCEPT AS INDICATED

28FEB07		2007										2008			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	8900	296	138	178	738	1487	2309	1130	423	351	492	195	91	104	321	276	371
DEPLETION	339	-30	-14	-18	52	371	628	172	-78	-128	-82	-41	-19	-22	-149	-171	-132
EVAPORATION	284							17	54	68	60	27	13	14	31		
MOD INFLOW	8277	326	152	196	686	1116	1681	941	447	411	514	209	97	111	439	447	503
RELEASE	5263	179	69	89	357	492	476	492	492	357	322	149	69	95	553	553	518
STOR CHANGE	3014	148	83	106	329	624	1205	449	-45	54	192	60	28	16	-115	-106	-15
STORAGE	9020	9167	9250	9356	9685	10309	11514	11964	11919	11973	12165	12225	12253	12269	12154	12048	12033
ELEV FTMSL	2200.2	2201.1	2201.7	2202.4	2204.5	2208.4	2215.6	2218.2	2217.9	2218.2	2219.3	2219.7	2219.8	2219.9	2219.3	2218.7	2218.6
DISCH KCFS	10.5	6.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	6.0	5.2	5.0	5.0	6.0	9.0	9.0	9.0
POWER																	
AVE POWER MW		71	59	60	72	97	100	102	103	77	68	65	65	78	116	116	116
PEAK POW MW		129	130	130	133	137	146	148	148	148	150	150	150	150	150	149	149
ENERGY GWH	805.6	25.5	10.0	12.9	51.8	72.3	71.9	76.1	76.5	55.6	50.4	23.3	10.9	14.9	86.6	86.3	80.6
--GARRISON--																	
NAT INFLOW	12900	482	225	289	1250	1723	3207	2405	763	522	593	236	110	126	260	316	394
DEPLETION	1104	-2	-1	-1	-2	197	886	536	40	-111	10	-101	-47	-54	-105	-87	-55
CHAN STOR	18	50	11		-11	-22				21	8	3		-10	-31		
EVAPORATION	329							19	63	79	69	31	15	17	36		
REG INFLOW	16748	712	306	379	1598	1996	2797	2342	1152	932	844	457	212	248	851	956	967
RELEASE	13079	476	208	268	1071	1291	1220	1230	1230	1012	891	417	194	238	953	1230	1150
STOR CHANGE	3669	236	98	111	527	705	1577	1112	-78	-80	-47	40	17	10	-102	-273	-184
STORAGE	10834	11070	11168	11280	11806	12511	14088	15200	15122	15042	14995	15035	15053	15062	14960	14687	14503
ELEV FTMSL	1809.6	1810.7	1811.1	1811.6	1813.9	1816.9	1823.2	1827.4	1827.1	1826.8	1826.6	1826.8	1826.9	1826.9	1826.5	1825.5	1824.8
DISCH KCFS	17.5	16.0	15.0	15.0	18.0	21.0	20.5	20.0	20.0	17.0	14.5	14.0	14.0	15.0	15.5	20.0	20.0
POWER																	
AVE POWER MW		165	156	157	189	225	227	229	233	198	169	163	163	175	180	231	229
PEAK POW MW		370	372	373	382	393	416	431	430	429	428	429	429	428	424	424	422
ENERGY GWH	1782.6	59.5	26.2	33.8	136.4	167.3	163.3	170.7	173.0	142.3	125.4	58.6	27.4	33.5	134.0	171.5	159.6
--OAHE--																	
NAT INFLOW	3200	460	214	276	394	285	749	246	103	135	85	91	42	48	18	5	49
DEPLETION	625	23	11	14	47	67	132	156	103	25	-9	2	1	1	12	16	26
CHAN STOR	-11	8	5	0	-15	-15	2	2		14	12	2		-5	-2	-21	
EVAPORATION	301							18	57	72	63	29	14	16	34		
REG INFLOW	15341	921	417	530	1403	1494	1839	1304	1173	1064	934	479	222	265	923	1198	1173
RELEASE	11581	501	86	246	792	1331	1087	1380	1370	804	835	219	112	126	1068	918	706
STOR CHANGE	3761	419	332	284	611	164	753	-76	-196	261	99	260	111	139	-145	280	468
STORAGE	11375	11795	12126	12410	13021	13185	13937	13861	13665	13925	14024	14284	14395	14534	14388	14668	15136
ELEV FTMSL	1578.4	1580.4	1581.9	1583.2	1585.9	1586.6	1589.7	1589.4	1588.6	1589.7	1590.1	1591.1	1591.6	1592.1	1591.6	1592.7	1594.5
DISCH KCFS	11.6	16.9	6.2	13.8	13.3	21.6	18.3	22.4	22.3	13.5	13.6	7.4	8.0	8.0	17.4	14.9	12.3
POWER																	
AVE POWER MW		186	69	155	152	248	212	262	260	158	160	87	96	95	206	177	147
PEAK POW MW		569	577	583	598	601	617	616	612	617	619	624	626	629	626	632	641
ENERGY GWH	1633.0	66.9	11.6	33.5	109.2	184.7	152.7	195.2	193.1	113.8	118.8	31.4	16.1	18.2	153.3	132.0	102.5
--BIG BEND--																	
EVAPORATION	78							5	15	19	16	7	3	4	9		
REG INFLOW	11503	501	86	246	792	1331	1087	1376	1355	785	819	212	108	122	1060	918	706
RELEASE	11503	501	86	246	792	1331	1087	1376	1355	785	819	212	108	122	1060	918	706
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	11.6	16.9	6.2	13.8	13.3	21.6	18.3	22.4	22.0	13.2	13.3	7.1	7.8	7.7	17.2	14.9	12.3
POWER																	
AVE POWER MW		79	29	65	62	101	86	105	104	65	67	36	40	39	85	73	59
PEAK POW MW		510	509	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	667.2	28.5	4.9	13.9	44.9	75.4	61.6	77.9	77.6	46.9	50.0	13.0	6.6	7.5	63.4	54.2	41.0
--FORT RANDALL--																	
NAT INFLOW	1200	142	66	85	239	150	195	89	65	64	38	3	1	1	18	5	39
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	80							6	19	21	15	6	3	3	8		
REG INFLOW	12544	642	151	330	1027	1472	1270	1441	1386	821	841	208	106	120	1067	920	742
RELEASE	12542	232	134	330	1027	1472	1270	1441	1560	1496	1244	208	106	120	701	683	518
STOR CHANGE	2	410	17					0	-174	-675	-403	0	0	0	366	237	224
STORAGE	3122	3532	3549	3549	3549	3549	3549	3549	3375	2700	2297	2297	2297	2297	2663	2900	3124
ELEV FTMSL	1350.0	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1343.5	1347.0	1350.0
DISCH KCFS	9.0	7.8	9.7	18.5	17.3	23.9	21.3	23.4	25.4	25.1	20.2	7.0	7.6	7.6	11.4	11.1	9.0
POWER																	
AVE POWER MW		65	82	157	146	202	181	198	212	201	151	51	56	55	86	87	73
PEAK POW MW		355	356	356	356	356	356	356	349	315	285	285	285	285	313	328	339
ENERGY GWH	1237.2	23.5	13.8	33.9	105.5	150.5	130.0	147.3	158.0	144.7	112.6	18.5	9.4	10.6	63.7	64.7	50.6
--GAVINS POINT--																	
NAT INFLOW	1899	93	44	56	207	257	237	178	144	114	132	51	24	27	86	89	161
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	2	-4	-17	2	-13	5	-4	-4	0	9	25	-1	0	-7	1	4
EVAPORATION	28							2	5	7	6	3	1	1	3		
REG INFLOW	14298	328	174	370	1232	1697	1488	1574	1685	1609	1377	275	125	143	767	771	683
RELEASE	14298	328	174	370	1232	1697	1488	1574	1672	1583	1377	275	125	143	767	771	722
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	12.6	20.7	20.7	27.6	25.0	25.6	27.2	26.6	22.4	9.2	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	44	71	71	94	86	88	93	92	79	33	32	32	44	45	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	599.6	13.9	7.4	15.4	51.4	69.9	61.6	65.1	69.3	66.6	58.6	11.9	5.4	6.2	33.0	33.1	30.8
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	2500	181	85	109	811	406	252	199	148	97	53	21	10	11	24	10	84
DEPLETION	254	6	3	4	21	35	30	37	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	16544	503	256	475	2022	2068	1710	1736	1785	1657	1420	290	132	151	779	768	792
KCFS		16.9	18.4	26.6	34.0	33:6	28.7	28.2	29.0	27.8	23.1	9.8	9.5	9.5	12.7	12.5	13.8
--TOTAL--																	
NAT INFLOW	30599	1654	772	992	3639	4308	6949	4247	1646	1283	1393	595	278	317	727	701	1098
DEPLETION	2516	-2	-1	-1	127	698	1712	958	125	-189	-68	-129	-60	-69	-217	-225	-144
CHAN STOR	6	60	13	-17	-24	-49	7	-2	-4	36	29	30	-1	-15	-41	-20	4
EVAPORATION	1101							66	212	265	229	103	48	55	121		
STORAGE	36330	37544	38073	38574	40041	41533	45068	46553	46073	45659	45499	45859	46015	46180	46184	46321	46775
SYSTEM POWER																	
AVE POWER MW		605	440	664	693	968	890	984	1005	791	693	435	451	474	718	728	668
PEAK POW MW		2048	2057	2067	2092	2111	2159	2175	2173	2164	2137	2143	2146	2149	2133	2149	2155
ENERGY GWH	6725.3	217.8	73.8	143.4	499.1	720.1	641.1	732.4	747.5	569.8	515.9	156.6	75.8	91.0	533.9	541.9	465.0
DAILY GWH		14.5	10.5	15.9	16.6	23.2	21.4	23.6	24.1	19.0	16.6	10.4	10.8	11.4	17.2	17.5	16.0

28FEB07		2007										2008			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	7400	264	123	158	628	1210	1851	829	324	319	398	188	88	100	310	261	349
DEPLETION	391	-18	-9	-11	73	315	535	244	-17	-102	-73	-36	-17	-19	-152	-178	-144
EVAPORATION	345							21	66	82	72	33	15	18	38		
MOD INFLOW	6664	283	132	170	555	895	1316	564	275	339	399	191	89	102	424	439	493
RELEASE	5102	179	69	89	357	492	476	492	492	357	297	134	62	71	523	523	489
STOR CHANGE	1562	104	62	80	198	403	840	72	-217	-18	101	57	26	30	-99	-84	4
STORAGE	8612	8717	8779	8859	9057	9460	10300	10373	10156	10138	10239	10296	10322	10352	10254	10170	10174
ELEV FTMSL	2197.4	2198.1	2198.6	2199.1	2200.4	2203.1	2208.4	2208.8	2207.5	2207.4	2208.0	2208.3	2208.5	2208.7	2208.1	2207.6	2207.6
DISCH KCFS	10.0	6.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	6.0	4.8	4.5	4.5	4.5	8.5	8.5	8.5
POWER																	
AVE POWER MW		70	58	59	71	95	97	98	98	73	59	55	55	55	104	104	104
PEAK POW MW		126	126	127	128	131	137	138	136	136	137	137	137	138	137	136	136
ENERGY GWH	748.3	25.1	9.8	12.6	50.8	70.5	69.7	73.1	72.9	52.8	44.1	19.9	9.3	10.6	77.5	77.3	72.2
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1066	41	19	25	47	199	756	548	68	-144	-19	-108	-50	-58	-112	-88	-58
CHAN STOR	17	45	11		-11	-22				21	12	4			-43		0
EVAPORATION	403							24	77	97	84	38	18	20	44		
REG INFLOW	14652	652	280	346	1152	1694	2678	1986	928	923	699	399	184	211	801	848	873
RELEASE	12751	417	194	250	952	1291	1220	1230	1230	1054	790	387	180	222	953	1230	1150
STOR CHANGE	1901	235	86	96	200	402	1458	756	-302	-132	-92	12	4	-11	-152	-382	-277
STORAGE	10338	10573	10659	10755	10955	11358	12816	13572	13270	13138	13046	13058	13062	13051	12899	12517	12239
ELEV FTMSL	1807.3	1808.4	1808.8	1809.2	1810.1	1812.0	1818.1	1821.2	1820.0	1819.4	1819.1	1819.1	1819.1	1819.1	1818.5	1816.9	1815.7
DISCH KCFS	17.5	14.0	14.0	14.0	16.0	21.0	20.5	20.0	20.0	17.7	12.9	13.0	13.0	14.0	15.5	20.0	20.0
POWER																	
AVE POWER MW		142	143	144	165	218	219	221	222	196	142	144	144	155	171	218	216
PEAK POW MW		362	363	365	368	375	397	408	404	402	401	401	401	401	398	393	388
ENERGY GWH	1665.7	51.2	24.0	31.0	118.6	162.0	157.7	164.3	165.3	141.1	105.8	51.7	24.1	29.7	126.9	162.0	150.1
--OAHE--																	
NAT INFLOW	2300	317	148	190	364	236	689	162	33	118	14	5	2	3	-20		40
DEPLETION	625	23	11	14	47	67	132	156	103	25	-9	2	1	1	12	16	26
CHAN STOR	-12	19			-10	-26	3	2		12	25	-1		-5	-8	-23	
EVAPORATION	360							22	68	86	75	34	16	18	40		
REG INFLOW	14053	729	331	426	1259	1434	1779	1216	1091	1073	763	355	166	201	874	1191	1164
RELEASE	12104	403	212	258	977	1133	1177	1492	1430	878	893	226	115	130	931	942	910
STOR CHANGE	1949	326	120	168	281	302	603	-275	-338	195	-130	130	51	71	-57	249	254
STORAGE	10866	11193	11312	11480	11761	12063	12666	12390	12052	12247	12117	12247	12298	12368	12311	12561	12815
ELEV FTMSL	1575.9	1577.5	1578.1	1578.9	1580.2	1581.6	1584.3	1583.1	1581.6	1582.5	1581.9	1582.5	1582.7	1583.0	1582.8	1583.9	1585.0
DISCH KCFS	15.4	13.5	15.3	14.5	16.4	18.4	19.8	24.3	23.3	14.8	14.5	7.6	8.3	8.2	15.1	15.3	15.8
POWER																	
AVE POWER MW		147	167	159	181	205	223	274	260	165	163	85	93	93	171	173	180
PEAK POW MW		554	556	561	568	575	589	583	575	579	576	579	581	582	581	587	593
ENERGY GWH	1641.7	52.9	28.0	34.3	130.6	152.5	160.3	203.8	193.8	119.1	121.3	30.7	15.7	17.8	126.9	128.8	125.3
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	12001	403	212	258	977	1133	1177	1486	1410	853	871	216	110	125	919	942	910
RELEASE	12001	403	212	258	977	1133	1177	1486	1410	853	871	216	110	125	919	942	910
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	15.4	13.5	15.3	14.5	16.4	18.4	19.8	24.2	22.9	14.3	14.2	7.3	8.0	7.9	14.9	15.3	15.8
POWER																	
AVE POWER MW		64	71	68	77	86	93	113	108	71	71	37	40	40	75	75	76
PEAK POW MW		517	509	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	697.4	23.1	12.0	14.6	55.4	64.2	66.7	84.1	80.7	51.0	53.2	13.2	6.8	7.7	55.8	56.1	52.8
--FORT RANDALL--																	
NAT INFLOW	900	122	57	73	115	140	185	74	57	42	2	2	1	1	10		19
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	107							8	25	28	20	8	4	4	10		
REG INFLOW	12715	524	268	331	1088	1264	1350	1534	1427	860	852	209	107	121	916	939	926
RELEASE	12715	232	134	331	1088	1264	1350	1534	1601	1535	1256	209	107	121	713	689	552
STOR CHANGE	0	292	134					0	-174	-675	-403	0	0	0	203	250	374
STORAGE	3123	3415	3549	3549	3549	3549	3549	3549	3375	2700	2297	2297	2296	2296	2499	2749	3123
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1341.0	1344.8	1350.0
DISCH KCFS	9.5	7.8	9.7	18.5	18.3	20.5	22.7	24.9	26.0	25.8	20.4	7.0	7.7	7.6	11.6	11.2	9.6
POWER																	
AVE POWER MW		65	82	157	155	174	192	211	218	206	153	52	56	56	86	86	77
PEAK POW MW		351	356	356	356	356	356	356	349	315	285	285	285	285	301	319	339
ENERGY GWH	1251.2	23.3	13.8	33.9	111.6	129.4	138.1	156.7	162.1	148.4	113.6	18.6	9.5	10.7	64.1	64.0	53.4
--GAVINS POINT--																	
NAT INFLOW	1450	92	43	55	148	174	166	86	103	77	122	50	23	27	77	79	127
DEPLETION	114	0	0	0	5	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	3	-4	-17	0	-4	-4	-4	-2	0	10	25	-1	0	-7	1	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	14012	328	174	370	1232	1414	1488	1574	1685	1609	1377	275	125	143	769	767	682
RELEASE	14012	328	174	370	1232	1414	1488	1574	1672	1583	1377	275	125	143	769	767	721
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	12.5	20.7	20.7	23.0	25.0	25.6	27.2	26.6	22.4	9.2	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	44	71	71	79	86	88	93	92	79	33	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	588.3	13.9	7.4	15.4	51.4	58.7	61.6	65.1	69.3	66.6	58.6	11.9	5.4	6.2	33.0	33.0	30.8
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1550	169	79	102	199	310	224	129	96	60	42	16	7	9	21	5	82
DEPLETION	253	6	3	4	21	35	30	37	35	23	10	6	3	3	12	13	13
REGULATED FLOW AT SIOUX CITY																	
KAF	15309	491	250	467	1410	1689	1682	1666	1733	1620	1409	286	130	148	778	759	790
KCFS		16.5	18.0	26.2	23.7	27.5	28.3	27.1	28.2	27.2	22.9	9.6	9.4	9.4	12.6	12.4	13.7
--TOTAL--																	
NAT INFLOW	24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION	2529	53	25	32	197	644	1489	1042	214	-196	-88	-131	-61	-70	-227	-233	-160
CHAN STOR	4	67	8	-17	-21	-52	-2	-2	-2	33	47	28	-1	-5	-58	-22	3
EVAPORATION	1356							83	263	327	282	127	59	68	147		
STORAGE	34919	35877	36279	36623	37302	38409	41310	41863	40845	40240	39716	39915	39997	40086	39981	40015	40331
SYSTEM POWER																	
AVE POWER MW		527	566	657	720	857	908	1004	1000	804	668	406	421	430	651	700	696
PEAK POW MW		2023	2025	2032	2044	2061	2104	2109	2098	2087	2053	2057	2059	2061	2033	2051	2062
ENERGY GWH	6592.5	189.6	95.0	142.0	518.3	637.3	654.0	747.0	744.2	579.0	496.7	146.0	70.8	82.6	484.3	521.1	484.7
DAILY GWH		12.6	13.6	15.8	17.3	20.6	21.8	24.1	24.0	19.3	16.0	9.7	10.1	10.3	15.6	16.8	16.7

	28FEB07	2007											2008			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	6000	242	113	145	525	925	1454	633	263	252	324	167	78	89	295	212	283
DEPLETION	514	-15	-7	-9	72	281	474	206	-9	-93	-65	-27	-12	-14	-91	-99	-79
EVAPORATION	396							24	76	95	83	37	17	20	43		
MOD INFLOW	5090	257	120	154	453	644	980	403	196	250	306	156	73	83	343	311	362
RELEASE	4939	119	56	71	446	461	446	461	461	357	318	149	69	79	492	492	460
STOR CHANGE	151	138	64	82	7	183	534	-58	-265	-107	-12	7	3	4	-149	-181	-98
STORAGE	8240	8378	8442	8524	8531	8714	9248	9189	8924	8817	8805	8812	8815	8819	8670	8489	8391
ELEV FTMSL	2194.8	2195.8	2196.2	2196.8	2196.9	2198.1	2201.7	2201.3	2199.5	2198.8	2198.7	2198.8	2198.8	2198.8	2197.8	2196.6	2195.9
DISCH KCFS	9.5	4.0	4.0	4.0	7.5	7.5	7.5	7.5	7.5	6.0	5.2	5.0	5.0	5.0	8.0	8.0	8.0
POWER																	
AVE POWER MW		46	46	46	87	87	88	89	88	70	61	59	59	59	93	92	92
PEAK POW MW		122	123	124	124	126	130	129	127	126	126	126	126	126	125	123	122
ENERGY GWH	696.2	16.5	7.7	10.0	62.3	64.7	63.4	66.1	65.7	50.6	45.1	21.1	9.8	11.2	69.3	68.8	63.9
--GARRISON--																	
NAT INFLOW	9400	443	207	266	712	1197	2521	1765	496	417	400	164	76	87	222	165	262
DEPLETION	1251	32	15	19	69	138	630	517	122	-73	55	-64	-30	-34	-72	-46	-28
CHAN STOR	17	62			-40					16	9	2		0	-33		
EVAPORATION	467							28	91	113	98	44	20	23	50		
REG INFLOW	12638	592	247	318	1050	1520	2337	1681	745	750	575	335	155	177	703	703	750
RELEASE	12457	417	180	303	1071	1414	1250	984	984	932	799	387	180	222	953	1230	1150
STOR CHANGE	182	176	67	14	-21	106	1088	697	-239	-181	-224	-52	-25	-45	-250	-527	-400
STORAGE	9886	10062	10129	10143	10122	10228	11315	12013	11773	11592	11368	11316	11290	11246	10995	10468	10068
ELEV FTMSL	1805.1	1806.0	1806.3	1806.4	1806.3	1806.8	1811.8	1814.8	1813.8	1813.0	1812.0	1811.8	1811.7	1811.5	1810.3	1807.9	1806.0
DISCH KCFS	17.5	14.0	13.0	17.0	18.0	23.0	21.0	16.0	16.0	15.7	13.0	13.0	13.0	14.0	15.5	20.0	20.0
POWER																	
AVE POWER MW		140	130	170	180	230	215	169	171	166	137	136	136	147	161	204	201
PEAK POW MW		353	354	354	354	356	374	385	381	378	375	374	374	373	369	360	353
ENERGY GWH	1549.7	50.2	21.9	36.7	129.6	170.8	154.5	126.0	126.9	119.4	102.0	49.1	22.9	28.1	119.9	152.0	139.7
--OAHE--																	
NAT INFLOW	1449	154	72	92	229	130	577	102	24	65	9				-35	-6	36
DEPLETION	626	23	11	14	47	67	132	156	103	25	-9	2	1	1	12	17	26
CHAN STOR	-14	19	5	-22	-5	-27	11	27		2	15			-6	-8	-25	
EVAPORATION	379							24	71	88	80	37	17	20	43		
REG INFLOW	12887	567	247	360	1248	1450	1705	933	834	885	752	349	163	196	855	1182	1160
RELEASE	12700	442	264	367	1236	1455	1432	1695	1520	460	476	255	118	135	1110	981	752
STOR CHANGE	187	125	-17	-7	12	-5	273	-762	-686	425	276	93	44	61	-255	201	408
STORAGE	10403	10528	10511	10504	10516	10511	10784	10023	9336	9762	10038	10131	10176	10236	9981	10182	10590
ELEV FTMSL	1573.5	1574.2	1574.1	1574.1	1574.1	1574.1	1575.5	1571.5	1567.8	1570.1	1571.6	1572.1	1572.3	1572.7	1571.3	1572.4	1574.5
DISCH KCFS	17.8	14.9	19.0	20.6	20.8	23.7	24.1	27.6	24.7	7.7	7.7	8.6	8.5	8.5	18.1	16.0	13.1
POWER																	
AVE POWER MW		159	203	219	221	252	257	292	256	80	81	91	90	90	190	168	139
PEAK POW MW		536	536	535	536	536	543	522	502	515	523	525	526	528	521	527	538
ENERGY GWH	1623.8	57.1	34.1	47.3	159.3	187.4	185.2	217.0	190.1	57.6	60.5	32.6	15.1	17.4	141.4	124.9	96.9
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12571	442	264	367	1236	1455	1432	1687	1496	429	449	243	113	129	1096	981	752
RELEASE	12571	442	264	367	1236	1455	1432	1687	1496	429	449	243	113	129	1096	981	752
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	17.8	14.9	19.0	20.6	20.8	23.7	24.1	27.4	24.3	7.2	7.3	8.2	8.1	8.1	17.8	16.0	13.1
POWER																	
AVE POWER MW		70	89	96	97	111	113	128	115	37	37	41	41	41	88	78	63
PEAK POW MW		518	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	726.5	25.3	15.0	20.8	70.0	82.4	81.1	95.5	85.6	26.3	27.6	14.9	6.9	7.9	65.5	57.8	43.7
--FORT RANDALL--																	
NAT INFLOW	500	68	32	41	64	51	130	26	49	23	1				5	-5	15
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	129							10	31	32	22	10	5	5	13		
REG INFLOW	12852	509	295	407	1296	1497	1550	1685	1499	403	427	232	107	123	1085	973	764
RELEASE	12848	232	158	390	1296	1497	1550	1685	1673	1481	427	232	107	123	719	701	575
STOR CHANGE	5	277	137	17				0	-174	-1079	0	0	0	0	366	272	189
STORAGE	3118	3395	3532	3549	3549	3549	3549	3549	3375	2296	2296	2296	2296	2296	2662	2934	3123
ELEV FTMSL	1349.9	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1337.5	1337.5	1337.5	1337.5	1337.5	1343.5	1347.4	1350.0
DISCH KCFS	10.0	7.8	11.4	21.8	21.8	24.3	26.1	27.4	27.2	24.9	6.9	7.8	7.7	7.7	11.7	11.4	10.0
POWER																	
AVE POWER MW		65	96	185	184	206	220	231	227	193	51	57	57	57	88	90	81
PEAK POW MW		350	355	356	356	356	356	356	349	284	285	285	285	285	313	330	339
ENERGY GWH	1270.7	23.3	16.2	39.9	132.6	153.0	158.3	171.9	169.2	139.2	38.0	20.6	9.5	10.9	65.4	66.6	56.3
--GAVINS POINT--																	
NAT INFLOW	1251	91	43	55	124	138	143	81	80	58	105	47	22	25	70	68	101
DEPLETION	113	0	0	0	4	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	4	-7	-20	0	-5	-3	-3	0	4	33	-2	0	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	13937	328	194	425	1416	1611	1666	1722	1735	1537	553	268	125	143	767	769	679
RELEASE	13937	328	194	425	1416	1611	1666	1722	1722	1511	553	268	125	143	767	769	718
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	14.0	23.8	23.8	26.2	28.0	28.0	28.0	25.4	9.0	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	49	82	82	89	95	95	96	88	32	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	583.2	13.9	8.2	17.6	58.7	66.6	68.6	70.9	71.3	63.7	23.9	11.6	5.4	6.2	33.0	33.0	30.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	900	115	54	69	90	174	125	75	56	35	24	13	6	7	13	-3	48
DEPLETION	254	6	3	4	21	35	30	37	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	14583	437	245	490	1485	1750	1761	1760	1743	1523	567	275	128	147	768	753	752
KCFS		14.7	17.6	27.5	25.0	28.5	29.6	28.6	28.3	25.6	9.2	9.2	9.2	9.2	12.5	12.2	13.1
--TOTAL--																	
NAT INFLOW	19500	1114	520	668	1744	2615	4950	2682	968	850	863	390	182	208	570	431	745
DEPLETION	2838	48	22	29	217	549	1302	973	276	-116	-6	-78	-36	-41	-126	-111	-64
CHAN STOR	-8	86	-1	-42	-45	-32	8	24	0	13	57	0	0	-6	-49	-24	3
EVAPORATION	1546							97	302	371	320	145	68	77	168		
STORAGE	33627	34342	34593	34700	34697	34981	36876	36753	35401	34486	34525	34573	34595	34615	34327	34092	34152
SYSTEM POWER																	
AVE POWER MW		518	613	798	851	974	988	1005	953	634	399	416	415	425	665	676	619
PEAK POW MW		1993	1993	1993	1993	1997	2026	2016	1994	1958	1964	1965	1966	1967	1944	1956	1957
ENERGY GWH	6450.0	186.4	103.0	172.4	612.6	724.7	711.2	747.4	708.8	456.8	297.0	149.8	69.7	81.7	494.4	503.1	431.0
DAILY GWH		12.4	14.7	19.2	20.4	23.4	23.7	24.1	22.9	15.2	9.6	10.0	10.0	10.2	15.9	16.2	14.9

	28FEB07	2007											2008			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--																	
NAT INFLOW	5100	234	109	140	515	783	996	439	253	242	320	159	74	85	271	205	275
DEPLETION	539	-15	-7	-9	72	281	474	174	-37	-124	-75	-17	-8	-9	-64	-58	-41
EVAPORATION	374							23	72	90	78	35	16	19	40		
MOD INFLOW	4187	249	116	149	443	502	522	242	218	276	317	140	65	75	295	263	316
RELEASE	5012	149	69	89	357	461	446	461	461	417	328	149	69	111	492	492	460
STOR CHANGE	-825	100	47	60	86	41	76	-219	-243	-140	-11	-9	-4	-37	-197	-229	-144
STORAGE	8240	8340	8387	8447	8533	8574	8649	8430	8187	8046	8035	8026	8022	7985	7788	7559	7415
ELEV FTMSL	2194.8	2195.5	2195.9	2196.3	2196.9	2197.1	2197.7	2196.2	2194.4	2193.4	2193.4	2193.3	2193.3	2193.0	2191.6	2189.9	2188.8
DISCH KCFS	9.5	5.0	5.0	5.0	6.0	7.5	7.5	7.5	7.5	7.0	5.3	5.0	5.0	7.0	8.0	8.0	8.0
POWER																	
AVE POWER MW		57	57	58	69	87	87	87	86	79	60	56	56	79	89	88	87
PEAK POW MW		122	122	123	124	124	125	123	120	119	119	118	118	118	116	113	112
ENERGY GWH	687.1	20.6	9.6	12.4	49.8	64.4	62.5	64.4	63.7	57.0	44.8	20.3	9.5	15.1	66.4	65.7	60.8
--GARRISON--																	
NAT INFLOW	7299	270	126	162	700	903	2020	1277	361	277	390	161	75	86	108	160	223
DEPLETION	1124	32	15	19	71	146	538	429	89	-91	38	-70	-33	-37	-28	-2	7
CHAN STOR	17	51			-11	-17				6	19	4		-23	-11		
EVAPORATION	423							26	81	102	89	40	19	21	46		
REG INFLOW	10781	437	180	232	975	1201	1928	1284	652	688	610	344	159	190	571	654	676
RELEASE	11795	417	180	277	1160	1476	1369	922	922	681	707	342	160	206	953	1045	978
STOR CHANGE	-1014	21	0	-45	-186	-275	560	361	-270	8	-97	1	-1	-16	-382	-391	-302
STORAGE	9886	9907	9907	9862	9676	9402	9961	10323	10052	10060	9963	9965	9963	9948	9566	9174	8872
ELEV FTMSL	1805.1	1805.2	1805.2	1805.0	1804.1	1802.7	1805.5	1807.2	1805.9	1806.0	1805.5	1805.5	1805.5	1805.4	1803.5	1801.5	1800.0
DISCH KCFS	17.5	14.0	13.0	15.5	19.5	24.0	23.0	15.0	15.0	11.4	11.5	11.5	11.5	13.0	15.5	17.0	17.0
POWER																	
AVE POWER MW		139	129	154	192	233	225	150	151	115	115	115	115	130	153	165	162
PEAK POW MW		350	350	349	346	341	351	357	353	353	351	351	351	351	344	337	331
ENERGY GWH	1405.5	50.1	21.7	33.2	138.1	173.5	161.9	111.9	112.1	82.5	85.6	41.3	19.3	24.9	113.8	122.6	113.0
--OAHE--																	
NAT INFLOW	1049	197	92	118	183	100	215	82	21	64	5	-5	-2	-3	-48	-12	41
DEPLETION	625	23	11	14	47	67	132	156	103	25	-9	2	1	1	12	16	26
CHAN STOR	3	19	5	-14	-22	-24	5	43		21	0			-9	-14	-9	0
EVAPORATION	361							23	69	85	75	34	16	18	40		
REG INFLOW	11861	610	267	368	1275	1484	1457	868	772	655	645	301	141	176	839	1009	993
RELEASE	12897	446	285	377	1261	1478	1447	1713	1537	422	543	259	120	138	908	1016	946
STOR CHANGE	-1036	165	-17	-10	14	6	10	-844	-766	233	102	42	20	38	-69	-7	47
STORAGE	10403	10568	10551	10541	10555	10561	10571	9727	8961	9195	9297	9339	9359	9397	9328	9321	9368
ELEV FTMSL	1573.5	1574.4	1574.3	1574.3	1574.3	1574.4	1574.4	1569.9	1565.6	1566.9	1567.5	1567.8	1567.9	1568.1	1567.7	1567.7	1567.9
DISCH KCFS	17.8	15.0	20.5	21.1	21.2	24.0	24.3	27.9	25.0	7.1	8.8	8.7	8.7	8.7	14.8	16.5	16.4
POWER																	
AVE POWER MW		160	219	225	226	256	259	292	255	72	91	89	89	89	152	169	168
PEAK POW MW		537	537	536	537	537	537	514	492	498	501	503	503	504	502	502	504
ENERGY GWH	1629.7	57.5	36.7	48.7	162.7	190.6	186.6	217.4	189.8	52.0	67.3	32.2	15.0	17.1	112.7	125.9	117.3
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12768	446	285	377	1261	1478	1447	1705	1513	391	516	247	115	131	894	1016	946
RELEASE	12768	446	285	377	1261	1478	1447	1705	1513	391	516	247	115	131	894	1016	946
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	17.8	15.0	20.5	21.1	21.2	24.0	24.3	27.7	24.6	6.6	8.4	8.3	8.3	8.3	14.5	16.5	16.4
POWER																	
AVE POWER MW		71	96	99	99	113	114	130	116	33	43	42	42	42	73	81	79
PEAK POW MW		518	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	739.2	25.5	16.2	21.4	71.4	83.7	82.0	96.6	86.6	24.0	31.7	15.2	7.0	8.0	54.5	60.5	54.9
--FORT RANDALL--																	
NAT INFLOW	300	55	26	33	43	35	120	13	36	-10	-52	-3	-1	-1		-6	12
DEPLETION	80	1	1	1	4	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	128							10	31	32	22	10	5	5	12		
REG INFLOW	12849	499	310	410	1300	1504	1555	1690	1503	332	441	233	108	124	878	1007	955
RELEASE	12845	235	160	393	1300	1504	1555	1690	1677	1411	441	234	108	124	726	707	581
STOR CHANGE	5	264	150	17			0	0	-174	-1079	0	0	0	0	153	300	374
STORAGE	3118	3382	3532	3549	3549	3549	3549	3549	3375	2296	2296	2296	2295	2295	2448	2748	3122
ELEV FTMSL	1349.9	1353.2	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1337.5	1337.5	1337.5	1337.5	1337.5	1340.1	1344.8	1350.0
DISCH KCFS	10.0	7.9	11.5	22.0	21.8	24.5	26.1	27.5	27.3	23.7	7.2	7.9	7.8	7.8	11.8	11.5	10.1
POWER																	
AVE POWER MW		66	97	186	185	207	221	232	228	184	53	58	57	57	87	88	81
PEAK POW MW		350	355	356	356	356	356	356	349	284	285	285	285	285	297	319	339
ENERGY GWH	1267.2	23.6	16.3	40.2	133.0	153.7	158.8	172.4	169.6	132.6	39.2	20.7	9.6	11.0	64.9	65.4	56.2
--GAVINS POINT--																	
NAT INFLOW	1200	87	41	52	120	131	138	76	76	55	104	45	21	24	67	65	98
DEPLETION	113	0	0	0	4	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	4	-7	-20	0	-5	-3	-3	0	7	31	-1	0	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	13883	327	194	425	1416	1611	1666	1722	1735	1466	564	268	125	143	770	772	682
RELEASE	13883	327	194	425	1416	1611	1666	1722	1722	1440	564	268	125	143	770	772	721
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	14.0	23.8	23.8	26.2	28.0	28.0	28.0	24.2	9.2	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	49	82	82	89	95	95	96	84	33	32	32	32	44	45	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	581.0	13.9	8.2	17.6	58.7	66.6	68.6	70.9	71.3	60.8	24.3	11.6	5.4	6.2	33.1	33.2	30.8
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	550	36	17	22	77	144	106	47	22	15	14	10	4	5	10	-5	26
DEPLETION	254	6	3	4	21	35	30	37	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	14179	357	208	443	1472	1720	1742	1732	1709	1432	568	272	127	145	768	754	733
KCFS		12.0	15.0	24.8	24.7	28.0	29.3	28.2	27.8	24.1	9.2	9.1	9.1	9.1	12.5	12.3	12.7
--TOTAL--																	
NAT INFLOW	15498	880	411	528	1638	2096	3595	1934	769	643	781	367	171	195	408	407	675
DEPLETION	2735	48	22	29	219	557	1210	853	215	-165	-33	-74	-34	-39	-55	-27	9
CHAN STOR	8	74	-1	-34	-33	-47	2	41	0	23	49	3	0	-31	-33	-8	3
EVAPORATION	1462							92	286	351	302	137	64	73	157		
STORAGE	33627	34177	34356	34379	34293	34065	34710	34008	32568	31616	31609	31643	31658	31644	31149	30821	30757
SYSTEM POWER																	
AVE POWER MW		531	648	803	853	984	1001	986	932	568	394	392	392	429	599	636	622
PEAK POW MW		1991	1989	1988	1986	1982	1993	1973	1947	1909	1911	1912	1913	1913	1875	1887	1890
ENERGY GWH	6309.7	191.2	108.8	173.5	613.9	732.5	720.5	733.6	693.0	409.0	292.9	141.3	65.8	82.3	445.4	473.2	432.9
DAILY GWH		12.7	15.5	19.3	20.5	23.6	24.0	23.7	22.4	13.6	9.4	9.4	9.4	10.3	14.4	15.3	14.9

	28FEB08	2008											2009			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	7400	264	123	158	628	1210	1851	829	324	319	398	188	88	100	310	261	349
DEPLETION	531	5	2	3	18	349	662	221	-58	-148	-83	-39	-18	-21	-129	-140	-94
EVAPORATION	373							22	71	89	78	36	17	19	41		
MOD INFLOW	6496	259	121	155	610	861	1189	586	311	378	403	191	89	102	398	401	443
RELEASE	5055	179	69	89	357	492	476	492	492	357	267	134	62	71	523	523	472
STOR CHANGE	1440	80	51	66	253	369	713	94	-181	21	136	57	27	30	-125	-122	-29
STORAGE	10174	10254	10306	10372	10625	10994	11707	11800	11620	11641	11776	11833	11860	11890	11765	11643	11614
ELEV FTMSL	2207.6	2208.1	2208.4	2208.8	2210.4	2212.6	2216.7	2217.3	2216.2	2216.3	2217.1	2217.4	2217.6	2217.8	2217.1	2216.4	2216.2
DISCH KCFS	8.5	6.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	6.0	4.3	4.5	4.5	4.5	8.5	8.5	8.5
POWER																	
AVE POWER MW		74	61	62	74	100	101	102	102	77	56	58	58	58	109	108	108
PEAK POW MW		137	137	138	140	142	147	147	146	146	147	148	148	148	147	146	146
ENERGY GWH	775.1	26.5	10.3	13.3	53.4	74.1	72.8	76.1	76.0	55.1	41.4	20.8	9.7	11.1	81.0	80.7	72.8
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1046	-6	-3	-4	-3	196	830	578	64	-130	-6	-108	-50	-58	-110	-89	-55
CHAN STOR	0	27	11		-11	-21				21	17	-2			-42		0
EVAPORATION	436							26	84	105	91	41	19	22	47		
REG INFLOW	14574	681	302	375	1202	1697	2604	1954	925	900	653	391	183	209	797	849	853
RELEASE	12820	417	194	250	952	1291	1220	1230	1230	1116	837	387	180	222	953	1230	1111
STOR CHANGE	1754	265	108	125	250	406	1384	724	-305	-217	-184	4	3	-13	-156	-381	-258
STORAGE	12239	12504	12612	12736	12987	13393	14777	15501	15196	14979	14795	14799	14802	14789	14632	14251	13993
ELEV FTMSL	1815.7	1816.9	1817.3	1817.8	1818.8	1820.5	1825.8	1828.5	1827.4	1826.6	1825.9	1825.9	1825.9	1825.9	1825.3	1823.8	1822.8
DISCH KCFS	20.0	14.0	14.0	14.0	16.0	21.0	20.5	20.0	20.0	18.8	13.6	13.0	13.0	14.0	15.5	20.0	20.0
POWER																	
AVE POWER MW		152	152	153	175	232	232	232	234	218	158	150	150	162	179	228	226
PEAK POW MW		393	394	396	400	406	426	435	431	428	426	426	426	426	423	418	414
ENERGY GWH	1765.4	54.6	25.6	33.0	126.4	172.4	166.9	172.9	173.8	156.9	117.4	54.2	25.3	31.1	133.0	169.9	152.2
--OAHE--																	
NAT INFLOW	2300	317	148	190	364	236	689	162	33	118	14	5	2	3	-20		40
DEPLETION	640	23	11	14	48	68	135	160	106	26	-9	1	0	1	12	17	27
CHAN STOR	1	30			-10	-24	2	2		6	24	3		-5	-7	-21	
EVAPORATION	400							24	76	95	84	38	18	20	44		
REG INFLOW	14081	740	331	426	1258	1435	1776	1210	1081	1119	801	356	165	199	870	1192	1124
RELEASE	12283	403	227	300	971	1291	1172	1492	1430	878	892	226	115	130	931	942	886
STOR CHANGE	1798	337	104	126	288	144	605	-282	-349	241	-91	130	50	69	-61	250	238
STORAGE	12815	13152	13256	13382	13670	13814	14418	14136	13787	14028	13937	14067	14117	14186	14125	14375	14613
ELEV FTMSL	1585.0	1586.4	1586.9	1587.4	1588.6	1589.2	1591.7	1590.5	1589.1	1590.1	1589.7	1590.3	1590.5	1590.7	1590.5	1591.5	1592.5
DISCH KCFS	15.8	13.5	16.4	16.8	16.3	21.0	19.7	24.3	23.3	14.8	14.5	7.6	8.3	8.2	15.1	15.3	15.9
POWER																	
AVE POWER MW		155	188	194	189	245	232	286	272	173	170	89	98	97	178	181	189
PEAK POW MW		600	603	606	612	615	627	621	614	619	617	620	621	622	621	626	631
ENERGY GWH	1743.1	55.9	31.7	42.0	136.4	182.1	166.7	212.7	202.5	124.6	126.8	32.2	16.4	18.6	132.8	134.6	127.3
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	12180	403	227	300	971	1291	1172	1486	1410	853	870	216	110	125	919	942	886
RELEASE	12180	403	227	300	971	1291	1172	1486	1410	853	870	216	110	125	919	942	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	15.8	13.5	16.4	16.8	16.3	21.0	19.7	24.2	22.9	14.3	14.2	7.3	8.0	7.9	14.9	15.3	15.9
POWER																	
AVE POWER MW		64	77	79	76	98	92	113	108	71	71	37	40	40	75	75	77
PEAK POW MW		517	509	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	707.4	23.1	12.9	17.0	55.0	73.2	66.4	84.2	80.7	51.0	53.1	13.3	6.8	7.7	55.8	56.1	51.4
--FORT RANDALL--																	
NAT INFLOW	900	122	57	73	115	140	185	74	57	42	2	2	1	1	10		19
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	107							8	25	28	20	8	4	4	10		
REG INFLOW	12895	524	283	373	1083	1422	1345	1534	1427	860	851	209	107	121	916	939	902
RELEASE	12895	232	149	373	1083	1422	1345	1534	1601	1535	1254	209	107	121	713	689	528
STOR CHANGE	0	292	134				0	0	-174	-675	-403	0	0	0	203	250	374
STORAGE	3123	3415	3549	3549	3549	3549	3549	3549	3375	2700	2297	2297	2297	2297	2500	2750	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1341.0	1344.8	1350.0
DISCH KCFS	9.6	7.8	10.8	20.9	18.2	23.1	22.6	24.9	26.0	25.8	20.4	7.0	7.7	7.6	11.6	11.2	9.5
POWER																	
AVE POWER MW		65	91	177	154	196	191	211	218	206	153	52	56	56	86	86	76
PEAK POW MW		351	356	356	356	356	356	356	349	315	285	285	285	285	301	319	339
ENERGY GWH	1269.4	23.3	15.3	38.2	111.0	145.5	137.6	156.7	162.1	148.4	113.5	18.6	9.5	10.7	64.1	64.0	51.1
--GAVINS POINT--																	
NAT INFLOW	1450	92	43	55	148	174	166	86	103	77	122	50	23	27	77	79	127
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	3	-6	-19	5	-9	1	-4	-2	0	10	25	-1	0	-7	1	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	14194	328	187	409	1232	1568	1488	1574	1685	1609	1377	275	125	143	769	767	658
RELEASE	14194	328	187	409	1232	1568	1488	1574	1672	1583	1377	275	125	143	769	767	697
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	13.5	22.9	20.7	25.5	25.0	25.6	27.2	26.6	22.4	9.2	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	47	79	71	87	86	88	93	92	79	33	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	595.5	13.9	7.9	17.0	51.4	64.9	61.6	65.1	69.3	66.6	58.6	11.9	5.4	6.2	33.0	33.0	29.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1550	169	79	102	199	310	224	129	96	60	42	16	7	9	21	5	82
DEPLETION	255	6	3	4	21	35	30	38	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	15489	492	263	507	1410	1843	1682	1665	1733	1620	1409	286	130	148	778	759	765
KCFS		16.5	19.0	28.4	23.7	30.0	28.3	27.1	28.2	27.2	22.9	9.6	9.4	9.4	12.6	12.4	13.8
--TOTAL--																	
NAT INFLOW	24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION	2663	30	14	18	91	676	1693	1054	172	-227	-86	-135	-63	-72	-202	-195	-105
CHAN STOR	1	60	5	-19	-15	-55	3	-2	-2	27	52	27	-1	-5	-56	-20	3
EVAPORATION	1457							89	282	351	303	136	64	73	158		
STORAGE	40331	41305	41702	42018	42809	43728	46430	46966	45970	45366	44823	45014	45093	45180	45040	45038	45324
SYSTEM POWER																	
AVE POWER MW		548	617	743	741	957	933	1032	1027	837	687	419	435	444	672	723	721
PEAK POW MW		2112	2114	2119	2131	2142	2179	2184	2174	2163	2130	2133	2134	2136	2109	2125	2135
ENERGY GWH	6856.0	197.3	103.7	160.4	533.5	712.1	671.9	767.7	764.4	602.5	510.9	150.8	73.1	85.3	499.6	538.3	484.4
DAILY GWH		13.2	14.8	17.8	17.8	23.0	22.4	24.8	24.7	20.1	16.5	10.1	10.4	10.7	16.1	17.4	17.3

TIME OF STUDY 08:32:01 SHTN NAV SEAS 0 DAYS, SP MAR 5 MAY 14.16 STUDY NO 10
VALUES IN 1000 AF EXCEPT AS INDICATED

28FEB09		2009									2010				
INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																
NAT INFLOW	7400	264	123	158	628	1210	1851	829	324	319	398	188	88	100	310	261	349
DEPLETION	432	-25	-12	-15	49	350	586	232	-57	-149	-78	-41	-19	-22	-131	-142	-96
EVAPORATION	399							24	76	96	84	38	18	20	44		
MOD INFLOW	6569	289	135	173	579	860	1265	573	305	372	392	190	89	101	397	403	445
RELEASE	5526	179	69	89	357	492	476	492	492	417	380	179	83	95	584	615	528
STOR CHANGE	1043	110	65	84	222	368	789	81	-187	-44	12	12	5	6	-187	-212	-83
STORAGE	11614	11725	11790	11874	12096	12464	13253	13334	13147	13103	13115	13127	13132	13138	12951	12740	12657
ELEV FTMSL	2216.2	2216.8	2217.2	2217.7	2218.9	2221.0	2225.3	2225.7	2224.7	2224.5	2224.5	2224.6	2224.6	2224.7	2223.7	2222.5	2222.0
DISCH KCFS	8.5	6.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	7.0	6.2	6.0	6.0	6.0	9.5	10.0	9.5
POWER																	
AVE POWER MW		77	64	64	77	104	105	106	106	93	82	79	79	79	125	131	124
PEAK POW MW		147	147	148	149	151	156	156	155	155	155	155	155	154	153	153	152
ENERGY GWH	877.5	27.6	10.8	13.9	55.7	77.1	75.7	79.0	78.9	66.7	60.9	28.6	13.4	15.3	93.2	97.4	83.5
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1013	-9	-4	-5	-8	179	829	585	69	-133	-10	-112	-52	-59	-112	-90	-55
CHAN STOR	-10	26	11		-10	-21				10	8	2			-36	-5	5
EVAPORATION	463							28	90	112	97	43	20	23	50		
REG INFLOW	15041	683	303	376	1208	1715	2605	1945	914	945	756	440	204	234	863	937	914
RELEASE	13774	417	194	250	1012	1291	1250	1291	1291	1230	1094	491	229	262	1015	1291	1166
STOR CHANGE	1268	267	109	126	196	424	1355	654	-377	-285	-338	-51	-25	-28	-151	-355	-253
STORAGE	13993	14260	14369	14495	14691	15114	16470	17123	16746	16461	16123	16072	16047	16019	15868	15513	15261
ELEV FTMSL	1822.8	1823.9	1824.3	1824.8	1825.5	1827.1	1832.0	1834.2	1832.9	1831.9	1830.7	1830.6	1830.5	1830.4	1829.8	1828.5	1827.6
DISCH KCFS	20.0	14.0	14.0	14.0	17.0	21.0	21.0	21.0	21.0	20.7	17.8	16.5	16.5	16.5	16.5	21.0	21.0
POWER																	
AVE POWER MW		159	160	160	195	242	248	253	254	249	213	197	196	196	196	247	245
PEAK POW MW		418	420	421	424	430	448	456	451	448	443	442	442	440	435	435	432
ENERGY GWH	1969.0	57.3	26.9	34.7	140.6	180.4	178.3	188.6	189.2	178.9	158.3	70.8	33.0	37.7	145.7	183.9	164.9
--OAHE--																	
NAT INFLOW	2300	317	148	190	364	236	689	162	33	118	14	5	2	3	-20		40
DEPLETION	652	23	11	14	48	69	138	164	109	27	-9	1	0	1	12	17	27
CHAN STOR	-4	28			-14	-18				1	13	6				-20	
EVAPORATION	433							27	83	104	92	41	19	22	47		
REG INFLOW	14985	738	331	426	1314	1440	1801	1263	1133	1218	1038	460	212	242	936	1254	1179
RELEASE	13686	403	227	300	971	1368	1224	1547	1485	932	1175	750	350	210	1082	879	786
STOR CHANGE	1299	335	104	126	343	73	576	-285	-352	287	-137	-290	-138	32	-146	375	394
STORAGE	14613	14948	15053	15178	15522	15595	16171	15886	15534	15821	15684	15394	15256	15289	15143	15518	15912
ELEV FTMSL	1592.5	1593.8	1594.2	1594.7	1596.0	1596.2	1598.4	1597.3	1596.0	1597.1	1596.6	1595.5	1595.0	1595.1	1594.5	1596.0	1597.4
DISCH KCFS	15.9	13.5	16.4	16.8	16.3	22.2	20.6	25.2	24.2	15.7	19.1	25.2	25.2	13.2	17.6	14.3	14.1
POWER																	
AVE POWER MW		162	196	202	197	270	251	308	294	191	233	305	304	160	212	173	173
PEAK POW MW		637	639	642	648	650	660	655	648	654	651	646	643	644	641	648	655
ENERGY GWH	2010.6	58.3	33.0	43.7	142.1	200.6	180.9	229.0	218.4	137.3	173.2	109.8	51.0	30.7	157.8	128.7	116.0
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	13583	403	227	300	971	1368	1224	1541	1466	907	1153	740	345	205	1070	879	786
RELEASE	13583	403	227	300	971	1368	1224	1541	1466	907	1153	740	345	205	1070	879	786
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	13.5	16.4	16.8	16.3	22.2	20.6	25.1	23.8	15.2	18.8	24.9	24.9	12.9	17.4	14.3	14.1
POWER																	
AVE POWER MW		64	77	79	76	104	96	117	113	75	94	124	124	65	86	70	68
PEAK POW MW		517	509	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	790.1	23.1	12.9	17.0	55.0	77.5	69.4	87.3	83.9	54.1	70.1	44.8	20.9	12.5	64.0	52.0	45.6
--FORT RANDALL--																	
NAT INFLOW	900	122	57	73	115	140	185	74	57	42	2	2	1	1	10		19
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	107							8	25	28	20	8	4	4	10		
REG INFLOW	14298	524	283	373	1083	1499	1397	1589	1483	914	1135	731	342	202	1067	876	802
RELEASE	14298	232	149	373	1083	1499	1397	1589	1657	1589	1538	731	342	202	701	689	528
STOR CHANGE	0	291	134	0				0	-174	-675	-403	0	0	0	366	187	274
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3375	2700	2297	2297	2297	2297	2663	2850	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1343.5	1346.3	1350.0
DISCH KCFS	9.5	7.8	10.8	20.9	18.2	24.4	23.5	25.8	26.9	26.7	25.0	24.6	24.6	12.7	11.4	11.2	9.5
POWER																	
AVE POWER MW		65	91	177	154	206	198	218	225	213	187	178	178	93	86	88	76
PEAK POW MW		351	356	356	356	356	356	356	349	315	285	285	285	285	313	325	339
ENERGY GWH	1398.1	23.3	15.3	38.2	111.0	153.1	142.9	162.3	167.6	153.5	138.8	64.0	29.9	17.8	63.7	65.1	51.4
--GAVINS POINT--																	
NAT INFLOW	1450	92	43	55	148	174	166	86	103	77	122	50	23	27	77	79	127
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	3	-6	-19	5	-12	2	-5	-2	0	3	1	0	22	2	0	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	15597	328	187	409	1232	1642	1541	1629	1741	1662	1654	774	361	246	766	767	658
RELEASE	15597	328	187	409	1232	1642	1541	1629	1728	1636	1654	774	361	246	766	767	697
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	13.5	22.9	20.7	26.7	25.9	26.5	28.1	27.5	26.9	26.0	26.0	15.5	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	47	79	71	91	88	90	96	95	94	91	91	55	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	653.6	13.9	7.9	17.0	51.4	67.8	63.7	67.3	71.5	68.7	70.1	32.8	15.3	10.5	32.9	33.0	29.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1550	169	79	102	199	310	224	129	96	60	42	16	7	9	21	5	82
DEPLETION	258	6	3	4	21	35	31	38	36	23	10	6	3	3	12	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	16889	491	263	507	1410	1917	1734	1720	1788	1673	1686	784	366	252	775	758	765
KCFS		16.5	19.0	28.4	23.7	31.2	29.1	28.0	29.1	28.1	27.4	26.4	26.4	15.9	12.6	12.3	13.8
--TOTAL--																	
NAT INFLOW	24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION	2546	-3	-1	-2	117	661	1620	1076	182	-230	-85	-140	-65	-74	-206	-197	-107
CHAN STOR	-14	57	5	-19	-19	-51	2	-5	-2	12	25	8	0	23	-33	-25	8
EVAPORATION	1543							95	300	373	322	144	67	76	166		
STORAGE	45324	46327	46740	47075	47837	48701	51422	51872	50794	50103	49237	48908	48751	48761	48644	48639	48933
SYSTEM POWER																	
AVE POWER MW		565	635	761	772	1017	987	1093	1088	916	902	975	973	649	749	753	731
PEAK POW MW		2184	2186	2191	2201	2210	2243	2247	2238	2226	2189	2184	2181	2181	2164	2177	2184
ENERGY GWH	7698.9	203.5	106.7	164.4	555.7	756.6	710.9	813.4	809.5	659.3	671.4	350.8	163.5	124.6	557.4	560.0	491.1
DAILY GWH		13.6	15.2	18.3	18.5	24.4	23.7	26.2	26.1	22.0	21.7	23.4	23.4	15.6	18.0	18.1	17.5

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

28FEB10		2010											2011			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	7400	264	123	158	628	1210	1851	829	324	319	398	188	88	100	310	261	349
DEPLETION	442	-26	-12	-15	49	352	591	240	-53	-150	-78	-42	-19	-22	-133	-143	-97
EVAPORATION	430							26	82	103	90	41	19	22	47		
MOD INFLOW	6528	290	135	174	579	858	1260	563	295	366	386	188	88	100	396	404	446
RELEASE	5074	179	69	89	357	492	476	492	492	357	314	149	69	79	492	523	444
STOR CHANGE	1454	111	66	85	222	366	784	71	-197	9	71	39	18	21	-96	-119	2
STORAGE	12657	12768	12834	12919	13141	13507	14291	14362	14165	14174	14246	14285	14303	14324	14228	14109	14111
ELEV FTMSL	2222.0	2222.7	2223.0	2223.5	2224.7	2226.6	2230.6	2230.9	2230.0	2230.0	2230.4	2230.6	2230.7	2230.8	2230.3	2229.7	2229.7
DISCH KCFS	9.5	6.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	6.0	5.1	5.0	5.0	5.0	8.0	8.5	8.0
POWER																	
AVE POWER MW		79	66	66	79	106	107	108	108	81	69	68	68	68	108	114	108
PEAK POW MW		153	153	154	155	157	160	160	159	159	160	160	160	160	159	159	159
ENERGY GWH	823.4	28.3	11.1	14.2	57.1	79.0	77.2	80.3	80.2	58.2	51.3	24.3	11.4	13.0	80.3	85.1	72.3
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1030	-8	-4	-5	-7	179	839	601	75	-135	-15	-115	-54	-61	-114	-90	-56
CHAN STOR	15	36	10		-10	-20				20	9	1		0	-30	-5	5
EVAPORATION	475							29	93	115	99	44	21	23	51		
REG INFLOW	14585	692	303	376	1207	1715	2595	1927	905	894	694	412	192	219	778	845	831
RELEASE	14635	417	194	250	952	1414	1369	1414	1414	1309	1214	491	229	262	1015	1414	1277
STOR CHANGE	-50	276	108	126	255	301	1226	513	-510	-415	-520	-79	-37	-42	-237	-570	-446
STORAGE	15261	15537	15645	15771	16026	16327	17553	18066	17557	17142	16622	16543	16506	16463	16226	15657	15211
ELEV FTMSL	1827.6	1828.6	1829.0	1829.5	1830.4	1831.4	1835.7	1837.4	1835.7	1834.3	1832.5	1832.2	1832.1	1831.9	1831.1	1829.1	1827.4
DISCH KCFS	21.0	14.0	14.0	14.0	16.0	23.0	23.0	23.0	23.0	22.0	19.7	16.5	16.5	16.5	16.5	23.0	23.0
POWER																	
AVE POWER MW		164	165	166	190	273	278	283	283	269	239	199	198	198	198	272	269
PEAK POW MW		436	437	439	442	446	462	468	461	456	450	449	448	448	445	437	431
ENERGY GWH	2128.9	59.2	27.7	35.8	136.7	203.5	200.3	210.9	210.9	193.4	177.7	71.6	33.3	38.1	147.1	202.4	180.6
--OAHE--																	
NAT INFLOW	2300	317	148	190	364	236	689	162	33	118	14	5	2	3	-20		40
DEPLETION	665	24	11	14	49	70	141	169	112	27	-10	1	0	1	12	17	27
CHAN STOR	-9	31			-9	-30				4	10	14				-29	
EVAPORATION	452							28	87	109	96	43	20	22	48		
REG INFLOW	15809	740	331	426	1258	1550	1917	1379	1248	1295	1152	466	211	242	934	1368	1290
RELEASE	14992	402	236	319	1030	1556	1397	1726	1663	1104	1353	836	390	234	1082	879	786
STOR CHANGE	817	338	95	107	229	-6	520	-346	-415	191	-201	-369	-179	7	-147	490	505
STORAGE	15912	16250	16345	16452	16680	16674	17194	16848	16433	16624	16422	16053	15874	15882	15734	16224	16729
ELEV FTMSL	1597.4	1598.7	1599.0	1599.4	1600.2	1600.2	1602.0	1600.8	1599.3	1600.0	1599.3	1598.0	1597.3	1597.3	1596.8	1598.6	1600.4
DISCH KCFS	14.1	13.5	17.0	17.9	17.3	25.3	23.5	28.1	27.1	18.6	22.0	28.1	28.1	14.8	17.6	14.3	14.1
POWER																	
AVE POWER MW		166	210	221	215	314	293	350	335	230	272	345	343	181	215	175	175
PEAK POW MW		661	663	665	669	669	679	672	665	668	664	658	655	655	652	661	670
ENERGY GWH	2242.8	59.8	35.2	47.7	154.5	233.3	210.6	260.2	249.1	165.5	202.5	124.1	57.6	34.7	159.8	130.4	117.8
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	14889	402	236	319	1030	1556	1397	1719	1644	1079	1332	826	386	229	1070	879	786
RELEASE	14889	402	236	319	1030	1556	1397	1719	1644	1079	1332	826	386	229	1070	879	786
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	14.1	13.5	17.0	17.9	17.3	25.3	23.5	28.0	26.7	18.1	21.7	27.8	27.8	14.4	17.4	14.3	14.1
POWER																	
AVE POWER MW		64	80	84	81	118	110	131	127	89	109	139	139	73	86	70	68
PEAK POW MW		517	509	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	865.6	23.1	13.4	18.1	58.3	88.1	79.1	97.4	94.1	64.3	80.8	49.9	23.3	14.0	64.0	52.0	45.6
--FORT RANDALL--																	
NAT INFLOW	900	122	57	73	115	140	185	74	57	42	2	2	1	1	10		19
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	107							8	25	28	20	8	4	4	10		
REG INFLOW	15604	523	293	391	1142	1687	1570	1767	1661	1086	1313	818	382	227	1067	876	802
RELEASE	15604	232	159	391	1142	1687	1570	1767	1835	1762	1716	818	382	226	701	689	528
STOR CHANGE	0	291	134				0	0	-174	-675	-403	0	0	0	366	187	274
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3375	2700	2297	2297	2297	2297	2663	2850	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1343.5	1346.3	1350.0
DISCH KCFS	9.5	7.8	11.4	21.9	19.2	27.4	26.4	28.7	29.8	29.6	27.9	27.5	27.5	14.3	11.4	11.2	9.5
POWER																	
AVE POWER MW		65	97	185	163	231	223	242	249	236	208	199	199	104	86	88	76
PEAK POW MW		351	356	356	356	356	356	356	349	315	285	285	285	285	313	325	339
ENERGY GWH	1524.0	23.3	16.2	40.0	117.1	172.1	160.2	180.2	185.4	169.8	154.6	71.5	33.4	20.0	63.7	65.1	51.4
--GAVINS POINT--																	
NAT INFLOW	1450	92	43	55	148	174	166	86	103	77	122	50	23	27	77	79	127
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	3	-7	-20	5	-16	2	-5	-2	0	3	1	0	25	5	0	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	16903	328	195	427	1291	1826	1714	1808	1919	1835	1832	860	401	273	769	767	658
RELEASE	16903	328	195	427	1291	1826	1714	1808	1906	1809	1832	860	401	273	769	767	697
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	14.0	23.9	21.7	29.7	28.8	29.4	31.0	30.4	29.8	28.9	28.9	17.2	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	49	82	75	100	98	99	104	104	103	101	101	61	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	701.9	13.9	8.2	17.7	53.8	74.5	70.5	74.0	77.2	74.6	76.7	36.3	17.0	11.7	33.1	33.0	29.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1550	169	79	102	199	310	224	129	96	60	42	16	7	9	21	5	82
DEPLETION	263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	18190	491	271	524	1468	2101	1907	1899	1966	1845	1864	870	406	278	777	758	765
KCFS		16.5	19.5	29.4	24.7	34.2	32.0	30.9	32.0	31.0	30.3	29.2	29.2	17.5	12.6	12.3	13.8
--TOTAL--																	
NAT INFLOW	24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION	2591	-2	-1	-1	120	664	1638	1105	195	-232	-91	-144	-67	-77	-209	-198	-109
CHAN STOR	7	70	3	-20	-14	-66	2	-5	-2	25	22	15	0	26	-25	-34	8
EVAPORATION	1606							100	313	389	334	149	69	79	172		
STORAGE	48933	49949	50352	50669	51375	52036	54566	54804	53522	52658	51605	51196	50998	50984	50870	50858	51154
SYSTEM POWER																	
AVE POWER MW		577	666	803	802	1143	1108	1214	1205	1008	1000	1049	1047	684	736	763	740
PEAK POW MW		2232	2233	2237	2246	2252	2280	2280	2268	2254	2213	2206	2203	2202	2185	2198	2205
ENERGY GWH	8286.7	207.7	111.9	173.5	577.4	850.6	797.9	903.0	896.8	725.9	743.7	377.7	175.9	131.4	547.9	568.0	497.4
DAILY GWH		13.8	16.0	19.3	19.2	27.4	26.6	29.1	28.9	24.2	24.0	25.2	25.1	16.4	17.7	18.3	17.8

TIME OF STUDY 08:32:02 SHT NV 0, SP MR 5 MY 15.69, GARR +3.0 Oahe -3.0 STUDY NO 12
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	7400	264	123	158	628	1210	1851	829	324	319	398	188	88	100	310	261	349
DEPLETION	454	-26	-12	-15	49	353	595	247	-48	-150	-78	-41	-19	-22	-131	-141	-107
EVAPORATION	445							28	87	108	93	42	19	22	47		
MOD INFLOW	6501	290	135	174	579	857	1256	554	285	361	383	187	87	100	394	402	456
RELEASE	6965	179	83	107	357	492	762	615	615	653	590	268	132	159	646	676	633
STOR CHANGE	-464	111	52	67	222	365	494	-60	-329	-291	-207	-81	-45	-59	-252	-274	-177
STORAGE	14111	14222	14274	14341	14563	14928	15422	15362	15032	14741	14534	14453	14409	14350	14098	13824	13647
ELEV FTMSL	2229.7	2230.3	2230.5	2230.8	2231.9	2233.7	2236.0	2235.7	2234.2	2232.8	2231.8	2231.4	2231.2	2230.9	2229.6	2228.2	2227.3
DISCH KCFS	8.0	6.0	6.0	6.0	6.0	8.0	12.8	10.0	10.0	11.0	9.6	9.0	9.5	10.0	10.5	11.0	11.0
POWER																	
AVE POWER MW		81	81	81	81	109	163	137	136	147	130	122	128	135	140	145	144
PEAK POW MW		159	160	160	161	162	164	163	162	161	161	160	160	160	159	158	157
ENERGY GWH	1125.5	29.1	13.6	17.5	58.5	80.8	117.2	101.7	101.4	105.7	96.7	43.8	21.6	25.9	104.1	107.6	100.2
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1042	-8	-4	-5	-6	179	849	618	80	-138	-20	-119	-55	-63	-114	-90	-62
CHAN STOR	-31	21				-20	-49	28		-10	14	6	-5	-5	-5	-5	
EVAPORATION	483							29	93	116	101	45	21	24	53		
REG INFLOW	16410	677	306	394	1216	1715	2822	2062	1023	1162	977	538	250	295	955	998	1021
RELEASE	15151	417	194	250	922	1568	1488	1506	1476	1320	1157	506	236	270	1045	1445	1352
STOR CHANGE	1259	260	112	144	294	147	1334	555	-453	-158	-180	33	14	25	-90	-447	-331
STORAGE	15211	15471	15583	15727	16020	16168	17502	18057	17604	17446	17266	17299	17313	17338	17248	16801	16470
ELEV FTMSL	1827.4	1828.4	1828.8	1829.3	1830.4	1830.9	1835.5	1837.3	1835.8	1835.3	1834.7	1834.8	1834.9	1834.9	1834.6	1833.1	1832.0
DISCH KCFS	23.0	14.0	14.0	14.0	15.5	25.5	25.0	24.5	24.0	22.2	18.8	17.0	17.0	17.0	17.0	23.5	23.5
POWER																	
AVE POWER MW		164	165	165	184	302	301	301	296	272	230	208	208	208	208	285	282
PEAK POW MW		435	436	438	442	444	461	468	462	460	458	458	458	459	458	452	448
ENERGY GWH	2220.7	59.1	27.7	35.7	132.4	224.9	217.0	224.3	220.0	195.8	171.2	74.8	34.9	39.9	154.7	211.8	196.5
--OAHE--																	
NAT INFLOW	2300	317	148	190	364	236	689	162	33	118	14	5	2	3	-20		40
DEPLETION	680	24	11	14	49	71	145	173	115	28	-10	1	0	1	12	18	28
CHAN STOR	-2	39			-6	-42	2	2	2	8	14	8			0	-28	
EVAPORATION	463							29	90	112	98	43	20	23	49		
REG INFLOW	16305	748	331	426	1231	1691	2034	1469	1306	1306	1097	474	218	249	964	1398	1364
RELEASE	15881	402	259	363	1172	1659	1486	1818	1756	1193	1445	880	411	247	1088	885	816
STOR CHANGE	424	346	72	62	59	32	548	-349	-449	112	-348	-406	-193	2	-124	514	548
STORAGE	16729	17074	17146	17209	17267	17299	17847	17498	17048	17161	16812	16406	16213	16215	16091	16605	17153
ELEV FTMSL	1600.4	1601.6	1601.9	1602.1	1602.3	1602.4	1604.3	1603.1	1601.5	1601.9	1600.7	1599.2	1598.5	1598.5	1598.1	1600.0	1601.9
DISCH KCFS	14.1	13.5	18.7	20.4	19.7	27.0	25.0	29.6	28.6	20.1	23.5	29.6	29.6	15.6	17.7	14.4	14.2
POWER																	
AVE POWER MW		169	234	255	247	338	315	373	358	251	293	366	364	192	218	178	177
PEAK POW MW		677	678	679	680	681	691	684	676	678	672	664	661	661	659	668	678
ENERGY GWH	2400.8	60.8	39.3	55.1	178.1	251.6	226.6	277.4	266.0	180.8	218.2	131.6	61.1	36.9	161.8	132.3	123.3
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	15778	402	259	363	1172	1659	1486	1812	1736	1169	1424	871	406	242	1076	885	816
RELEASE	15778	402	259	363	1172	1659	1486	1812	1736	1169	1424	871	406	242	1076	885	816
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	14.1	13.5	18.7	20.4	19.7	27.0	25.0	29.5	28.2	19.6	23.2	29.3	29.3	15.3	17.5	14.4	14.2
POWER																	
AVE POWER MW		64	87	95	92	126	117	138	134	97	116	146	146	77	87	70	68
PEAK POW MW		517	509	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	916.8	23.1	14.7	20.6	66.4	94.0	84.2	102.6	99.4	69.6	86.3	52.6	24.5	14.8	64.4	52.4	47.4
--FORT RANDALL--																	
NAT INFLOW	900	122	57	73	115	140	185	74	57	42	2	2	1	1	10		19
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	107							8	25	28	20	8	4	4	10		
REG INFLOW	16494	523	315	436	1284	1790	1659	1860	1753	1176	1405	862	403	240	1073	882	832
RELEASE	16494	232	181	436	1284	1790	1659	1860	1927	1851	1809	862	403	239	707	695	558
STOR CHANGE	0	291	134					0	-174	-675	-403	0	0	0	366	187	274
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3375	2700	2297	2297	2297	2297	2663	2850	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1343.5	1346.3	1350.0
DISCH KCFS	9.5	7.8	13.1	24.4	21.6	29.1	27.9	30.2	31.3	31.1	29.4	29.0	29.0	15.1	11.5	11.3	9.7
POWER																	
AVE POWER MW		65	111	206	183	245	235	255	261	248	219	209	209	110	86	88	78
PEAK POW MW		351	356	356	356	356	356	356	349	315	285	285	285	285	313	325	339
ENERGY GWH	1610.3	23.3	18.6	44.5	131.5	182.4	169.2	189.4	194.5	178.3	162.7	75.3	35.2	21.1	64.3	65.7	54.3
--GAVINS POINT--																	
NAT INFLOW	1450	92	43	55	148	174	166	86	103	77	122	50	23	27	77	79	127
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-2	3	-10	-22	5	-14	2	-5	-2	0	3	1	0	26	7	0	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	17792	328	215	470	1434	1931	1803	1900	2011	1924	1925	904	422	287	777	773	688
RELEASE	17792	328	215	470	1434	1931	1803	1900	1998	1898	1925	904	422	287	777	773	727
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	15.5	26.3	24.1	31.4	30.3	30.9	32.5	31.9	31.3	30.4	30.4	18.1	12.6	12.6	12.6
POWER																	
AVE POWER MW		39	54	90	83	104	102	103	107	107	107	105	105	64	45	45	45
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	730.5	13.9	9.0	19.4	59.5	77.5	73.2	76.6	79.7	77.2	79.4	37.7	17.6	12.3	33.4	33.2	31.0
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1550	169	79	102	199	310	224	129	96	60	42	16	7	9	21	5	82
DEPLETION	263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	19079	491	291	567	1611	2206	1996	1991	2058	1934	1957	914	427	293	785	764	795
KCFS		16.5	20.9	31.8	27.1	35.9	33.5	32.4	33.5	32.5	31.8	30.7	30.7	18.4	12.8	12.4	13.8
--TOTAL--																	
NAT INFLOW	24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION	2630	-2	-1	-1	121	666	1656	1133	208	-234	-96	-147	-68	-78	-207	-195	-124
CHAN STOR	-33	63	-10	-22	-1	-77	-45	26	0	-2	32	14	-5	22	2	-33	3
EVAPORATION	1639							102	321	398	341	152	71	80	175		
STORAGE	51154	52162	52532	52804	53379	53923	56299	56445	55052	54066	52928	52473	52250	52218	52118	52098	52373
SYSTEM POWER																	
AVE POWER MW		582	731	893	870	1225	1232	1307	1292	1121	1095	1155	1160	786	783	811	794
PEAK POW MW		2253	2254	2257	2263	2266	2295	2295	2283	2270	2230	2223	2220	2219	2204	2219	2227
ENERGY GWH	9004.6	209.4	122.9	192.9	626.2	911.2	887.3	972.0	961.1	807.3	814.6	415.8	194.9	150.8	582.6	603.1	552.7
DAILY GWH		14.0	17.6	21.4	20.9	29.4	29.6	31.4	31.0	26.9	26.3	27.7	27.8	18.9	18.8	19.5	19.1

	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	7400	264	123	158	628	1210	1851	829	324	319	398	188	88	100	310	261	349
DEPLETION	466	-26	-12	-15	49	353	599	254	-44	-150	-82	-43	-20	-23	-134	-144	-97
EVAPORATION	421							26	82	102	87	39	18	21	45		
MOD INFLOW	6513	290	135	174	579	857	1252	549	286	367	393	191	89	102	399	405	446
RELEASE	7151	179	69	89	357	492	1083	676	676	592	535	253	125	151	646	646	583
STOR CHANGE	-638	111	66	85	222	365	169	-128	-391	-224	-142	-62	-36	-49	-246	-241	-137
STORAGE	13647	13758	13824	13909	14131	14496	14665	14537	14146	13922	13780	13718	13682	13633	13387	13146	13009
ELEV FTMSL	2227.3	2227.9	2228.2	2228.7	2229.8	2231.6	2232.4	2231.8	2229.9	2228.7	2228.0	2227.7	2227.5	2227.3	2226.0	2224.7	2224.0
DISCH KCFS	11.0	6.0	5.0	5.0	6.0	8.0	18.2	11.0	11.0	9.9	8.7	8.5	9.0	9.5	10.5	10.5	10.5
POWER																	
AVE POWER MW		80	67	67	81	108	160	146	146	133	116	114	120	127	138	137	137
PEAK POW MW		158	158	158	159	160	160	161	159	158	158	158	157	157	156	155	154
ENERGY GWH	1090.7	28.9	11.3	14.5	58.1	80.3	115.3	109.0	108.4	96.0	86.6	40.9	20.2	24.3	102.8	102.3	91.9
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1063	-8	-4	-5	-5	180	860	634	86	-141	-24	-123	-57	-65	-117	-92	-57
CHAN STOR	4	51	10		-10	-20	-102	71		10	12	2	-5	-5	-10		
EVAPORATION	503							31	99	122	104	47	22	25	53		
REG INFLOW	16590	707	302	375	1205	1715	3079	2148	1073	1118	921	522	245	289	952	975	966
RELEASE	16483	417	208	286	952	1660	1607	1660	1660	1483	1299	625	292	333	1076	1537	1388
STOR CHANGE	107	290	94	90	253	55	1472	488	-588	-365	-379	-103	-47	-45	-124	-563	-422
STORAGE	16470	16760	16854	16944	17196	17251	18723	19211	18623	18258	17880	17777	17730	17686	17562	16999	16577
ELEV FTMSL	1832.0	1833.0	1833.3	1833.6	1834.5	1834.6	1839.5	1841.0	1839.1	1838.0	1836.7	1836.4	1836.3	1836.1	1835.7	1833.8	1832.3
DISCH KCFS	23.5	14.0	15.0	16.0	16.0	27.0	27.0	27.0	27.0	24.9	21.1	21.0	21.0	21.0	17.5	25.0	25.0
POWER																	
AVE POWER MW		169	182	194	195	328	333	340	339	311	262	259	259	259	215	304	301
PEAK POW MW		451	453	454	457	458	475	481	474	470	465	464	464	463	462	455	449
ENERGY GWH	2457.0	60.9	30.5	41.9	140.3	244.0	239.9	252.7	252.5	223.8	195.0	93.3	43.5	49.6	160.3	226.4	202.3
--OAHE--																	
NAT INFLOW	2300	317	148	190	364	236	689	162	33	118	14	5	2	3	-20		40
DEPLETION	696	24	11	15	50	72	148	178	119	29	-11	1	0	1	13	18	28
CHAN STOR	-6	40	-4	-4		-46				9	15	1			15	-32	
EVAPORATION	482							30	92	116	102	45	21	24	52		
REG INFLOW	17599	749	340	457	1266	1779	2148	1615	1482	1464	1238	584	272	311	1006	1488	1400
RELEASE	16513	402	275	389	1256	1701	1527	1861	1799	1235	1488	901	421	262	1168	965	863
STOR CHANGE	1086	347	65	68	10	78	620	-246	-317	229	-250	-317	-148	49	-162	523	537
STORAGE	17153	17500	17565	17633	17643	17721	18341	18095	17778	18007	17757	17440	17291	17341	17179	17702	18239
ELEV FTMSL	1601.9	1603.1	1603.3	1603.5	1603.6	1603.8	1605.9	1605.1	1604.0	1604.8	1604.0	1602.9	1602.4	1602.5	1602.0	1603.8	1605.6
DISCH KCFS	14.2	13.5	19.8	21.8	21.1	27.7	25.7	30.3	29.3	20.8	24.2	30.3	30.3	16.5	19.0	15.7	15.5
POWER																	
AVE POWER MW		170	250	275	267	349	326	385	371	264	307	381	380	208	239	198	198
PEAK POW MW		684	686	687	687	688	699	695	689	694	689	683	681	682	679	688	698
ENERGY GWH	2529.2	61.3	42.0	59.4	192.0	259.8	234.9	286.7	275.9	189.8	228.4	137.3	63.8	39.9	177.5	147.3	133.1
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	16410	402	275	389	1256	1701	1527	1855	1779	1210	1467	891	416	257	1156	965	863
RELEASE	16410	402	275	389	1256	1701	1527	1855	1779	1210	1467	891	416	257	1156	965	863
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	14.2	13.5	19.8	21.8	21.1	27.7	25.7	30.2	28.9	20.3	23.9	30.0	30.0	16.2	18.8	15.7	15.5
POWER																	
AVE POWER MW		64	93	102	99	129	120	141	137	100	119	149	149	82	93	77	75
PEAK POW MW		517	509	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	953.4	23.1	15.6	22.0	71.1	96.3	86.5	105.0	101.9	72.1	88.9	53.8	25.1	15.7	69.1	57.1	50.1
--FORT RANDALL--																	
NAT INFLOW	900	122	57	73	115	140	185	74	57	42	2	2	1	1	10		19
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	107							8	25	28	20	8	4	4	10		
REG INFLOW	17125	523	332	461	1368	1832	1700	1903	1796	1217	1449	883	413	254	1153	962	879
RELEASE	17125	232	198	461	1368	1832	1700	1903	1970	1892	1852	883	413	254	787	775	605
STOR CHANGE	0	291	134					0	-174	-675	-403	0	0	0	366	187	274
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3375	2700	2297	2297	2297	2297	2663	2850	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1343.5	1346.3	1350.0
DISCH KCFS	9.7	7.8	14.2	25.9	23.0	29.8	28.6	30.9	32.0	31.8	30.1	29.7	29.7	16.0	12.8	12.6	10.9
POWER																	
AVE POWER MW		65	120	218	194	251	241	260	267	253	224	214	214	117	96	98	88
PEAK POW MW		351	356	356	356	356	356	356	349	315	285	285	285	285	313	325	339
ENERGY GWH	1670.7	23.3	20.2	47.1	139.9	186.6	173.3	193.7	198.8	182.2	166.5	77.1	36.0	22.4	71.5	73.2	58.9
--GAVINS POINT--																	
NAT INFLOW	1450	92	43	55	148	174	166	86	103	77	122	50	23	27	77	79	127
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-4	4	-12	-22	5	-13	2	-5	-2	0	3	1	0	25	6	0	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	18422	329	229	495	1517	1974	1845	1943	2054	1966	1968	925	432	302	856	853	736
RELEASE	18422	329	229	495	1517	1974	1845	1943	2041	1940	1968	925	432	302	856	853	775
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	12.6	11.0	16.5	27.7	25.5	32.1	31.0	31.6	33.2	32.6	32.0	31.1	31.1	19.0	13.9	13.9	13.9
POWER																	
AVE POWER MW		39	57	94	87	106	103	105	109	109	108	106	106	67	49	49	49
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	752.6	13.9	9.6	20.4	62.8	78.7	74.3	77.8	80.8	78.3	80.6	38.2	17.8	12.9	36.7	36.6	33.0
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1550	169	79	102	199	310	224	129	96	60	42	16	7	9	21	5	82
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	19704	491	304	592	1694	2248	2038	2033	2100	1976	1999	935	436	307	864	844	842
KCFS		16.5	21.9	33.2	28.5	36.6	34.2	33.1	34.2	33.2	32.5	31.4	31.4	19.3	14.0	13.7	15.2
--TOTAL--																	
NAT INFLOW	24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION	2684	-1	-1	-1	123	669	1674	1162	223	-236	-104	-152	-71	-81	-212	-200	-108
CHAN STOR	-5	94	-6	-26	-5	-79	-100	66	-2	19	32	3	-5	22	11	-31	3
EVAPORATION	1654							104	325	401	343	153	71	81	176		
STORAGE	52373	53412	53771	54013	54499	54996	57257	57371	55915	54906	53732	53250	53019	52975	52809	52715	52928
SYSTEM POWER																	
AVE POWER MW		587	769	951	923	1271	1284	1378	1369	1170	1137	1224	1229	858	830	864	847
PEAK POW MW		2276	2276	2279	2283	2286	2315	2316	2306	2292	2252	2245	2242	2242	2225	2239	2245
ENERGY GWH	9453.7	211.4	129.2	205.4	664.2	945.7	924.3	1025.0	1018.3	842.1	846.1	440.6	206.4	164.8	617.8	642.9	569.4
DAILY GWH		14.1	18.5	22.8	22.1	30.5	30.8	33.1	32.8	28.1	27.3	29.4	29.5	20.6	19.9	20.7	20.3

TIME OF STUDY 17:02:18 SHTN NAV SEAS 48 DAYS, SP MAR 0 MAY 0 STUDY NO 14
VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB08	2008											2009			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	6556	264	123	158	574	1011	1589	692	287	275	354	183	85	98	322	231	309
DEPLETION	405	-6	-3	-3	52	286	505	215	-48	-143	-68	-34	-16	-18	-109	-121	-84
EVAPORATION	411							25	79	98	86	39	18	21	45		
MOD INFLOW	5740	270	126	162	522	725	1084	452	256	320	336	178	83	95	386	352	393
RELEASE	5090	149	69	89	357	430	476	492	492	359	302	134	62	71	553	553	500
STOR CHANGE	650	121	57	73	165	295	608	-40	-235	-40	34	44	21	23	-168	-201	-107
STORAGE	8391	8513	8569	8642	8807	9101	9709	9669	9434	9394	9429	9473	9493	9517	9349	9148	9041
ELEV FTMSL	2195.9	2196.7	2197.1	2197.6	2198.7	2200.7	2204.7	2204.4	2202.9	2202.6	2202.9	2203.1	2203.3	2203.4	2202.3	2201.0	2200.3
DISCH KCFS	8.0	5.0	5.0	5.0	6.0	7.0	8.0	8.0	8.0	6.0	4.9	4.5	4.5	4.5	9.0	9.0	9.0
POWER																	
AVE POWER MW		58	58	58	70	82	95	96	96	72	59	54	54	54	107	107	106
PEAK POW MW		123	124	125	126	129	133	133	131	131	131	131	131	132	130	129	128
ENERGY GWH	730.5	20.8	9.7	12.5	50.3	61.1	68.6	71.6	71.2	51.9	43.6	19.4	9.1	10.4	79.8	79.3	71.2
--GARRISON--																	
NAT INFLOW	10069	475	221	285	763	1282	2701	1891	532	446	428	175	82	93	238	177	280
DEPLETION	919	15	7	9	24	135	745	564	66	-138		-114	-53	-61	-119	-95	-66
CHAN STOR	-11	34			-11	-11	-11			21	12	4			-49		
EVAPORATION	485							30	94	117	101	45	21	24	52		
REG INFLOW	13744	642	284	365	1085	1566	2421	1789	864	847	641	382	176	201	809	825	846
RELEASE	12949	446	208	268	952	1138	1190	1230	1230	1066	861	417	194	222	953	1353	1222
STOR CHANGE	795	196	76	97	133	429	1231	560	-366	-219	-220	-35	-18	-21	-144	-527	-376
STORAGE	10068	10264	10340	10437	10570	10999	12229	12789	12423	12205	11984	11950	11931	11910	11766	11239	10863
ELEV FTMSL	1806.0	1806.9	1807.3	1807.8	1808.4	1810.3	1815.7	1818.0	1816.5	1815.6	1814.7	1814.5	1814.4	1814.4	1813.7	1811.4	1809.7
DISCH KCFS	20.0	15.0	15.0	15.0	16.0	18.5	20.0	20.0	20.0	17.9	14.0	14.0	14.0	14.0	15.5	22.0	22.0
POWER																	
AVE POWER MW		151	151	152	163	190	211	217	217	193	150	150	150	150	165	231	227
PEAK POW MW		356	358	359	362	369	389	397	391	388	384	384	384	383	381	373	367
ENERGY GWH	1650.5	54.2	25.4	32.8	117.0	141.0	151.7	161.1	161.6	139.1	111.9	53.9	25.1	28.7	122.8	171.6	152.6
--OAHE--																	
NAT INFLOW	1761	187	87	112	278	158	701	124	29	79	11				-42	-7	44
DEPLETION	640	23	11	14	48	68	135	160	106	26	-9	1	0	1	12	17	27
CHAN STOR	-10	27		0	-5	-13	-8			12	21			0	-8	-35	0
EVAPORATION	397							24	74	94	84	38	18	21	44		
REG INFLOW	13663	637	285	366	1177	1214	1748	1169	1079	1037	818	377	176	201	847	1293	1239
RELEASE	12849	411	250	352	1209	1431	1385	1701	1501	577	743	243	118	134	1103	821	872
STOR CHANGE	814	226	35	14	-32	-217	363	-531	-422	460	76	134	58	67	-257	473	367
STORAGE	10590	10816	10851	10865	10833	10616	10979	10447	10025	10485	10561	10696	10754	10821	10565	11037	11404
ELEV FTMSL	1574.5	1575.6	1575.8	1575.9	1575.7	1574.6	1576.5	1573.8	1571.5	1574.0	1574.4	1575.0	1575.3	1575.7	1574.4	1576.7	1578.5
DISCH KCFS	13.1	13.8	18.0	19.7	20.3	23.3	23.3	27.7	24.4	9.7	12.1	8.2	8.5	8.4	17.9	13.3	15.7
POWER																	
AVE POWER MW		149	194	212	219	249	250	296	257	103	129	88	91	91	193	144	171
PEAK POW MW		544	545	545	544	538	548	534	522	535	537	540	542	544	537	550	559
ENERGY GWH	1666.6	53.5	32.6	45.9	157.6	185.5	180.0	220.1	191.4	74.1	96.1	31.6	15.3	17.5	143.2	107.1	115.2
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12720	411	250	352	1209	1431	1385	1693	1476	546	716	231	112	127	1089	821	872
RELEASE	12720	411	250	352	1209	1431	1385	1693	1476	546	716	231	112	127	1089	821	872
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	13.1	13.8	18.0	19.7	20.3	23.3	23.3	27.5	24.0	9.2	11.6	7.8	8.1	8.0	17.7	13.3	15.7
POWER																	
AVE POWER MW		65	84	92	95	109	109	129	114	46	59	39	41	41	88	66	75
PEAK POW MW		517	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	736.8	23.6	14.2	19.9	68.5	81.1	78.5	95.9	84.5	33.5	43.8	14.2	6.9	7.8	65.1	48.8	50.6
--FORT RANDALL--																	
NAT INFLOW	643	88	41	53	82	66	167	33	63	30	2				6	-6	19
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	129							10	31	32	22	10	5	5	13		
REG INFLOW	13147	497	290	403	1288	1488	1540	1698	1493	528	694	220	107	121	1079	812	888
RELEASE	13147	223	155	386	1288	1488	1540	1698	1667	1606	694	220	107	121	713	695	544
STOR CHANGE	1	274	135	17				0	-174	-1078	0	0	0	0	366	117	344
STORAGE	3123	3397	3532	3549	3549	3549	3549	3549	3375	2297	2297	2296	2296	2296	2662	2779	3123
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1337.5	1337.5	1337.5	1337.5	1337.5	1343.5	1345.3	1350.0
DISCH KCFS	10.0	7.5	11.1	21.6	21.6	24.2	25.9	27.6	27.1	27.0	11.3	7.4	7.7	7.6	11.6	11.3	9.8
POWER																	
AVE POWER MW		62	94	183	183	204	218	233	227	209	82	54	56	56	87	88	78
PEAK POW MW		350	355	356	356	356	356	356	349	284	285	285	285	285	313	320	339
ENERGY GWH	1295.6	22.4	15.8	39.5	131.8	152.1	157.3	173.2	168.7	150.7	61.4	19.5	9.5	10.8	64.8	65.4	52.7
--GAVINS POINT--																	
NAT INFLOW	1335	98	46	59	132	147	153	87	85	62	112	50	23	27	75	73	107
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	5	-7	-20	0	-5	-3	-3	1	0	29	7	-1	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	14322	326	193	425	1416	1611	1666	1740	1735	1662	824	268	125	143	766	767	654
RELEASE	14322	326	193	425	1416	1611	1666	1740	1722	1636	824	268	125	143	766	767	693
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	26.2	28.0	28.3	28.0	27.5	13.4	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	49	82	82	89	95	96	96	95	48	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	599.2	13.8	8.2	17.6	58.7	66.6	68.6	71.6	71.3	68.7	35.4	11.6	5.4	6.2	32.9	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1135	145	68	87	113	219	158	95	70	44	31	16	7	9	16	-3	60
DEPLETION	255	6	3	4	21	35	30	38	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	15202	465	258	508	1508	1795	1794	1797	1757	1657	845	278	130	148	770	751	739
KCFS		15.6	18.6	28.5	25.3	29.2	30.2	29.2	28.6	27.9	13.7	9.4	9.4	9.4	12.5	12.2	13.3
--TOTAL--																	
NAT INFLOW	21499	1256	586	753	1942	2883	5469	2922	1066	936	938	424	198	226	615	465	819
DEPLETION	2410	40	19	24	152	552	1451	1034	184	-230	-65	-136	-63	-72	-191	-182	-106
CHAN STOR	-30	66	-7	-20	-17	-30	-22	-3	1	24	62	12	-1	0	-65	-35	3
EVAPORATION	1598							99	311	384	331	150	70	80	174		
STORAGE	34152	34969	35271	35472	35738	36244	38446	38434	37250	36399	36289	36433	36493	36563	36361	36222	36410
SYSTEM POWER																	
AVE POWER MW		523	630	779	811	924	979	1066	1006	719	527	417	424	423	684	679	702
PEAK POW MW		2006	2007	2009	2012	2015	2049	2043	2027	1993	1992	1996	1997	1999	1977	1988	1997
ENERGY GWH	6679.2	188.2	105.9	168.3	584.1	687.4	704.7	793.5	748.6	517.9	392.1	150.2	71.2	81.3	508.6	505.2	472.0
DAILY GWH		12.5	15.1	18.7	19.5	22.2	23.5	25.6	24.1	17.3	12.6	10.0	10.2	10.2	16.4	16.3	16.9

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

TIME OF STUDY 17:02:19 SHTN NAV SEAS 33 DAYS, SP MAR 0 MAY 0 STUDY NO 15
VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB09		2009										2010			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	6613	267	124	160	579	1019	1603	698	289	278	357	185	86	98	325	233	312
DEPLETION	432	-20	-9	-12	42	313	563	218	-49	-148	-74	-35	-16	-19	-112	-123	-86
EVAPORATION	427							26	82	102	89	40	19	22	47		
MOD INFLOW	5754	287	134	172	537	706	1040	454	256	324	342	179	84	95	390	356	398
RELEASE	5254	149	69	89	357	430	476	492	492	387	315	153	69	79	584	584	528
STOR CHANGE	500	138	64	83	180	276	564	-38	-236	-63	26	26	14	16	-194	-228	-130
STORAGE	9041	9179	9244	9326	9506	9782	10346	10308	10073	10010	10036	10062	10076	10093	9899	9671	9541
ELEV FTMSL	2200.3	2201.2	2201.7	2202.2	2203.4	2205.1	2208.7	2208.4	2207.0	2206.6	2206.7	2206.9	2207.0	2207.1	2205.9	2204.4	2203.6
DISCH KCFS	9.0	5.0	5.0	5.0	6.0	7.0	8.0	8.0	8.0	6.5	5.1	5.1	5.0	5.0	9.5	9.5	9.5
POWER																	
AVE POWER MW		59	59	59	72	84	97	98	98	79	62	63	61	61	115	114	114
PEAK POW MW		129	130	130	132	134	138	137	136	135	135	136	136	136	134	133	132
ENERGY GWH	769.1	21.3	10.0	12.9	51.6	62.6	70.1	73.0	72.7	57.0	46.5	22.5	10.3	11.7	85.7	85.0	76.3
--GARRISON--																	
NAT INFLOW	10134	478	223	287	768	1290	2718	1903	535	449	431	176	82	94	240	178	282
DEPLETION	1008	-5	-2	-3	42	234	732	601	72	-140	-4	-118	-55	-63	-121	-96	-66
CHAN STOR	-5	45			-11	-11	-11			16	15		1	0	-49		
EVAPORATION	496							30	96	120	104	47	22	25	54		
REG INFLOW	13879	676	295	379	1072	1475	2451	1764	859	872	661	400	186	211	843	858	876
RELEASE	13269	476	194	250	1012	1383	1190	1230	1230	1012	928	449	208	238	953	1322	1194
STOR CHANGE	610	200	100	129	60	92	1261	534	-371	-139	-266	-49	-22	-27	-110	-464	-318
STORAGE	10863	11063	11164	11293	11353	11445	12706	13240	12869	12730	12463	12414	12392	12366	12255	11791	11473
ELEV FTMSL	1809.7	1810.6	1811.1	1811.7	1811.9	1812.3	1817.7	1819.9	1818.4	1817.8	1816.7	1816.5	1816.4	1816.3	1815.8	1813.8	1812.5
DISCH KCFS	22.0	16.0	14.0	14.0	17.0	22.5	20.0	20.0	20.0	17.0	15.1	15.1	15.0	15.0	15.5	21.5	21.5
POWER																	
AVE POWER MW		165	146	146	178	235	214	219	220	186	164	164	162	162	167	229	226
PEAK POW MW		370	371	374	375	376	396	404	398	396	392	391	391	390	389	381	376
ENERGY GWH	1720.1	59.5	24.5	31.6	128.0	174.9	153.9	163.3	163.7	133.9	122.3	58.9	27.3	31.2	124.5	170.5	152.2
--OAHE--																	
NAT INFLOW	1794	190	89	114	283	161	714	127	30	80	11				-43	-7	45
DEPLETION	652	23	11	14	48	69	138	164	109	27	-9	1	0	1	12	17	27
CHAN STOR	3	31	10		-16	-28	13			16	10		0		-3	-32	
EVAPORATION	426							27	81	102	89	40	19	22	47		
REG INFLOW	13988	674	283	350	1231	1447	1779	1166	1070	979	869	408	189	216	849	1266	1212
RELEASE	13362	409	248	350	1206	1429	1380	1700	1498	679	1192	224	119	133	1102	977	716
STOR CHANGE	626	266	34	0	25	18	399	-534	-428	300	-323	184	71	83	-254	290	496
STORAGE	11404	11670	11704	11704	11729	11747	12145	11612	11184	11484	11161	11345	11416	11498	11245	11534	12030
ELEV FTMSL	1578.5	1579.8	1580.0	1580.0	1580.1	1580.2	1582.0	1579.5	1577.5	1578.9	1577.4	1578.2	1578.6	1579.0	1577.8	1579.1	1581.5
DISCH KCFS	15.7	13.7	17.9	19.6	20.3	23.2	23.2	27.6	24.4	11.4	19.4	7.5	8.5	8.4	17.9	15.9	12.9
POWER																	
AVE POWER MW		151	198	217	224	257	258	306	266	125	212	83	94	93	196	174	143
PEAK POW MW		566	566	566	567	567	577	564	553	561	553	557	559	561	555	562	574
ENERGY GWH	1781.8	54.5	33.2	46.8	161.4	191.1	185.7	227.8	198.2	90.1	157.7	29.7	15.8	17.8	146.1	129.7	96.3
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13233	409	248	350	1206	1429	1380	1692	1473	648	1165	212	113	127	1088	977	716
RELEASE	13233	409	248	350	1206	1429	1380	1692	1473	648	1165	212	113	127	1088	977	716
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	15.7	13.7	17.9	19.6	20.3	23.2	23.2	27.5	24.0	10.9	18.9	7.1	8.1	8.0	17.7	15.9	12.9
POWER																	
AVE POWER MW		65	84	92	95	109	109	129	113	55	95	36	41	41	87	77	62
PEAK POW MW		517	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	767.4	23.4	14.1	19.8	68.3	80.9	78.2	95.8	84.3	39.6	70.8	13.0	6.9	7.8	65.1	57.5	41.6
--FORT RANDALL--																	
NAT INFLOW	659	90	42	54	84	67	171	34	65	31	2				7	-7	20
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	130							10	31	33	23	10	5	5	13		
REG INFLOW	13676	497	290	403	1287	1487	1539	1698	1492	631	1142	202	107	121	1079	967	733
RELEASE	13676	223	154	386	1287	1487	1539	1698	1666	1606	1246	202	108	121	713	695	544
STOR CHANGE	0	274	135	17				0	-174	-975	-103	0	0	0	366	272	189
STORAGE	3123	3397	3532	3549	3549	3549	3549	3549	3375	2400	2297	2296	2296	2296	2662	2934	3123
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1339.3	1337.5	1337.5	1337.5	1337.5	1343.5	1347.4	1350.0
DISCH KCFS	9.8	7.5	11.1	21.6	21.6	24.2	25.9	27.6	27.1	27.0	20.3	6.8	7.8	7.6	11.6	11.3	9.8
POWER																	
AVE POWER MW		62	94	183	183	204	218	233	227	211	148	50	57	56	87	89	79
PEAK POW MW		350	355	356	356	356	356	356	349	292	285	285	285	285	313	330	339
ENERGY GWH	1344.9	22.4	15.8	39.5	131.7	152.0	157.2	173.2	168.6	151.9	110.3	17.9	9.6	10.7	64.8	66.0	53.2
--GAVINS POINT--																	
NAT INFLOW	1342	98	46	59	133	148	154	87	86	62	112	51	24	27	75	73	108
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	4	-7	-20	0	-5	-3	-3	1	0	12	25	-2	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	14858	326	194	425	1416	1611	1666	1740	1735	1662	1359	268	125	143	766	767	655
RELEASE	14858	326	194	425	1416	1611	1666	1740	1722	1636	1359	268	125	143	766	767	694
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	26.2	28.0	28.3	28.0	27.5	22.1	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	49	82	82	89	95	96	96	95	78	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	621.7	13.8	8.2	17.6	58.7	66.6	68.6	71.6	71.3	68.7	57.9	11.6	5.4	6.2	32.9	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1160	149	69	89	116	224	161	97	72	45	31	16	7	9	17	-3	61
DEPLETION	258	6	3	4	21	35	31	38	36	23	10	6	3	3	12	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	15760	469	260	510	1511	1800	1796	1799	1758	1658	1380	278	130	148	771	750	741
KCFS		15.7	18.7	28.6	25.4	29.3	30.2	29.3	28.6	27.9	22.4	9.4	9.4	9.4	12.5	12.2	13.3
--TOTAL--																	
NAT INFLOW	21702	1271	593	762	1963	2909	5521	2946	1077	945	944	427	199	228	621	467	828
DEPLETION	2541	5	2	3	160	679	1500	1078	193	-236	-75	-141	-66	-75	-196	-184	-108
CHAN STOR	-10	80	3	-20	-27	-44	-1	-3	1	25	37	26	0	0	-59	-31	3
EVAPORATION	1655							103	323	399	342	154	72	83	180		
STORAGE	36410	37288	37622	37851	38116	38502	40726	40688	39493	38641	37975	38136	38199	38271	38079	37949	38146
SYSTEM POWER																	
AVE POWER MW		542	630	779	833	979	991	1082	1020	752	760	427	448	444	698	728	668
PEAK POW MW		2047	2048	2050	2053	2057	2090	2084	2070	2039	2020	2024	2025	2027	2007	2023	2027
ENERGY GWH	7005.0	195.0	105.8	168.3	599.8	728.0	713.6	804.8	758.7	541.3	565.4	153.6	75.2	85.3	519.1	541.8	449.2
DAILY GWH		13.0	15.1	18.7	20.0	23.5	23.8	26.0	24.5	18.0	18.2	10.2	10.7	10.7	16.7	17.5	16.0

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

	29FEB10		2010									2011				
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	6720	271	126	163	588	1036	1629	709	294	282	363	188	88	100	330	237	317
DEPLETION	442	-22	-10	-13	43	314	568	225	-45	-149	-74	-36	-17	-19	-113	-124	-86
EVAPORATION	439							27	84	105	92	42	19	22	48		
MOD INFLOW	5839	293	137	176	545	722	1061	457	255	326	345	182	85	97	395	361	403
RELEASE	5298	149	69	89	357	430	476	492	492	417	393	164	76	87	553	553	500
STOR CHANGE	541	144	67	86	188	292	585	-35	-237	-91	-48	18	9	10	-158	-192	-97
STORAGE	9541	9685	9752	9839	10026	10318	10903	10868	10632	10541	10493	10511	10520	10529	10371	10179	10082
ELEV FTMSL	2203.6	2204.5	2204.9	2205.5	2206.7	2208.5	2212.0	2211.8	2210.4	2209.8	2209.6	2209.7	2209.7	2209.8	2208.8	2207.6	2207.0
DISCH KCFS	9.5	5.0	5.0	5.0	6.0	7.0	8.0	8.0	8.0	7.0	6.4	5.5	5.5	5.5	9.0	9.0	9.0
POWER																	
AVE POWER MW		60	60	61	73	86	99	100	99	87	79	68	68	68	111	110	110
PEAK POW MW		133	133	134	135	137	141	141	140	139	139	139	139	139	138	136	136
ENERGY GWH	788.7	21.7	10.1	13.1	52.5	63.7	71.3	74.3	74.0	62.4	58.8	24.5	11.4	13.1	82.4	82.0	73.7
--GARRISON--																	
NAT INFLOW	10262	484	226	290	777	1306	2752	1927	542	455	437	179	83	95	243	180	286
DEPLETION	1029	-5	-2	-3	43	234	748	618	77	-143	-9	-122	-57	-65	-122	-97	-67
CHAN STOR	6	50			-11	-11	-11			11	6	10	0	0	-37		
EVAPORATION	513							31	99	124	107	48	22	26	56		
REG INFLOW	14024	687	297	382	1080	1492	2469	1770	858	902	738	425	194	222	825	830	853
RELEASE	13368	446	194	250	1012	1168	1250	1291	1291	1071	957	463	208	238	953	1353	1222
STOR CHANGE	656	241	103	132	69	323	1220	478	-433	-170	-219	-38	-14	-16	-128	-522	-369
STORAGE	11473	11714	11817	11949	12018	12341	13561	14039	13606	13436	13217	13179	13164	13148	13020	12498	12129
ELEV FTMSL	1812.5	1813.5	1814.0	1814.5	1814.8	1816.2	1821.1	1823.0	1821.3	1820.6	1819.8	1819.6	1819.6	1819.5	1819.0	1816.8	1815.3
DISCH KCFS	21.5	15.0	14.0	14.0	17.0	19.0	21.0	21.0	21.0	18.0	15.6	15.6	15.0	15.0	15.5	22.0	22.0
POWER																	
AVE POWER MW		159	149	149	182	204	230	236	236	201	173	172	166	166	171	240	237
PEAK POW MW		380	382	384	385	390	408	415	409	406	403	403	402	402	400	392	387
ENERGY GWH	1772.9	57.1	25.0	32.3	130.7	151.7	165.7	175.3	175.4	144.6	128.8	62.1	27.9	31.9	127.3	178.3	159.0
--OAHE--																	
NAT INFLOW	1860	197	92	118	294	167	740	131	31	83	12				-45	-7	46
DEPLETION	665	24	11	14	49	70	141	169	112	27	-10	1	0	1	12	17	27
CHAN STOR	-2	33	5		-15	-10	-10			16	13		3		-3	-33	0
EVAPORATION	443							27	84	105	92	42	20	23	49		
REG INFLOW	14118	653	280	354	1241	1255	1838	1226	1126	1037	900	420	191	215	844	1295	1241
RELEASE	13446	404	266	388	1196	1424	1371	1697	1494	971	967	221	118	133	1102	977	715
STOR CHANGE	672	249	14	-34	46	-169	467	-471	-368	66	-68	199	72	82	-258	318	526
STORAGE	12030	12279	12293	12259	12305	12136	12603	12132	11765	11830	11763	11961	12034	12116	11858	12176	12702
ELEV FTMSL	1581.5	1582.6	1582.7	1582.5	1582.7	1582.0	1584.1	1581.9	1580.2	1580.6	1580.2	1581.2	1581.5	1581.9	1580.7	1582.1	1584.5
DISCH KCFS	12.9	13.6	19.2	21.7	20.1	23.2	23.0	27.6	24.3	16.3	15.7	7.4	8.5	8.4	17.9	15.9	12.9
POWER																	
AVE POWER MW		153	216	244	226	259	259	310	270	181	175	83	96	94	200	177	146
PEAK POW MW		580	581	580	581	577	588	577	568	569	568	573	574	576	570	578	590
ENERGY GWH	1820.3	54.9	36.2	52.6	162.5	193.0	186.6	230.5	200.8	130.4	130.0	29.9	16.0	18.1	148.7	132.0	97.9
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13317	404	266	388	1196	1424	1371	1689	1469	940	940	209	113	126	1088	977	715
RELEASE	13317	404	266	388	1196	1424	1371	1689	1469	940	940	209	113	126	1088	977	715
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	12.9	13.6	19.2	21.7	20.1	23.2	23.0	27.5	23.9	15.8	15.3	7.0	8.1	8.0	17.7	15.9	12.9
POWER																	
AVE POWER MW		64	90	102	94	108	108	129	113	78	77	36	41	40	87	77	62
PEAK POW MW		517	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	771.3	23.2	15.1	22.0	67.7	80.7	77.7	95.7	84.1	56.1	57.4	12.9	6.9	7.8	65.1	57.5	41.5
--FORT RANDALL--																	
NAT INFLOW	690	94	44	56	88	70	179	36	68	32	2				7	-7	21
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	134							10	31	35	25	10	5	5	13		
REG INFLOW	13795	497	310	443	1281	1485	1538	1697	1491	930	916	199	107	121	1079	967	733
RELEASE	13795	223	175	426	1281	1485	1538	1697	1665	1605	1320	199	108	121	713	695	544
STOR CHANGE	0	274	135	17			0	0	-174	-675	-403	0	0	0	366	272	189
STORAGE	3123	3397	3532	3549	3549	3549	3549	3549	3375	2700	2297	2297	2297	2297	2663	2935	3124
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1343.5	1347.4	1350.0
DISCH KCFS	9.8	7.5	12.6	23.9	21.5	24.2	25.9	27.6	27.1	27.0	21.5	6.7	7.7	7.6	11.6	11.3	9.8
POWER																	
AVE POWER MW		62	106	201	182	204	218	233	226	215	160	49	57	56	87	89	79
PEAK POW MW		350	355	356	356	356	356	356	349	315	285	285	285	285	313	330	339
ENERGY GWH	1361.7	22.4	17.8	43.5	131.1	151.8	157.1	173.1	168.5	155.0	119.3	17.7	9.5	10.7	64.8	66.0	53.2
--GAVINS POINT--																	
NAT INFLOW	1359	100	47	60	135	150	155	88	87	63	114	51	24	27	76	74	109
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	4	-10	-22	5	-5	-3	-3	1	0	10	27	-2	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	14993	328	212	464	1416	1611	1666	1740	1735	1662	1433	268	125	143	767	768	656
RELEASE	14993	328	212	464	1416	1611	1666	1740	1722	1636	1433	268	125	143	767	768	695
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	26.2	28.0	28.3	28.0	27.5	23.3	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	53	89	82	89	95	96	96	95	82	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	627.2	13.9	8.9	19.2	58.7	66.6	68.6	71.6	71.3	68.7	60.9	11.6	5.4	6.2	33.0	33.0	29.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1211	155	72	93	121	234	168	101	75	47	33	17	8	9	17	-3	64
DEPLETION	263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	15941	476	281	553	1515	1810	1803	1803	1761	1659	1456	279	130	149	771	751	745
KCFS		16.0	20.2	31.0	25.5	29.4	30.3	29.3	28.6	27.9	23.7	9.4	9.4	9.4	12.5	12.2	13.4
--TOTAL--																	
NAT INFLOW	22102	1301	607	780	2003	2963	5623	2992	1097	962	961	434	203	231	628	474	843
DEPLETION	2590	5	2	3	164	681	1524	1107	205	-239	-81	-145	-67	-77	-197	-186	-109
CHAN STOR	3	87	-5	-22	-22	-26	-24	-3	1	26	29	38	1	0	-47	-33	3
EVAPORATION	1705							106	331	412	354	159	74	85	185		
STORAGE	38146	39054	39373	39576	39878	40324	42595	42568	41369	40526	39787	39966	40033	40108	39930	39806	40015
SYSTEM POWER																	
AVE POWER MW		536	674	846	838	951	1010	1103	1040	857	746	440	460	456	701	738	677
PEAK POW MW		2075	2076	2077	2081	2084	2117	2113	2099	2085	2049	2054	2055	2057	2037	2053	2057
ENERGY GWH	7142.2	193.1	113.2	182.7	603.2	707.3	727.0	820.5	774.0	617.3	555.1	158.6	77.2	87.6	521.3	548.9	455.0
DAILY GWH		12.9	16.2	20.3	20.1	22.8	24.2	26.5	25.0	20.6	17.9	10.6	11.0	11.0	16.8	17.7	16.3

TIME OF STUDY 17:02:19 SHTN NAV SEAS 31 DAYS, SP MAR 5 MAY 12.49 STUDY NO 17

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	6751	272	127	163	591	1041	1636	712	295	284	365	188	88	100	332	238	318
DEPLETION	454	-22	-10	-13	43	315	573	232	-40	-149	-74	-36	-17	-19	-112	-122	-96
EVAPORATION	448							27	86	107	94	42	20	23	49		
MOD INFLOW	5849	294	137	176	548	726	1063	453	249	326	345	181	84	97	395	360	414
RELEASE	5360	149	69	89	357	492	506	523	523	357	344	164	76	87	553	553	518
STOR CHANGE	489	146	68	87	191	234	557	-70	-273	-31	1	17	8	9	-158	-193	-104
STORAGE	10082	10227	10295	10382	10573	10807	11365	11295	11021	10990	10992	11009	11017	11026	10868	10675	10571
ELEV FTMSL	2207.0	2207.9	2208.3	2208.9	2210.0	2211.5	2214.7	2214.3	2212.7	2212.5	2212.6	2212.7	2212.7	2212.8	2211.8	2210.7	2210.0
DISCH KCFS	9.0	5.0	5.0	5.0	6.0	8.0	8.5	8.5	8.5	6.0	5.6	5.5	5.5	5.5	9.0	9.0	9.0
POWER																	
AVE POWER MW		61	61	62	74	99	107	107	107	75	70	69	69	69	112	112	111
PEAK POW MW		137	137	138	139	141	145	144	142	142	142	142	142	142	141	140	139
ENERGY GWH	809.4	22.0	10.3	13.3	53.4	73.8	76.8	79.9	79.5	54.2	52.2	24.8	11.6	13.3	83.6	83.2	77.5
--GARRISON--																	
NAT INFLOW	10290	485	226	291	779	1310	2760	1932	543	456	438	179	84	95	243	181	287
DEPLETION	1041	-4	-2	-3	44	234	758	634	83	-146	-14	-125	-58	-67	-123	-97	-73
CHAN STOR	0	44			-11	-22	-5	0		26	4	1	0	0	-37		
EVAPORATION	525							32	101	126	110	49	23	26	57		
REG INFLOW	14084	682	298	383	1081	1546	2502	1789	881	859	690	419	195	223	825	831	878
RELEASE	13490	387	180	232	982	1537	1250	1291	1230	1012	925	446	208	238	953	1353	1265
STOR CHANGE	594	295	117	151	99	9	1253	498	-348	-153	-235	-27	-13	-15	-128	-521	-388
STORAGE	12129	12424	12542	12692	12792	12801	14054	14551	14203	14050	13815	13788	13775	13760	13632	13111	12723
ELEV FTMSL	1815.3	1816.5	1817.0	1817.6	1818.0	1818.1	1823.1	1825.0	1823.6	1823.0	1822.1	1822.0	1822.0	1821.9	1821.4	1819.3	1817.8
DISCH KCFS	22.0	13.0	13.0	13.0	16.5	25.0	21.0	21.0	20.0	17.0	15.1	15.0	15.0	15.0	15.5	22.0	22.0
POWER																	
AVE POWER MW		140	141	142	180	272	233	239	228	193	170	169	169	169	174	244	241
PEAK POW MW		391	393	395	397	397	415	422	417	415	412	411	411	411	409	402	396
ENERGY GWH	1818.0	50.6	23.7	30.6	129.8	202.5	167.9	177.6	169.6	138.9	126.6	60.8	28.4	32.4	129.5	181.4	167.6
--OAHE--																	
NAT INFLOW	1877	199	93	119	297	168	747	132	31	84	12				-45	-7	47
DEPLETION	680	24	11	14	49	71	145	173	115	28	-10	1	0	1	12	18	28
CHAN STOR	0	45			-17	-42	20		5	15	10	0			-2	-33	
EVAPORATION	463							29	89	111	96	44	21	24	51		
REG INFLOW	14224	607	262	337	1212	1592	1871	1221	1062	972	861	402	187	214	843	1295	1284
RELEASE	13614	403	266	387	1195	1569	1364	1697	1494	971	967	231	118	133	1102	977	740
STOR CHANGE	610	204	-4	-50	18	23	508	-476	-432	1	-107	171	70	81	-260	318	544
STORAGE	12702	12905	12902	12852	12870	12893	13401	12925	12494	12494	12388	12559	12628	12709	12450	12768	13312
ELEV FTMSL	1584.5	1585.4	1585.4	1585.1	1585.2	1585.3	1587.5	1585.5	1583.6	1583.6	1583.1	1583.9	1584.2	1584.5	1583.4	1584.8	1587.1
DISCH KCFS	12.9	13.6	19.1	21.7	20.1	25.5	22.9	27.6	24.3	16.3	15.7	7.8	8.5	8.4	17.9	15.9	12.9
POWER																	
AVE POWER MW		155	219	247	229	291	263	316	276	185	178	88	97	96	203	180	148
PEAK POW MW		595	595	594	594	595	606	595	585	585	583	587	588	590	584	592	604
ENERGY GWH	1876.4	55.7	36.7	53.4	164.9	216.2	189.4	235.3	205.0	132.9	132.3	31.7	16.2	18.4	151.2	134.2	102.9
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13485	403	266	387	1195	1569	1364	1689	1469	940	940	219	112	127	1088	977	740
RELEASE	13485	403	266	387	1195	1569	1364	1689	1469	940	940	219	112	127	1088	977	740
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	12.9	13.6	19.1	21.7	20.1	25.5	22.9	27.5	23.9	15.8	15.3	7.3	8.1	8.0	17.7	15.9	12.9
POWER																	
AVE POWER MW		64	90	102	94	119	107	129	113	78	77	37	41	40	87	77	62
PEAK POW MW		517	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	780.9	23.1	15.1	21.9	67.7	88.9	77.3	95.7	84.1	56.1	57.4	13.4	6.9	7.8	65.1	57.5	43.0
--FORT RANDALL--																	
NAT INFLOW	696	95	44	57	89	71	181	36	68	32	2				7	-7	21
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	134							10	31	35	25	10	5	5	13		
REG INFLOW	13969	497	309	443	1281	1631	1533	1697	1491	930	916	208	107	121	1079	967	758
RELEASE	13969	223	175	426	1281	1631	1533	1697	1665	1605	1320	208	107	121	713	695	569
STOR CHANGE	0	274	135	17		0	0	0	-174	-675	-403	0	0	0	366	272	189
STORAGE	3124	3397	3532	3549	3549	3549	3549	3549	3375	2700	2296	2296	2296	2296	2662	2934	3123
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1343.5	1347.4	1350.0
DISCH KCFS	9.8	7.5	12.6	23.9	21.5	26.5	25.8	27.6	27.1	27.0	21.5	7.0	7.7	7.6	11.6	11.3	9.9
POWER																	
AVE POWER MW		62	106	201	182	224	217	233	226	215	160	51	56	56	87	89	80
PEAK POW MW		350	355	356	356	356	356	356	349	315	285	285	285	285	313	330	339
ENERGY GWH	1379.0	22.4	17.8	43.5	131.1	166.5	156.5	173.1	168.5	155.0	119.3	18.5	9.5	10.7	64.8	66.0	55.7
--GAVINS POINT--																	
NAT INFLOW	1362	100	47	60	135	150	156	88	87	63	114	51	24	27	76	75	110
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	4	-10	-22	5	-10	1	-4	1	0	10	27	-1	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	15171	328	212	464	1416	1752	1666	1740	1735	1662	1433	277	125	143	767	769	682
RELEASE	15171	328	212	464	1416	1752	1666	1740	1722	1636	1433	277	125	143	767	769	721
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	28.5	28.0	28.3	28.0	27.5	23.3	9.3	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	53	89	82	97	95	96	96	95	82	33	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	634.3	13.9	8.9	19.2	58.7	72.1	68.6	71.6	71.3	68.7	60.9	11.9	5.4	6.2	33.0	33.1	30.8
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1223	157	73	94	122	236	170	102	75	47	33	17	8	9	18	-3	65
DEPLETION	263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	16131	478	282	554	1516	1953	1805	1804	1761	1659	1456	288	130	149	772	752	772
KCFS		16.1	20.3	31.1	25.5	31.8	30.3	29.3	28.6	27.9	23.7	9.7	9.4	9.4	12.5	12.2	13.4
--TOTAL--																	
NAT INFLOW	22199	1308	610	785	2013	2976	5650	3002	1099	966	964	435	203	232	631	477	848
DEPLETION	2629	5	2	3	165	683	1543	1134	219	-241	-86	-148	-69	-79	-197	-183	-124
CHAN STOR	0	93	-10	-22	-24	-73	16	-4	6	42	24	29	-1	0	-47	-32	3
EVAPORATION	1746							108	340	421	362	163	76	87	189		
STORAGE	40015	40933	41250	41455	41763	42030	44347	44299	43085	42253	41509	41671	41735	41810	41630	41506	41708
SYSTEM POWER																	
AVE POWER MW		522	670	843	841	1102	1023	1120	1046	842	737	448	464	462	708	747	686
PEAK POW MW		2105	2105	2106	2110	2112	2146	2141	2128	2112	2076	2080	2082	2083	2063	2080	2083
ENERGY GWH	7298.1	187.8	112.6	182.0	605.5	820.0	736.4	833.3	777.9	605.9	548.7	161.2	77.9	88.7	527.1	555.4	477.5
DAILY GWH		12.5	16.1	20.2	20.2	26.5	24.5	26.9	25.1	20.2	17.7	10.7	11.1	11.1	17.0	17.9	16.5

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

	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	7022	283	132	170	615	1083	1702	741	307	295	379	196	91	104	345	248	331
DEPLETION	465	-22	-10	-13	42	316	577	239	-36	-149	-78	-38	-18	-20	-114	-125	-87
EVAPORATION	466							28	89	112	98	44	21	24	51		
MOD INFLOW	6091	305	142	183	573	767	1125	474	254	332	359	189	88	101	408	373	418
RELEASE	5376	149	69	89	357	492	506	523	523	357	344	166	76	87	553	584	500
STOR CHANGE	715	156	73	94	216	275	619	-49	-269	-25	16	22	12	13	-145	-211	-82
STORAGE	10571	10727	10800	10893	11109	11384	12004	11955	11686	11662	11677	11699	11711	11725	11579	11368	11286
ELEV FTMSL	2210.0	2211.0	2211.4	2212.0	2213.3	2214.9	2218.4	2218.1	2216.6	2216.5	2216.6	2216.7	2216.7	2216.8	2216.0	2214.8	2214.3
DISCH KCFS	9.0	5.0	5.0	5.0	6.0	8.0	8.5	8.5	8.5	6.0	5.6	5.6	5.5	5.5	9.0	9.5	9.0
POWER																	
AVE POWER MW		62	62	62	75	101	108	109	109	77	71	72	70	70	115	120	114
PEAK POW MW		140	141	141	143	145	149	148	147	146	147	147	147	147	146	145	144
ENERGY GWH	826.7	22.4	10.5	13.5	54.2	75.0	78.1	81.3	81.0	55.2	53.2	25.7	11.8	13.5	85.3	89.6	76.4
--GARRISON--																	
NAT INFLOW	10598	500	233	300	803	1349	2842	1990	559	470	451	185	86	98	251	186	295
DEPLETION	1067	-3	-2	-2	44	235	771	650	88	-149	-19	-129	-60	-69	-125	-97	-67
CHAN STOR	0	43			-11	-21	-5	0		26	4	0	1	0	-37	-5	5
EVAPORATION	546							33	106	131	114	51	24	27	59		
REG INFLOW	14362	695	304	391	1105	1585	2571	1829	888	871	704	428	200	227	834	862	867
RELEASE	13488	446	194	250	1012	1138	1309	1353	1353	1071	936	453	208	238	953	1353	1222
STOR CHANGE	873	249	110	141	94	447	1262	477	-465	-201	-232	-25	-9	-11	-119	-491	-355
STORAGE	12723	12972	13082	13223	13317	13764	15026	15503	15038	14837	14605	14581	14572	14561	14442	13951	13596
ELEV FTMSL	1817.8	1818.8	1819.2	1819.8	1820.2	1821.9	1826.8	1828.5	1826.8	1826.1	1825.2	1825.1	1825.1	1825.0	1824.6	1822.7	1821.3
DISCH KCFS	22.0	15.0	14.0	14.0	17.0	18.5	22.0	22.0	22.0	18.0	15.2	15.2	15.0	15.0	15.5	22.0	22.0
POWER																	
AVE POWER MW		165	154	155	188	206	251	256	256	208	176	175	172	172	178	249	247
PEAK POW MW		400	401	403	405	411	429	435	429	426	423	423	422	422	421	414	409
ENERGY GWH	1858.8	59.2	26.0	33.5	135.7	153.6	180.4	190.6	190.6	150.0	130.7	63.0	29.0	33.1	132.3	185.5	165.7
--OAHE--																	
NAT INFLOW	2048	217	101	130	324	183	815	144	34	92	13				-49	-8	51
DEPLETION	696	24	11	15	50	72	148	178	119	29	-11	1	0	1	13	18	28
CHAN STOR	0	34	5		-14	-7	-17			19	13	0	1		-2	-32	0
EVAPORATION	487							30	93	116	102	46	22	25	54		
REG INFLOW	14354	673	289	366	1271	1241	1959	1289	1175	1037	872	406	187	213	835	1295	1245
RELEASE	13460	524	141	362	1180	1556	1338	1689	1484	965	964	220	118	132	1101	978	708
STOR CHANGE	894	149	148	4	92	-315	621	-400	-309	72	-93	186	69	80	-266	317	537
STORAGE	13312	13461	13609	13613	13705	13390	14011	13611	13303	13375	13282	13468	13538	13618	13352	13669	14206
ELEV FTMSL	1587.1	1587.8	1588.4	1588.4	1588.8	1587.5	1590.0	1588.4	1587.1	1587.4	1587.0	1587.8	1588.1	1588.4	1587.3	1588.6	1590.8
DISCH KCFS	12.9	17.6	10.2	20.3	19.8	25.3	22.5	27.5	24.1	16.2	15.7	7.4	8.5	8.3	17.9	15.9	12.7
POWER																	
AVE POWER MW		204	119	235	231	293	262	320	279	188	181	86	99	97	208	185	150
PEAK POW MW		607	610	611	613	606	619	611	604	605	603	607	609	611	605	612	623
ENERGY GWH	1890.6	73.4	19.9	50.8	166.1	218.0	188.3	238.0	207.5	135.0	134.9	30.9	16.6	18.7	154.5	137.4	100.6
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13331	524	141	362	1180	1556	1338	1681	1459	934	937	208	112	126	1087	978	708
RELEASE	13331	524	141	362	1180	1556	1338	1681	1459	934	937	208	112	126	1087	978	708
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	12.9	17.6	10.2	20.3	19.8	25.3	22.5	27.3	23.7	15.7	15.2	7.0	8.1	7.9	17.7	15.9	12.7
POWER																	
AVE POWER MW		83	48	95	93	118	105	128	112	77	77	35	41	40	87	77	61
PEAK POW MW		510	509	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	771.8	29.8	8.0	20.5	66.8	88.1	75.8	95.2	83.5	55.8	57.2	12.8	6.9	7.7	65.0	57.6	41.1
--FORT RANDALL--																	
NAT INFLOW	779	106	49	64	100	79	203	41	76	36	2				8	-8	23
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	134							10	31	35	25	10	5	5	13		
REG INFLOW	13897	629	190	424	1277	1626	1529	1694	1489	928	913	197	107	120	1079	967	728
RELEASE	13897	220	173	424	1277	1626	1529	1694	1663	1603	1317	198	107	120	713	695	539
STOR CHANGE	0	409	17				0	0	-174	-675	-403	0	0	0	366	272	189
STORAGE	3123	3532	3549	3549	3549	3549	3549	3549	3375	2700	2297	2296	2296	2296	2662	2934	3123
ELEV FTMSL	1350.0	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1344.1	1337.5	1337.5	1337.5	1337.5	1343.5	1347.4	1350.0
DISCH KCFS	9.9	7.4	12.5	23.8	21.5	26.4	25.7	27.6	27.0	26.9	21.4	6.6	7.7	7.5	11.6	11.3	9.7
POWER																	
AVE POWER MW		62	106	201	181	223	217	232	226	215	160	49	56	55	87	89	78
PEAK POW MW		355	356	356	356	356	356	356	349	315	285	285	285	285	313	330	339
ENERGY GWH	1372.5	22.3	17.8	43.4	130.7	166.0	156.1	172.8	168.3	154.8	119.1	17.6	9.5	10.6	64.8	66.0	52.7
--GAVINS POINT--																	
NAT INFLOW	1401	103	48	62	139	155	160	91	89	65	117	53	25	28	78	77	113
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	5	-10	-22	4	-10	1	-4	1	0	10	27	-2	0	-8	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	15139	328	212	464	1416	1752	1666	1740	1735	1662	1433	268	125	143	768	771	655
RELEASE	15139	328	212	464	1416	1752	1666	1740	1722	1636	1433	268	125	143	768	771	694
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	28.5	28.0	28.3	28.0	27.5	23.3	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	53	89	82	97	95	96	96	95	82	32	32	32	44	45	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	633.0	13.9	8.9	19.2	58.7	72.1	68.6	71.6	71.3	68.7	60.9	11.6	5.4	6.2	33.0	33.2	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1356	174	81	104	135	262	188	113	84	52	37	19	9	10	20	-4	72
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	16227	495	289	565	1529	1978	1823	1814	1769	1664	1459	281	131	150	775	753	751
KCFS		16.6	20.8	31.6	25.7	32.2	30.6	29.5	28.8	28.0	23.7	9.4	9.4	9.4	12.6	12.3	13.5
--TOTAL--																	
NAT INFLOW	23204	1383	645	829	2116	3111	5910	3120	1149	1010	999	452	211	241	653	491	885
DEPLETION	2687	7	3	4	165	687	1563	1163	233	-243	-95	-153	-71	-82	-200	-186	-108
CHAN STOR	1	82	-5	-22	-21	-38	-21	-4	1	46	28	28	0	0	-47	-36	8
EVAPORATION	1809							112	351	436	375	168	79	90	196		
STORAGE	41708	42671	43019	43258	43659	44066	46569	46597	45394	44592	43880	44063	44135	44218	44053	43940	44191
SYSTEM POWER																	
AVE POWER MW		614	542	837	850	1039	1038	1142	1078	861	747	449	471	468	719	765	693
PEAK POW MW		2127	2132	2135	2140	2141	2176	2174	2162	2148	2112	2117	2118	2120	2100	2117	2119
ENERGY GWH	7353.2	221.0	91.1	180.9	612.2	772.9	747.3	849.6	802.2	619.6	555.9	161.5	79.1	89.8	535.0	569.2	466.0
DAILY GWH		14.7	13.0	20.1	20.4	24.9	24.9	27.4	25.9	20.7	17.9	10.8	11.3	11.2	17.3	18.4	16.6

	28FEB08		2008										2009			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	5435	250	116	150	549	834	1061	468	270	258	341	169	79	90	289	218	293
DEPLETION	316	-1	0	-1	56	194	349	234	15	-86	-62	-47	-22	-25	-135	-103	-50
EVAPORATION	352							22	68	84	73	33	15	18	38		
MOD INFLOW	4767	251	117	150	493	640	712	212	187	260	330	183	85	98	386	321	343
RELEASE	5160	149	69	89	387	492	476	492	492	417	399	193	90	103	461	461	389
STOR CHANGE	-393	102	48	61	106	148	236	-280	-305	-157	-70	-10	-5	-6	-75	-140	-46
STORAGE	7415	7517	7565	7626	7732	7880	8116	7836	7531	7374	7304	7294	7289	7284	7208	7068	7022
ELEV FTMSL	2188.8	2189.6	2189.9	2190.4	2191.2	2192.3	2193.9	2191.9	2189.7	2188.5	2188.0	2187.9	2187.8	2187.8	2187.2	2186.1	2185.8
DISCH KCFS	8.0	5.0	5.0	5.0	6.5	8.0	8.0	8.0	8.0	7.0	6.5	6.5	6.5	6.5	7.5	7.5	7.0
POWER																	
AVE POWER MW		55	55	55	72	89	90	90	88	76	70	70	70	70	81	80	75
PEAK POW MW		113	114	114	115	117	119	116	113	111	111	111	110	110	110	108	108
ENERGY GWH	684.0	19.7	9.2	11.9	51.7	66.1	64.6	66.7	65.7	55.0	52.4	25.3	11.8	13.5	60.2	59.8	50.2
--GARRISON--																	
NAT INFLOW	8026	297	138	178	770	993	2221	1404	397	305	429	177	83	94	119	176	245
DEPLETION	1153	24	11	14	35	93	719	571	119	-99	24	-81	-38	-43	-90	-65	-41
CHAN STOR	12	35			-17	-17				11	6		0		-11		6
EVAPORATION	416							26	81	100	86	39	18	21	45		
REG INFLOW	11628	456	197	253	1104	1375	1978	1299	689	732	724	412	192	220	614	702	681
RELEASE	12083	417	180	232	893	1076	1131	1168	1168	952	818	396	194	222	953	1199	1083
STOR CHANGE	-455	40	16	21	212	299	847	131	-480	-220	-95	16	-2	-2	-339	-497	-402
STORAGE	8872	8912	8929	8949	9161	9460	10307	10438	9958	9738	9644	9660	9658	9656	9317	8820	8418
ELEV FTMSL	1800.0	1800.2	1800.3	1800.4	1801.5	1803.0	1807.1	1807.8	1805.5	1804.4	1803.9	1804.0	1804.0	1804.0	1802.3	1799.7	1797.5
DISCH KCFS	17.0	14.0	13.0	13.0	15.0	17.5	19.0	19.0	19.0	16.0	13.3	13.3	14.0	14.0	15.5	19.5	19.5
POWER																	
AVE POWER MW		133	124	124	144	169	188	192	190	158	131	131	138	138	151	186	182
PEAK POW MW		332	332	333	337	342	357	359	351	347	345	346	346	346	339	330	322
ENERGY GWH	1426.3	48.0	20.8	26.8	103.5	125.9	135.3	142.5	141.6	114.0	97.6	47.2	23.1	26.4	112.5	138.5	122.5
--OAHE--																	
NAT INFLOW	1184	223	104	134	206	113	242	92	24	72	6	-6	-3	-3	-54	-13	47
DEPLETION	640	23	11	14	48	68	135	160	106	26	-9	1	0	1	12	17	27
CHAN STOR	-14	17	6		-11	-14	-9			18	16		-4	0	-9	-24	
EVAPORATION	325							20	60	76	69	32	15	17	37		
REG INFLOW	12289	633	279	352	1039	1107	1229	1080	1026	941	781	358	172	202	841	1145	1103
RELEASE	12778	432	277	369	1248	1468	1418	1727	1351	593	549	259	120	137	1022	801	1007
STOR CHANGE	-490	202	3	-18	-209	-361	-189	-646	-324	348	232	99	52	64	-181	344	96
STORAGE	9368	9569	9572	9554	9346	8984	8795	8149	7824	8172	8404	8503	8555	8619	8438	8782	8878
ELEV FTMSL	1567.9	1569.1	1569.1	1569.0	1567.8	1565.7	1564.6	1560.6	1558.5	1560.8	1562.2	1562.8	1563.1	1563.5	1562.4	1564.5	1565.1
DISCH KCFS	16.4	14.5	19.9	20.7	21.0	23.9	23.8	28.1	22.0	10.0	8.9	8.7	8.7	8.7	16.6	13.0	18.1
POWER																	
AVE POWER MW		149	205	213	215	242	239	276	211	97	88	86	86	86	165	130	182
PEAK POW MW		509	509	509	503	492	487	467	456	468	475	478	479	481	476	486	489
ENERGY GWH	1541.8	53.8	34.5	46.1	155.0	180.2	172.0	205.1	157.2	69.5	65.3	31.0	14.5	16.6	122.4	96.5	122.2
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12650	432	277	369	1248	1468	1418	1719	1326	562	522	247	114	131	1008	801	1007
RELEASE	12650	432	277	369	1248	1468	1418	1719	1326	562	522	247	114	131	1008	801	1007
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	16.4	14.5	19.9	20.7	21.0	23.9	23.8	28.0	21.6	9.4	8.5	8.3	8.2	8.3	16.4	13.0	18.1
POWER																	
AVE POWER MW		69	93	97	98	112	112	131	103	48	43	42	42	42	82	65	87
PEAK POW MW		518	510	509	509	509	509	509	525	538	538	538	538	538	538	538	529
ENERGY GWH	733.3	24.7	15.7	20.9	70.7	83.2	80.3	97.4	76.5	34.5	32.0	15.1	7.0	8.0	60.8	48.0	58.5
--FORT RANDALL--																	
NAT INFLOW	366	67	31	40	52	42	146	16	44	-12	-62	-3	-1	-2		-7	15
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	127							10	30	31	22	10	5	5	13		
REG INFLOW	12804	497	307	408	1297	1501	1552	1707	1325	506	437	233	108	123	992	791	1019
RELEASE	12803	235	159	391	1297	1501	1552	1707	1674	1410	437	233	108	123	719	701	555
STOR CHANGE	1	262	148	17				0	-349	-903	0	0	0	0	273	90	464
STORAGE	3122	3384	3532	3549	3549	3549	3549	3549	3200	2296	2296	2296	2296	2296	2569	2659	3123
ELEV FTMSL	1350.0	1353.2	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1351.0	1337.5	1337.5	1337.5	1337.5	1337.5	1342.1	1343.5	1350.0
DISCH KCFS	10.1	7.9	11.5	21.9	21.8	24.4	26.1	27.8	27.2	23.7	7.1	7.8	7.8	7.8	11.7	11.4	10.0
POWER																	
AVE POWER MW		66	97	185	184	206	220	234	226	182	52	57	57	57	87	87	79
PEAK POW MW		350	355	356	356	356	356	356	342	284	285	285	285	285	306	312	339
ENERGY GWH	1261.1	23.6	16.3	40.0	132.7	153.4	158.5	174.1	167.9	131.3	38.8	20.6	9.6	10.9	64.9	65.0	53.4
--GAVINS POINT--																	
NAT INFLOW	1229	89	42	53	123	134	141	78	78	56	107	46	21	25	69	67	100
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	4	-7	-20	0	-5	-3	-3	1	7	31	-1	0	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	13872	329	194	425	1416	1611	1666	1740	1735	1466	564	268	125	143	766	768	658
RELEASE	13872	329	194	425	1416	1611	1666	1740	1722	1440	564	268	125	143	766	768	697
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	11.1	14.0	23.8	23.8	26.2	28.0	28.3	28.0	24.2	9.2	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	49	82	82	89	95	96	96	84	33	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	580.5	13.9	8.2	17.6	58.7	66.6	68.6	71.6	71.3	60.8	24.3	11.6	5.4	6.2	32.9	33.0	29.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	664	44	21	26	93	173	128	57	26	18	17	12	5	6	12	-6	32
DEPLETION	255	6	3	4	21	35	30	38	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	14281	367	212	448	1488	1749	1764	1759	1713	1435	571	274	128	146	766	749	715
KCFS		12.3	15.2	25.1	25.0	28.4	29.6	28.6	27.9	24.1	9.3	9.2	9.2	9.2	12.5	12.2	12.9
--TOTAL--																	
NAT INFLOW	16904	969	452	581	1793	2289	3939	2115	839	697	838	395	184	211	435	435	732
DEPLETION	2555	53	25	32	167	418	1269	1060	300	-134	-35	-116	-54	-62	-188	-134	-47
CHAN STOR	-9	56	-1	-20	-28	-37	-12	-3	1	31	53	-1	-4	0	-28	-23	8
EVAPORATION	1395							88	273	334	288	131	61	70	152		
STORAGE	30757	31362	31576	31658	31767	31853	32747	31951	30505	29598	29666	29771	29816	29873	29551	29348	29420
SYSTEM POWER																	
AVE POWER MW		510	624	756	795	908	944	1018	914	646	417	419	425	425	610	592	650
PEAK POW MW		1936	1935	1935	1934	1931	1943	1922	1903	1865	1871	1874	1876	1877	1847	1853	1863
ENERGY GWH	6227.0	183.7	104.8	163.4	572.4	675.3	679.4	757.4	680.1	465.1	310.5	150.8	71.4	81.7	453.7	440.8	436.5
DAILY GWH		12.2	15.0	18.2	19.1	21.8	22.6	24.4	21.9	15.5	10.0	10.1	10.2	10.2	14.6	14.2	15.6

VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB09	2009												2010			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	5615	258	120	155	567	862	1097	483	279	266	352	175	81	93	298	226	303
DEPLETION	424	-2	-1	-1	92	324	530	187	-34	-138	-63	-69	-32	-37	-179	-103	-50
EVAPORATION	364							22	69	86	76	35	16	19	41		
MOD INFLOW	4827	260	121	156	475	538	567	274	244	318	339	209	97	111	436	329	353
RELEASE	3773	119	56	89	298	307	357	369	369	298	237	115	56	63	338	369	333
STOR CHANGE	1055	141	66	67	177	231	210	-95	-125	20	102	94	42	48	98	-40	20
STORAGE	7022	7163	7229	7296	7473	7704	7914	7819	7694	7714	7816	7910	7952	7999	8097	8057	8077
ELEV FTMSL	2185.8	2186.9	2187.4	2187.9	2189.2	2191.0	2192.5	2191.8	2190.9	2191.0	2191.8	2192.5	2192.8	2193.1	2193.8	2193.5	2193.7
DISCH KCFS	7.0	4.0	4.0	5.0	5.0	5.0	6.0	6.0	6.0	5.0	3.9	3.9	4.0	4.0	5.5	6.0	6.0
POWER																	
AVE POWER MW		43	43	54	55	55	67	67	67	55	43	43	45	45	62	68	68
PEAK POW MW		109	110	111	113	115	117	116	115	115	116	117	118	118	119	119	119
ENERGY GWH	508.2	15.5	7.3	11.7	39.2	41.0	48.1	49.9	49.6	39.9	32.0	15.6	7.6	8.7	46.2	50.4	45.5
--GARRISON--																	
NAT INFLOW	8444	312	146	187	810	1045	2337	1477	418	320	451	187	87	99	125	185	258
DEPLETION	903	7	3	4	30	202	677	556	77	-148	-12	-116	-54	-62	-113	-88	-61
CHAN STOR	12	35		-12			-11			11	13		-2		-17	-6	
EVAPORATION	435							26	83	104	91	41	19	22	47		
REG INFLOW	10891	459	198	260	1078	1150	2006	1264	627	673	622	376	176	203	512	636	652
RELEASE	9623	357	167	196	655	922	893	922	922	714	656	317	146	167	892	892	805
STOR CHANGE	1268	102	31	64	423	228	1113	341	-296	-41	-34	59	30	36	-380	-255	-153
STORAGE	8418	8520	8551	8615	9038	9266	10379	10720	10424	10383	10349	10408	10438	10474	10094	9839	9686
ELEV FTMSL	1797.5	1798.1	1798.2	1798.6	1800.8	1802.0	1807.5	1809.1	1807.7	1807.5	1807.3	1807.6	1807.8	1807.9	1806.1	1804.9	1804.1
DISCH KCFS	19.5	12.0	12.0	11.0	11.0	15.0	15.0	15.0	15.0	12.0	10.7	10.7	10.5	10.5	14.5	14.5	14.5
POWER																	
AVE POWER MW		112	113	103	105	144	148	153	153	122	108	108	107	107	146	144	143
PEAK POW MW		324	325	326	334	339	359	364	359	358	358	359	359	360	353	349	346
ENERGY GWH	1156.9	40.4	18.9	22.3	75.3	107.4	106.8	113.7	113.8	87.7	80.6	39.0	17.9	20.5	108.8	107.4	96.2
--OAHE--																	
NAT INFLOW	1263	238	111	143	220	120	259	99	25	77	6	-6	-3	-3	-58	-14	50
DEPLETION	652	23	11	14	48	69	138	164	109	27	-9	1	0	1	12	17	27
CHAN STOR	30	44		6		-22				17	7		1		-22		
EVAPORATION	392							23	73	93	83	38	18	20	44		
REG INFLOW	9872	615	267	331	827	951	1014	834	766	688	595	272	126	143	756	861	828
RELEASE	8552	364	191	80	363	779	808	1090	907	201	421	261	121	139	1024	802	1001
STOR CHANGE	1320	251	75	251	464	172	205	-256	-142	487	174	12	5	4	-268	59	-173
STORAGE	8878	9129	9204	9455	9919	10091	10296	10040	9899	10385	10560	10572	10576	10580	10312	10371	10198
ELEV FTMSL	1565.1	1566.6	1567.0	1568.4	1571.0	1571.9	1573.0	1571.6	1570.9	1573.4	1574.3	1574.4	1574.4	1574.4	1573.1	1573.4	1572.5
DISCH KCFS	18.1	12.2	13.8	4.5	6.1	12.7	13.6	17.7	14.8	3.4	6.8	8.8	8.7	8.7	16.7	13.0	18.0
POWER																	
AVE POWER MW		124	141	46	64	133	144	187	155	36	73	94	94	94	177	139	191
PEAK POW MW		497	499	506	519	524	530	523	519	532	537	537	537	537	530	532	527
ENERGY GWH	1091.7	44.6	23.6	9.9	45.7	99.1	103.4	139.0	115.1	25.8	54.5	33.8	15.7	18.0	132.0	103.1	128.2
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	8423	364	191	80	363	779	808	1082	883	170	394	248	115	132	1010	802	1001
RELEASE	8423	364	191	80	363	779	808	1082	883	170	394	248	115	132	1010	802	1001
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	18.1	12.2	13.8	4.5	6.1	12.7	13.6	17.6	14.4	2.9	6.4	8.3	8.3	8.3	16.4	13.0	18.0
POWER																	
AVE POWER MW		58	65	21	29	59	64	82	68	14	32	42	41	41	80	63	85
PEAK POW MW		518	510	509	509	509	509	509	518	538	538	538	538	538	538	534	513
ENERGY GWH	485.7	20.8	10.9	4.5	20.5	44.2	45.8	61.3	50.5	10.2	23.7	14.9	6.9	7.9	59.5	47.0	57.0
--FORT RANDALL--																	
NAT INFLOW	404	74	35	44	58	47	161	18	48	-13	-69	-4	-2	-2		-8	16
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	143							10	31	35	28	12	6	6	15		
REG INFLOW	8605	436	225	123	418	817	957	1072	885	115	296	232	108	123	992	791	1014
RELEASE	8243	170	83	106	418	817	957	1072	1059	678	449	232	108	123	719	701	550
STOR CHANGE	363	267	142	17				0	-174	-563	-153	0	0	0	273	90	464
STORAGE	3123	3390	3532	3549	3549	3549	3549	3549	3375	2812	2659	2659	2659	2659	2932	3022	3486
ELEV FTMSL	1350.0	1353.3	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1345.7	1343.5	1343.5	1343.5	1343.5	1347.4	1348.6	1354.5
DISCH KCFS	10.0	5.7	6.0	6.0	7.0	13.3	16.1	17.4	17.2	11.4	7.3	7.8	7.8	7.8	11.7	11.4	9.9
POWER																	
AVE POWER MW		47	51	51	60	113	137	148	145	93	57	60	60	60	92	92	82
PEAK POW MW		350	355	356	356	356	356	356	349	322	312	312	312	312	330	334	354
ENERGY GWH	824.2	17.1	8.6	11.0	43.2	84.1	98.4	110.0	107.8	66.7	42.5	21.7	10.1	11.5	68.3	68.1	55.1
--GAVINS POINT--																	
NAT INFLOW	1242	90	42	54	124	136	143	79	79	57	108	47	22	25	69	67	101
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	0	8	-1	0	-2	-12	-5	-3	0	11	8	-1	0	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	9325	268	125	161	536	922	1071	1107	1120	740	553	268	125	143	766	768	654
RELEASE	9325	268	125	161	536	922	1071	1107	1107	714	553	268	125	143	766	768	693
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	9.0	9.0	9.0	9.0	15.0	18.0	18.0	18.0	12.0	9.0	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		32	32	32	32	52	62	62	63	42	32	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	396.1	11.4	5.3	6.8	22.8	38.9	44.9	46.4	46.6	30.6	23.9	11.6	5.4	6.2	32.9	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	730	48	23	29	102	191	141	63	29	20	18	13	6	7	13	-7	35
DEPLETION	258	6	3	4	21	35	31	38	36	23	10	6	3	3	12	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	9797	310	145	186	617	1078	1181	1132	1100	711	561	275	128	147	767	747	714
KCFS		10.4	10.4	10.4	10.4	17.5	19.8	18.4	17.9	11.9	9.1	9.2	9.2	9.2	12.5	12.1	12.8
--TOTAL--																	
NAT INFLOW	17698	1020	476	612	1881	2401	4138	2219	878	727	866	411	192	219	447	449	763
DEPLETION	2428	36	17	21	198	658	1412	1002	213	-234	-72	-173	-81	-92	-255	-156	-67
CHAN STOR	42	87	-1	-6	-2	-34	-17	-3	0	39	28	-1	-1	0	-46	-5	3
EVAPORATION	1509							92	289	361	315	143	67	77	166		
STORAGE	29420	30181	30495	30894	31959	32589	34117	34108	33384	33312	33401	33566	33642	33730	33453	33307	33426
SYSTEM POWER																	
AVE POWER MW		416	444	307	343	557	621	699	650	362	346	379	379	379	602	550	613
PEAK POW MW		1912	1914	1922	1946	1957	1985	1983	1975	1983	1978	1980	1981	1983	1949	1946	1935
ENERGY GWH	4462.8	149.8	74.5	66.3	246.9	414.7	447.5	520.3	483.4	260.8	257.1	136.6	63.7	72.8	447.7	409.1	411.6
DAILY GWH		10.0	10.6	7.4	8.2	13.4	14.9	16.8	15.6	8.7	8.3	9.1	9.1	9.1	14.4	13.2	14.7

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

TIME OF STUDY 11:06:05 SHTN NAV SEAS 61 DAYS, SP MAR 0 MAY 0 STUDY NO 21
VALUES IN 1000 AF EXCEPT AS INDICATED

28FEB10		2010										2011			
INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																
NAT INFLOW 5748	264	123	158	580	882	1123	495	285	273	361	179	83	95	305	231	310
DEPLETION 442	-2	-1	-1	92	329	538	194	-30	-138	-65	-70	-32	-37	-180	-104	-51
EVAPORATION 383							24	73	91	80	36	17	19	42		
MOD INFLOW 4923	266	124	160	488	553	585	277	242	320	346	212	99	113	443	335	361
RELEASE 4888	119	56	71	298	400	476	492	492	387	344	162	76	87	492	492	444
STOR CHANGE 36	147	69	88	190	153	109	-214	-250	-67	2	49	22	26	-49	-157	-83
STORAGE 8077	8224	8293	8381	8572	8725	8834	8619	8369	8302	8304	8354	8376	8402	8353	8196	8113
ELEV FTMSL 2193.7	2194.7	2195.2	2195.8	2197.1	2198.2	2198.9	2197.5	2195.7	2195.3	2195.3	2195.6	2195.8	2196.0	2195.6	2194.5	2193.9
DISCH KCFS 6.0	4.0	4.0	4.0	5.0	6.5	8.0	8.0	8.0	6.5	5.6	5.5	5.5	5.5	8.0	8.0	8.0
POWER																
AVE POWER MW	45	46	46	58	76	93	93	92	74	64	63	63	63	92	91	91
PEAK POW MW	121	121	122	124	126	127	125	122	121	121	122	122	122	122	120	119
ENERGY GWH 679.6	16.4	7.7	9.9	41.6	56.2	67.1	69.2	68.5	53.5	47.6	22.5	10.6	12.1	68.1	67.7	60.8
--GARRISON--																
NAT INFLOW 8762	324	151	194	840	1084	2425	1533	433	332	468	194	90	103	130	192	268
DEPLETION 1028	-3	-1	-2	31	203	764	573	96	-138	-16	-107	-50	-57	-115	-88	-62
CHAN STOR -23	23			-11	-17	-17			17	10	2	0	0	-28		
EVAPORATION 449							28	87	108	93	42	20	22	48		
REG INFLOW 12151	469	208	268	1095	1264	2120	1424	742	765	745	422	197	225	661	772	774
RELEASE 12105	417	167	214	893	1045	1131	1168	1168	982	911	417	194	222	953	1168	1055
STOR CHANGE 46	52	42	53	203	218	990	256	-427	-216	-166	6	2	3	-292	-396	-281
STORAGE 9686	9739	9780	9833	10036	10254	11244	11500	11073	10857	10691	10697	10699	10702	10409	10013	9732
ELEV FTMSL 1804.1	1804.4	1804.6	1804.9	1805.8	1806.9	1811.4	1812.6	1810.7	1809.7	1808.9	1809.0	1809.0	1809.0	1807.6	1805.7	1804.4
DISCH KCFS 14.5	14.0	12.0	12.0	15.0	17.0	19.0	19.0	19.0	16.5	14.8	14.0	14.0	14.0	15.5	19.0	19.0
POWER																
AVE POWER MW	138	119	119	149	170	194	199	198	170	152	143	144	144	158	190	188
PEAK POW MW	347	348	349	352	356	373	377	370	366	364	364	364	364	359	352	347
ENERGY GWH 1489.2	49.7	20.0	25.7	107.4	126.6	139.9	147.9	147.4	122.7	113.2	51.7	24.1	27.6	117.4	141.6	126.2
--OAHE--																
NAT INFLOW 1323	249	116	149	231	126	271	103	26	81	7	-7	-3	-3	-61	-15	52
DEPLETION 666	24	11	14	49	70	141	169	112	27	-10	2	1	1	12	17	27
CHAN STOR -24	3	11		-16	-11	-11			15	10	5		0	-8	-20	
EVAPORATION 369							23	68	86	78	36	17	19	42		
REG INFLOW 12369	645	283	349	1058	1090	1250	1080	1014	964	859	377	174	198	830	1117	1080
RELEASE 12322	178	144	361	1236	1458	1388	1723	1518	425	551	259	120	137	1021	804	1000
STOR CHANGE 47	467	139	-11	-177	-368	-139	-643	-503	539	308	118	54	61	-191	313	80
STORAGE 10198	10665	10804	10793	10615	10248	10109	9466	8963	9502	9811	9928	9982	10043	9852	10164	10245
ELEV FTMSL 1572.5	1574.9	1575.6	1575.5	1574.6	1572.7	1572.0	1568.5	1565.6	1568.7	1570.4	1571.0	1571.3	1571.6	1570.6	1572.3	1572.7
DISCH KCFS 18.0	6.0	10.3	20.2	20.8	23.7	23.3	28.0	24.7	7.1	9.0	8.7	8.7	8.7	16.6	13.1	18.0
POWER																
AVE POWER MW	64	112	217	223	252	246	290	251	73	93	91	91	91	174	137	190
PEAK POW MW	540	543	543	538	528	525	506	492	507	516	520	521	523	517	526	528
ENERGY GWH 1562.4	23.0	18.7	46.9	160.3	187.2	176.8	216.0	186.5	52.7	69.3	32.9	15.3	17.5	129.4	102.2	127.7
--BIG BEND--																
EVAPORATION 129							8	24	31	27	12	6	7	14		
REG INFLOW 12193	178	144	361	1236	1458	1388	1715	1493	394	524	247	114	131	1007	804	1000
RELEASE 12193	178	144	361	1236	1458	1388	1715	1493	394	524	247	114	131	1007	804	1000
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 18.0	6.0	10.3	20.2	20.8	23.7	23.3	27.9	24.3	6.6	8.5	8.3	8.2	8.2	16.4	13.1	18.0
POWER																
AVE POWER MW	28	49	95	97	111	109	131	115	34	43	42	42	42	82	65	86
PEAK POW MW	512	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH 706.1	10.1	8.2	20.4	70.0	82.6	78.6	97.1	85.5	24.2	32.1	15.1	7.0	8.0	60.7	48.2	58.0
--FORT RANDALL--																
NAT INFLOW 433	80	37	48	62	50	174	19	52	-15	-75	-4	-2	-2		-9	17
DEPLETION 79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION 128							10	31	32	22	10	5	5	13		
REG INFLOW 12409	256	180	408	1295	1499	1550	1706	1499	330	425	232	108	123	991	792	1014
RELEASE 12772	232	158	391	1295	1499	1550	1706	1673	1409	426	233	108	123	719	701	550
STOR CHANGE -363	24	22	17				0	-174	-1079	0	0	0	0	272	91	464
STORAGE 3486	3510	3532	3549	3549	3549	3549	3549	3375	2296	2296	2295	2295	2295	2567	2658	3122
ELEV FTMSL 1354.5	1354.7	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1337.5	1337.5	1337.5	1337.5	1337.5	1342.1	1343.5	1350.0
DISCH KCFS 9.9	7.8	11.4	21.9	21.8	24.4	26.1	27.7	27.2	23.7	6.9	7.8	7.8	7.8	11.7	11.4	9.9
POWER																
AVE POWER MW	66	97	185	184	206	220	234	228	184	51	57	57	57	87	87	79
PEAK POW MW	355	355	356	356	356	356	356	349	284	285	285	285	285	306	312	339
ENERGY GWH 1261.5	23.9	16.3	39.9	132.5	153.2	158.3	174.0	169.3	132.4	37.8	20.6	9.6	10.9	64.9	65.0	52.9
--GAVINS POINT--																
NAT INFLOW 1246	91	42	54	125	136	143	79	79	57	108	47	22	25	70	68	101
DEPLETION 112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR -1	4	-7	-20	0	-5	-3	-3	1	7	31	-2	0	0	-7	1	3
EVAPORATION 47							3	9	11	10	5	2	2	5		
REG INFLOW 13858	327	194	425	1416	1611	1666	1740	1735	1466	553	268	125	143	767	769	654
RELEASE 13858	327	194	425	1416	1611	1666	1740	1722	1440	553	268	125	143	767	769	693
STOR CHANGE								13	26							-39
STORAGE 358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	14.0	23.8	23.8	26.2	28.0	28.3	28.0	24.2	9.0	9.0	9.0	9.0	12.5	12.5	12.5
POWER																
AVE POWER MW	39	49	82	82	89	95	96	96	84	32	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 579.9	13.9	8.2	17.6	58.7	66.6	68.6	71.6	71.3	60.8	23.9	11.6	5.4	6.2	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																
NAT INFLOW 785	52	24	31	110	205	151	68	31	21	20	14	6	7	14	-7	38
DEPLETION 263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																
KAF 14380	372	215	452	1504	1781	1786	1770	1717	1437	563	275	128	147	768	748	717
KCFS	12.5	15.5	25.3	25.3	29.0	30.0	28.8	27.9	24.1	9.2	9.3	9.3	9.3	12.5	12.2	12.9
--TOTAL--																
NAT INFLOW 18297	1060	494	636	1948	2483	4287	2297	906	749	889	422	197	225	458	460	786
DEPLETION 2590	27	12	16	201	665	1510	1031	239	-223	-79	-163	-76	-87	-257	-157	-69
CHAN STOR -58	30	4	-20	-27	-33	-31	-3	1	28	50	4	0	0	-44	-19	3
EVAPORATION 1505							94	292	360	311	141	66	76	164		
STORAGE 33426	34117	34388	34535	34751	34755	35715	35113	33772	32975	33119	33292	33370	33460	33199	33050	33191
SYSTEM POWER																
AVE POWER MW	381	470	743	792	904	957	1043	979	620	435	429	428	429	636	615	677
PEAK POW MW	1988	1993	1994	1994	1990	2004	1987	1966	1934	1941	1945	1947	1949	1920	1927	1939
ENERGY GWH 6278.7	137.0	79.0	160.6	570.5	672.3	689.4	775.8	728.5	446.4	323.9	154.3	71.9	82.3	473.5	457.9	455.2
DAILY GWH	9.1	11.3	17.8	19.0	21.7	23.0	25.0	23.5	14.9	10.4	10.3	10.3	10.3	15.3	14.8	16.3

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

	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	5919	272	127	163	598	909	1156	509	294	281	371	184	86	98	314	238	319
DEPLETION	447	-2	-1	-1	92	330	542	202	-25	-138	-67	-70	-33	-37	-180	-104	-60
EVAPORATION	386							24	74	92	81	36	17	20	42		
MOD INFLOW	5086	274	128	165	506	579	614	283	245	327	357	218	101	116	452	342	379
RELEASE	4949	119	56	71	238	461	446	492	492	419	383	164	76	87	492	492	460
STOR CHANGE	137	155	72	93	268	118	168	-209	-247	-92	-26	54	25	29	-40	-150	-81
STORAGE	8113	8268	8341	8434	8702	8820	8987	8779	8532	8439	8413	8467	8492	8521	8481	8331	8250
ELEV FTMSL	2193.9	2195.0	2195.5	2196.2	2198.0	2198.8	2200.0	2198.5	2196.9	2196.2	2196.0	2196.4	2196.6	2196.8	2196.5	2195.5	2194.9
DISCH KCFS	8.0	4.0	4.0	4.0	4.0	7.5	7.5	8.0	8.0	7.0	6.2	5.5	5.5	5.5	8.0	8.0	8.0
POWER																	
AVE POWER MW		46	46	46	46	87	88	94	93	81	72	63	63	64	92	92	91
PEAK POW MW		121	122	123	125	126	128	126	124	123	122	123	123	124	123	122	121
ENERGY GWH	691.9	16.4	7.7	9.9	33.4	65.0	63.2	69.6	69.0	58.4	53.3	22.8	10.7	12.2	68.5	68.2	63.4
--GARRISON--																	
NAT INFLOW	9185	340	158	204	881	1136	2542	1607	454	349	491	203	95	108	136	201	281
DEPLETION	1042	-2	-1	-1	31	203	774	589	102	-140	-20	-111	-52	-59	-116	-88	-67
CHAN STOR	0	46				-40		-6		11	9	8	0	0	-28		
EVAPORATION	446							27	86	107	93	42	20	22	48		
REG INFLOW	12646	507	215	277	1088	1355	2214	1477	758	811	810	443	203	232	668	781	808
RELEASE	12482	387	167	214	1071	1414	1250	1107	1107	952	887	415	194	222	953	1107	1035
STOR CHANGE	164	120	49	62	17	-60	965	370	-349	-141	-77	28	8	10	-285	-326	-227
STORAGE	9732	9852	9900	9963	9980	9920	10885	11255	10906	10765	10689	10717	10725	10735	10449	10123	9896
ELEV FTMSL	1804.4	1804.9	1805.2	1805.5	1805.6	1805.3	1809.8	1811.5	1809.9	1809.3	1808.9	1809.1	1809.1	1809.1	1807.8	1806.3	1805.2
DISCH KCFS	19.0	13.0	12.0	12.0	18.0	23.0	21.0	18.0	18.0	16.0	14.4	14.0	14.0	14.0	15.5	18.0	18.0
POWER																	
AVE POWER MW		129	119	120	179	227	212	186	187	165	148	143	144	144	158	181	179
PEAK POW MW		349	350	351	351	350	367	373	367	365	364	364	364	364	360	354	350
ENERGY GWH	1528.8	46.3	20.0	25.8	128.7	169.2	152.4	138.7	138.8	118.5	110.1	51.5	24.1	27.6	117.6	134.7	124.6
--OAHE--																	
NAT INFLOW	1408	265	123	159	245	134	288	110	28	86	7	-7	-3	-3	-64	-16	56
DEPLETION	680	24	11	14	49	71	145	173	115	28	-10	1	0	1	12	18	28
CHAN STOR	6	33	5		-33	-27	11	16		11	9	3	0	0	-8	-14	
EVAPORATION	379							23	70	89	80	37	17	20	43		
REG INFLOW	12837	661	284	359	1234	1450	1403	1037	949	933	832	373	173	198	826	1059	1063
RELEASE	12665	409	265	356	1230	1452	1370	1721	1513	426	558	259	120	137	1022	804	1023
STOR CHANGE	172	252	20	3	5	-2	33	-684	-563	507	274	114	53	61	-196	255	40
STORAGE	10245	10497	10517	10520	10524	10522	10555	9871	9308	9815	10089	10203	10257	10317	10121	10376	10416
ELEV FTMSL	1572.7	1574.0	1574.1	1574.1	1574.2	1574.2	1574.3	1570.7	1567.6	1570.4	1571.9	1572.5	1572.8	1573.1	1572.1	1573.4	1573.6
DISCH KCFS	18.0	13.7	19.1	19.9	20.7	23.6	23.0	28.0	24.6	7.2	9.1	8.7	8.7	8.7	16.6	13.1	17.8
POWER																	
AVE POWER MW		146	203	212	220	251	245	294	253	74	95	92	92	92	176	139	189
PEAK POW MW		535	536	536	536	536	537	518	502	516	524	527	529	530	525	532	533
ENERGY GWH	1618.5	52.6	34.2	45.9	158.6	187.0	176.6	219.0	188.6	53.5	70.9	33.2	15.4	17.7	130.7	103.1	131.6
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12537	409	265	356	1230	1452	1370	1713	1488	395	531	247	114	131	1008	804	1023
RELEASE	12537	409	265	356	1230	1452	1370	1713	1488	395	531	247	114	131	1008	804	1023
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	18.0	13.7	19.1	19.9	20.7	23.6	23.0	27.9	24.2	6.6	8.6	8.3	8.2	8.3	16.4	13.1	17.8
POWER																	
AVE POWER MW		65	89	93	97	111	108	130	115	34	44	42	42	42	82	65	85
PEAK POW MW		518	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	725.8	23.4	15.0	20.1	69.7	82.2	77.6	97.0	85.2	24.3	32.6	15.2	7.0	8.0	60.8	48.2	59.4
--FORT RANDALL--																	
NAT INFLOW	476	88	41	53	68	55	191	21	57	-16	-82	-4	-2	-2		-10	19
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	128							10	31	32	22	10	5	5	13		
REG INFLOW	12795	495	305	407	1295	1498	1549	1706	1499	330	425	232	107	123	992	791	1039
RELEASE	12794	232	158	390	1295	1498	1549	1706	1673	1409	426	232	107	123	719	701	575
STOR CHANGE	1	263	147	17				0	-174	-1078	0	0	0	0	273	90	464
STORAGE	3122	3385	3532	3549	3549	3549	3549	3549	3375	2297	2296	2296	2296	2296	2569	2659	3123
ELEV FTMSL	1350.0	1353.2	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1337.5	1337.5	1337.5	1337.5	1337.5	1342.1	1343.5	1350.0
DISCH KCFS	9.9	7.8	11.4	21.9	21.8	24.4	26.0	27.7	27.2	23.7	6.9	7.8	7.7	7.7	11.7	11.4	10.0
POWER																	
AVE POWER MW		65	96	185	184	206	220	234	228	184	51	57	57	57	87	87	79
PEAK POW MW		350	355	356	356	356	356	356	349	284	285	285	285	285	306	312	339
ENERGY GWH	1263.0	23.3	16.2	39.9	132.5	153.1	158.2	174.0	169.3	132.4	37.8	20.6	9.5	10.9	64.9	65.0	55.3
--GAVINS POINT--																	
NAT INFLOW	1252	91	42	55	125	137	144	79	79	57	109	47	22	25	70	68	102
DEPLETION	113	0	0	0	4	19	24	39	10	-5	2	5	2	3	10	1	
CHAN STOR	-1	4	-7	-20	0	-5	-3	-3	1	7	31	-2	0	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	13885	328	194	425	1416	1611	1666	1740	1735	1466	553	268	125	143	767	769	680
RELEASE	13885	328	194	425	1416	1611	1666	1740	1722	1440	553	268	125	143	767	769	719
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	14.0	23.8	23.8	26.2	28.0	28.3	28.0	24.2	9.0	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	49	82	82	89	95	96	96	84	32	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	581.0	13.9	8.2	17.6	58.7	66.6	68.6	71.6	71.3	60.8	23.9	11.6	5.4	6.2	33.0	33.0	30.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	862	57	27	34	121	225	166	74	34	23	22	15	7	8	16	-8	41
DEPLETION	263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	14484	378	217	455	1515	1801	1801	1776	1720	1439	565	277	129	148	770	747	746
KCFS		12.7	15.7	25.5	25.5	29.3	30.3	28.9	28.0	24.2	9.2	9.3	9.3	9.3	12.5	12.1	13.0
--TOTAL--																	
NAT INFLOW	19102	1112	519	667	2038	2596	4487	2400	946	780	918	438	204	234	472	473	818
DEPLETION	2624	27	12	16	201	667	1528	1059	253	-224	-84	-168	-78	-89	-258	-156	-82
CHAN STOR	-5	83	-1	-20	-32	-72	8	7	1	19	49	9	0	0	-43	-13	3
EVAPORATION	1516							95	295	362	313	142	67	76	166		
STORAGE	33191	33981	34269	34444	34734	34790	35955	35433	34113	33334	33506	33702	33788	33887	33638	33508	33664
SYSTEM POWER																	
AVE POWER MW		489	603	738	808	972	968	1035	971	622	442	430	430	430	639	608	668
PEAK POW MW		1987	1988	1989	1992	1992	2011	1996	1975	1943	1950	1954	1956	1958	1930	1936	1948
ENERGY GWH	6408.9	175.9	101.3	159.4	581.7	723.2	696.7	770.0	722.1	447.9	328.6	154.8	72.2	82.6	475.5	452.2	465.0
DAILY GWH		11.7	14.5	17.7	19.4	23.3	23.2	24.8	23.3	14.9	10.6	10.3	10.3	10.3	15.3	14.6	16.0

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	5961	274	128	164	602	915	1164	513	296	283	374	185	86	99	317	240	321
DEPLETION	473	-2	-1	-1	94	333	549	208	-21	-139	-69	-71	-33	-38	-181	-105	-51
EVAPORATION	363							24	74	93	81	23	11	13	43		
MOD INFLOW	5125	276	129	165	508	582	615	281	243	329	362	232	108	124	455	345	372
RELEASE	4947	119	56	71	298	461	476	492	492	357	307	152	69	79	523	523	472
STOR CHANGE	179	157	73	94	210	121	139	-211	-249	-28	54	80	39	44	-68	-178	-100
STORAGE	8250	8407	8480	8574	8784	8905	9044	8833	8584	8556	8610	8690	8729	8774	8706	8528	8428
ELEV FTMSL	2194.9	2196.0	2196.5	2197.1	2198.6	2199.4	2200.3	2198.9	2197.2	2197.0	2197.4	2198.0	2198.2	2198.5	2198.1	2196.8	2196.1
DISCH KCFS	8.0	4.0	4.0	4.0	5.0	7.5	8.0	8.0	8.0	6.0	5.0	5.1	5.0	5.0	8.5	8.5	8.5
POWER																	
AVE POWER MW		46	46	46	58	88	94	94	93	69	58	59	58	58	99	98	98
PEAK POW MW		122	123	124	126	127	128	127	124	124	124	125	126	126	125	124	123
ENERGY GWH	695.9	16.5	7.8	10.0	41.9	65.2	67.6	69.8	69.2	50.0	43.2	21.4	9.8	11.2	73.6	73.2	65.6
--GARRISON--																	
NAT INFLOW	9293	344	160	206	891	1150	2572	1626	460	353	496	205	96	109	137	204	284
DEPLETION	1131	-2	-1	-1	32	203	784	630	102	-149	-25	-120	-56	-64	-95	-66	-42
CHAN STOR	-5	45			-11	-28	-6			22	11	-1	1	0	-39		0
EVAPORATION	431							29	90	112	96	27	13	15	50		
REG INFLOW	12672	510	217	279	1145	1380	2258	1459	760	769	743	448	209	238	666	793	798
RELEASE	12453	387	167	214	893	1045	1160	1199	1199	1012	974	464	208	238	953	1230	1111
STOR CHANGE	219	123	50	64	253	335	1098	260	-439	-242	-231	-16	1	0	-287	-437	-313
STORAGE	9896	10019	10069	10134	10386	10721	11819	12079	11640	11398	11167	11151	11152	11152	10865	10428	10115
ELEV FTMSL	1805.2	1805.8	1806.0	1806.3	1807.5	1809.1	1814.0	1815.1	1813.2	1812.1	1811.1	1811.0	1811.0	1811.0	1809.7	1807.7	1806.2
DISCH KCFS	18.0	13.0	12.0	12.0	15.0	17.0	19.5	19.5	19.5	17.0	15.8	15.6	15.0	15.0	15.5	20.0	20.0
POWER																	
AVE POWER MW		130	120	120	151	173	203	208	207	179	166	162	156	156	161	204	201
PEAK POW MW		352	353	354	359	364	382	386	379	375	372	371	371	371	367	359	354
ENERGY GWH	1557.7	46.7	20.2	26.0	108.8	128.6	146.3	154.5	154.1	128.8	123.2	58.4	26.2	30.0	119.4	151.5	134.9
--OAHE--																	
NAT INFLOW	1429	269	125	161	249	136	293	112	29	87	7	-7	-3	-4	-65	-16	56
DEPLETION	696	24	11	15	50	72	148	178	119	29	-11	1	0	1	13	18	28
CHAN STOR	-10	27	5		-16	-11	-14			14	7	1	3		-3	-25	
EVAPORATION	346							23	68	87	79	23	11	13	43		
REG INFLOW	12830	659	286	361	1075	1098	1292	1110	1041	997	919	434	197	221	829	1171	1139
RELEASE	12611	406	263	354	1228	1451	1366	1721	1511	426	559	249	116	132	1022	804	1002
STOR CHANGE	219	253	23	7	-153	-353	-75	-610	-470	571	360	185	81	89	-193	367	136
STORAGE	10416	10669	10692	10698	10546	10193	10119	9508	9038	9609	9970	10154	10236	10325	10132	10499	10635
ELEV FTMSL	1573.6	1574.9	1575.0	1575.0	1574.3	1572.4	1572.0	1568.7	1566.0	1569.3	1571.3	1572.2	1572.7	1573.1	1572.1	1574.0	1574.7
DISCH KCFS	17.8	13.6	19.0	19.8	20.6	23.6	23.0	28.0	24.6	7.2	9.1	8.4	8.3	8.3	16.6	13.1	18.0
POWER																	
AVE POWER MW		146	203	213	221	250	242	290	250	74	95	88	88	89	176	139	193
PEAK POW MW		540	540	541	537	527	525	507	494	510	521	526	528	530	525	535	539
ENERGY GWH	1604.3	52.5	34.2	45.9	158.9	185.9	173.9	215.9	186.1	53.0	70.7	31.8	14.8	17.0	130.8	103.3	129.6
--BIG BEND--																	
EVAPORATION	120							8	24	31	27	8	4	4	14		
REG INFLOW	12491	406	263	354	1228	1451	1366	1713	1486	395	532	241	112	128	1008	804	1002
RELEASE	12491	406	263	354	1228	1451	1366	1713	1486	395	532	241	112	128	1008	804	1002
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	17.8	13.6	19.0	19.8	20.6	23.6	23.0	27.9	24.2	6.6	8.7	8.1	8.1	8.1	16.4	13.1	18.0
POWER																	
AVE POWER MW		65	89	93	97	110	107	130	114	34	44	41	41	41	82	65	87
PEAK POW MW		518	510	509	509	509	509	509	518	538	538	538	538	538	538	538	529
ENERGY GWH	723.1	23.2	14.9	20.1	69.6	82.2	77.4	97.0	85.1	24.3	32.6	14.8	6.9	7.9	60.8	48.2	58.2
--FORT RANDALL--																	
NAT INFLOW	489	90	42	54	70	56	195	21	59	-16	-84	-4	-2	-2		-10	20
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	121							10	31	32	22	6	3	3	13		
REG INFLOW	12770	494	305	407	1295	1498	1549	1706	1499	330	424	230	107	122	992	791	1019
RELEASE	12770	232	158	390	1295	1498	1549	1706	1673	1409	424	230	107	122	719	701	555
STOR CHANGE	0	262	147	17				0	-174	-1078	0	0	0	0	273	90	464
STORAGE	3123	3385	3532	3549	3549	3549	3549	3549	3375	2297	2297	2296	2296	2296	2569	2659	3123
ELEV FTMSL	1350.0	1353.3	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.1	1337.5	1337.5	1337.5	1337.5	1337.5	1342.1	1343.5	1350.0
DISCH KCFS	10.0	7.8	11.4	21.9	21.8	24.4	26.0	27.7	27.2	23.7	6.9	7.7	7.7	7.7	11.7	11.4	10.0
POWER																	
AVE POWER MW		65	96	185	184	206	220	234	228	184	51	57	56	56	87	87	79
PEAK POW MW		350	355	356	356	356	356	356	349	284	285	285	285	285	306	312	339
ENERGY GWH	1260.7	23.3	16.2	39.9	132.5	153.1	158.2	174.0	169.3	132.4	37.7	20.4	9.5	10.8	65.0	65.0	53.4
--GAVINS POINT--																	
NAT INFLOW	1252	91	42	55	125	137	144	79	79	57	109	47	22	25	70	68	102
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	-1	4	-7	-20	0	-5	-3	-3	1	7	31	-2	0	0	-7	1	3
EVAPORATION	44							3	9	11	10	3	1	2	5		
REG INFLOW	13865	328	194	425	1416	1611	1666	1740	1735	1466	553	268	125	143	767	769	660
RELEASE	13865	328	194	425	1416	1611	1666	1740	1722	1440	553	268	125	143	767	769	699
STOR CHANGE									13	26							-39
STORAGE	358	358	358	358	358	358	358	358	371	397	397	397	397	397	397	397	358
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	14.0	23.8	23.8	26.2	28.0	28.3	28.0	24.2	9.0	9.0	9.0	9.0	12.5	12.5	12.6
POWER																	
AVE POWER MW		39	49	82	82	89	95	96	96	84	32	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	580.2	13.9	8.2	17.6	58.7	66.6	68.6	71.6	71.3	60.8	23.9	11.6	5.4	6.2	33.0	33.0	29.8
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	879	58	27	35	123	230	169	76	35	24	22	15	7	8	16	-8	42
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	14476	379	218	456	1517	1805	1804	1777	1720	1440	564	277	129	148	770	747	726
KCFS		12.7	15.7	25.5	25.5	29.4	30.3	28.9	28.0	24.2	9.2	9.3	9.3	9.3	12.5	12.1	13.1
--TOTAL--																	
NAT INFLOW	19303	1125	525	675	2060	2624	4537	2427	958	788	924	441	206	235	475	478	825
DEPLETION	2759	28	13	17	205	672	1548	1112	262	-233	-92	-177	-83	-94	-237	-135	-47
CHAN STOR	-27	77	-1	-20	-27	-44	-23	-3	1	33	48	-1	4	0	-49	-24	3
EVAPORATION	1425							96	297	366	316	91	43	49	168		
STORAGE	33664	34459	34752	34934	35244	35348	36510	35949	34629	33877	34061	34310	34431	34564	34290	34132	34281
SYSTEM POWER																	
AVE POWER MW		489	604	739	792	916	961	1052	988	624	445	440	432	432	648	637	702
PEAK POW MW		1996	1997	1998	2001	1998	2015	1999	1980	1949	1957	1962	1965	1968	1939	1947	1959
ENERGY GWH	6421.8	176.1	101.4	159.6	570.4	681.6	692.0	782.9	735.0	449.5	331.3	158.4	72.6	83.0	482.4	474.3	471.5
DAILY GWH		11.7	14.5	17.7	19.0	22.0	23.1	25.3	23.7	15.0	10.7	10.6	10.4	10.4	15.6	15.3	16.8