US Army Corps
of Engineers

Northwestern Division
Missouri River Basin
Water Management Division

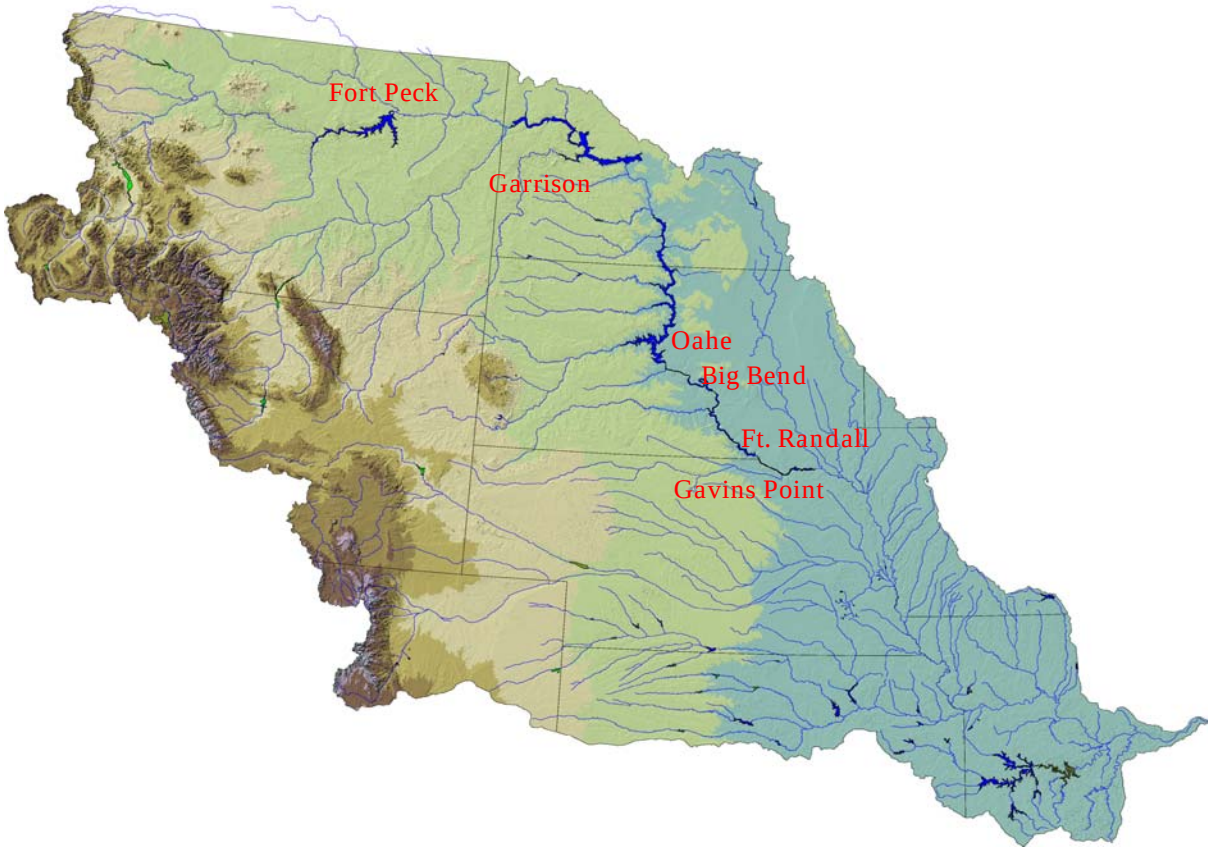
Final

AOP

2007-2008

Missouri River Mainstem System

2007-2008 Annual Operating Plan



Annual Operating Plan Process
55 Years Serving the Missouri River Basin

December 2007

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NORTHWESTERN DIVISION
12565 WEST CENTER ROAD
OMAHA NE 68144-3871

REPLY TO
ATTENTION OF

DEC 21 2007

Division Commander

Dear Stakeholders and Concerned Citizens,

This Annual Operating Plan (AOP) presents the Corps of Engineers' regulation of the Missouri River Mainstem Reservoir System (System) through December 2008. The AOP is based upon water management guidelines designed to meet the reservoir regulation objectives of the existing Missouri River Master Water Control Manual (Master Manual) updated in March 2006.

The AOP information 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. 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 2007. A report presenting Draft AOP meeting comments and including copies of all the comment letters received is available upon request.

This year was the eighth 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,

Steven R. Miles, P.E.
Colonel, US Army
Division Commander

MISSOURI RIVER MAINSTEM RESERVOIR SYSTEM

Annual Operating Plan
2007 - 2008

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
ISP	-	initial starting point
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
2007 – 2008

I. FOREWORD

This Annual Operating Plan (AOP) presents pertinent information and plans for regulating the Missouri River Mainstem Reservoir System (System) through December 2008 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.

This document provides the plan for future regulation of the System. Other documents that may be of interest include the recently revised "System Description and Regulation" report dated November 2007 or the "Summary of Actual Calendar Year 2006 Regulation," dated March 2007. Both reports are currently available at the "Reports and Publications" link on our web site at: **www.nwd-mr.usace.army.mil/rcc**, or you may contact the Missouri River Basin Water Management Division at 12565 West Center Road, Omaha, Nebraska 68144-3869, phone (402) 697-2676 for copies. The "Summary of Actual Calendar Year 2007 Regulation" will be available at the same site in April 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 process consists of a series of informational meetings with the Tribes and/or government-to-government consultation with Tribes, as requested. Informational meetings on the Draft AOP were held on August 23, 2007 in Rapid City, South Dakota and October 25, 2007 in Bismarck, North Dakota.

The 2007 spring public meetings were held at the following locations and dates: April 9 at Fort Peck, Montana; April 10 at Bismarck, North Dakota and Pierre, South Dakota; April 11 at Omaha, Nebraska; April 12 at Kansas City, Missouri and April 13 at St. Louis, Missouri. The attendees were given an update regarding the outlook for 2007 runoff and projected System regulation for the remainder of 2007. Six 2007 fall public meetings on the Draft 2007-2008 AOP were held: October 15 in Nebraska City, Nebraska; October 16 in Kansas City and Jefferson City, Missouri; October 17 in Fort Peck, Montana and Bismarck, North Dakota; and October 18 in Pierre, South Dakota.

In the spring of 2008, 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 2007-2008 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 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 2007 - DECEMBER 2008

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 2007 to February 2008. The August 1 runoff forecast for 2007 was 21.0 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 2007 to February 2008 period.

Simulations for the March 1, 2008 to February 29, 2009 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. An update of the runoff statistics to include data through 2007 is anticipated prior to the 2008-2009 draft AOP.

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 runoff could be lower than Lower Decile, and a 10 percent chance runoff could be greater than Upper Decile.

The Upper Decile and Upper Quartile simulations extend from the end of the 120 percent of Basic simulation through February 2009. 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 2009.

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 2007 through February 2009. The natural water supply for calendar year (CY) 2006 totaled 18.2 MAF.

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

	Natural 1/	Post-1949 Depletions	Net 2/
August 2007 through February 2008 (Basic Runoff Scenario)			
Basic	5,800	200	6,000
120% Basic	7,000	300	7,300
80% Basic	4,700	300	5,100
Runoff Year March 2008 through February 2009 (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	-2,600	16,900
Lower Decile	15,500	-2,600	12,900

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 2007-2008

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

The plan relies on a wealth of regulation experience. Reservoir regulation experience available for preparation of the 2007-2008 AOP includes 13 years of regulation at Fort Peck (1940) by itself, plus 54 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 eight-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.

B. 2007-2008 AOP Simulations. AOP simulations for the five runoff scenarios are shown in the final section of this AOP as studies 4 through 8. Due to the ongoing drought, service to all authorized project purposes except flood control will be reduced in the coming year and all water conservation measures available under the Master Manual will be utilized. In summary, the studies provide the following: minimum service flow support and a shortened navigation season under all runoff scenarios; low winter releases; low releases in the spring and fall before and after the navigation season; a March spring pulse from Gavins Point for Median and above runoff conditions; a May spring pulse for the Upper Quartile and Upper Decile runoff conditions; a steady release – flow to target regulation during the tern and plover nesting season; emphasis on Garrison for a steady to rising reservoir level during the forage fish spawn; and reservoir releases and pool levels sufficient to keep all intakes operational under all runoff scenarios. Numerous other water conservations measures will be implemented if conditions allow including cycling releases from Gavins Point

during the early part of the nesting season, only supporting flow targets in reaches being used by commercial navigation, and utilization of the Kansas River projects authorized for Missouri River navigation flow support. Additional details about the studies are provided in the following paragraphs. Results of the simulations are shown in ***Plates 4 and 5*** for the System storage and the Fort Peck, Garrison and Oahe pool elevations.

The March 1 System storage is above the 36.5 MAF March spring pulse preclude for the Median, Upper Quartile and Upper Decile studies, but below it for the Lower Quartile and Lower Decile studies. The peak magnitude of the March pulse is 5,000 cfs over navigation flows. 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 with peak magnitudes of 15,800 and 15,500 cfs, respectively. The actual peak magnitude of the May pulse is dependent on the actual System storage and the May 1 runoff forecast, and may be reduced or eliminated due to downstream flood control constraints, shown on Plate 3. Storms in May of 2007 produced widespread flooding in Missouri and as a result a significant number of levees were damaged. One comment on the Draft AOP was that the Corps should not implement the spring pulses in 2008 due to the increased risk of flooding associated with these damaged levees. First, it is very unlikely that the March pulse, given its rather modest magnitude, will exceed downstream channel capacity. Also, while it appears unlikely that a spring pulse will be conducted in May 2008, the current schedule shows that all of the damaged levees will be repaired by April of 2008. In addition, the current Master Manual technical criteria includes safeguards to minimize the risk of flooding associated with the spring pulses. The primary safeguard is what are termed 'downstream flow limits', which are well below the channel capacity of the Missouri River. These flow limits are identical to the most restrictive flood control constraints presented in the previous Master Manual and provide a very similar level of flood protection. And additional safeguards have been added compared to the criteria in the previous Master Manual. Under the current Master Manual, we incorporate anticipated precipitation into our river forecast, to provide greater assurance that flows will remain below the downstream flow limits during the duration of the spring pulses. As in 2006, primary consideration will be given to withdrawing the water needed for the May spring pulse from Fort Randall reservoir in 2008, 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. The Corps will also avoid cycling releases on the declining limb of the spring pulse hydrograph if the anticipated level of take of the two protected bird species is not excessive. 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. A May spring pulse is not shown for the lower three runoff scenarios: the Median, Lower Quartile and Lower Decile. It is important to note that the actual System storage on March 1 and May 1, 2007 will determine whether or not spring pulses will be implemented.

The March 15 and July 1 System storage checks were used to determine the level of flow support for navigation and other downstream purposes as well as the navigation season length. For modeling purposes in this AOP, the SR-FTT regulation scenario with an initial steady release of 25,000 cfs from Gavins Point dam is shown during the 2008 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 long-term average releases (see ***Plate 3***) 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. The long-term average values were used for July and August to indicate flowing to target. Although these modeled Gavins Point releases represent our best estimate of required releases during 2008, actual releases will be based on hydrologic conditions and the availability of habitat at that time. It may also be necessary to cycle releases for flood control regulation during the T&E species' nesting season.

The long-term average Gavins Point releases to meet target flows were used in all the AOP studies for navigation support during the spring and fall months. Winter 2007-2008 and winter 2008-2009 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 2004 Mainstem Master Manual, provided downstream tributary flows are adequate to serve water supply requirements. Gavins Point releases will be increased to meet downstream water supply requirements in critical reaches to the extent reasonably possible if downstream incremental runoff is low.

The Gavins Point releases shown in this and previous AOPs are estimates based on historic averages and experience. Adjustments are made as necessary in real-time based on hydrologic conditions to meet the Missouri River target flows presented in the Master Manual.

Application of the July 1 System storage check (***see Plate 3***) indicated that the navigation season would be shortened 17 days for Upper Decile, 29 days for Upper Quartile, 30 days for Median, 46 days for Lower Quartile, and 60 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, 2009.

Intrasystem releases are adjusted to best serve the multiple purposes of the projects with special emphasis placed on regulation for non-listed fisheries starting in early April and for T&E bird species beginning in early May and continuing through August. As part of the overall plan to rotate emphasis among the upper three reservoirs during low runoff years, Garrison will be favored during the 2008 forage fish spawn if runoff is not sufficient to keep all three reservoirs rising. Emphasis will shift to Fort Peck and Oahe in 2009. The Median, Upper Quartile, and Upper Decile simulations include releases that provide a steady to rising pool level in each of the three large upper reservoirs during the spring forage fish spawn period. Releases in the Lower Quartile and Lower Decile simulations are adjusted to maintain a steady to rising reservoir level at Garrison.

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 2008 due to low System storage. Both of these plans may be implemented when System storage recovers to more normal levels.

Actual System regulation from January 1 through July 31, 2007 and the regulating plans for each project through CY 2008 using the five runoff scenarios described on Page 4 are presented on ***Plates 6 through 11***, inclusive. Big Bend regulation is omitted since storage at that project is relatively constant and average monthly releases are essentially the same as those at Oahe. These plates also show, on a condensed scale, actual regulation since 1953.

Plate 12 illustrates for Fort Peck, Garrison, Oahe, and Gavins Point the actual releases (Regulated Flow) as well as the Missouri River flows that would have resulted if the reservoirs were not in place (Unregulated Flow) during the period January 2006 through July 2007. ***Plate 13*** presents past and simulated gross average monthly power generation and gross peaking capability for the System.

C. Regulation for the Balance of the 2007 Navigation Season and Fall of 2007. The regulation of the System for the period of August though November 2007 is presented in the following paragraphs.

Fort Peck Dam. Releases averaged 7,000 cfs during August and the first half of September. In mid-September they were gradually reduced to 4,000 cfs. The releases were held near that level until the end of November. The Fort Peck pool rose slightly through the period to end at 2200.1 on the last day of November. The record low pool elevation of 2196.2 feet msl was set in March 2007. The previous record low pool elevation was 2208.7 feet msl set in April 1991.

Garrison Dam. Releases averaged 16,000 cfs during August through the first week of September when irrigation ceased and they were reduced to 11,000 cfs. Releases were held at 11,000 cfs through the end of September. Releases were further reduced to 10,000 to 11,000 cfs during October and November as a water conservation measure prior to being raised to 15,000 cfs the first week of December. The Garrison pool level declined to 1813.0 feet msl by the end of November. The record low pool elevation of 1805.8 feet msl was set in May 2005. The previous record low pool elevation was 1815.0 feet msl set in May 1991.

Oahe Dam. Releases averaged 21,100 cfs in August, and they were reduced in early September to initiate an early fall drawdown of the Fort Randall pool, as the navigation season closed early in 2007. Low releases continued in September through 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 1582.2 feet msl. The record low Oahe pool elevation of 1570.2 feet msl was set in August 2006. The previous record low pool elevation was 1580.7 feet msl set in November 1989.

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

Fort Randall Dam. Releases averaged 20,400 cfs in August and were scheduled in September and most of October to back up the navigation releases from Gavins Point Dam. After the navigation season ends in late-October, releases were gradually reduced to as low as 7,000 cfs in November. The majority of the Fort Randall fall pool draw down occurred in September and early October, with the remainder occurring in late October and November.

Gavins Point Dam. Releases were scheduled to support downstream minimum service flows in reaches with commercial navigation throughout the remainder of the navigation season, which was shortened 35 days in 2007 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 17 at Sioux City to October 26 at the mouth near St. Louis. Releases were reduced by 3,000 cfs per day in mid-October until they reached 9,000 cfs because there was sufficient tributary inflow to meet the flow requirements at the critical downstream locations. Intakes were monitored during this period to ensure their operability. 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 will be kept near that elevation through the winter months.

D. Regulation Plan for Winter 2007-2008. The September 1 System storage check (12,000 cfs if System storage on September 1 is less than 55 MAF prorated up to 17,000 cfs at 58 MAF) is used to determine the amount of the winter System release. During the winter of 2007-2008, we will strive to average a 12,000 cfs System release because the September 1, 2007 System storage was 38.4 MAF. 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. Based on past experiences, these events are expected to occur infrequently and be of short duration. Given these infrequent temporary release increases above the 12,000 cfs level, the winter System release will likely average around 12,500 cfs. 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 5,500 to 6,000 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 remain nearly steady near 2200 feet msl during the winter period, ending February about 34 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, 2008. The pool level is expected to rise during March to near elevation 2202 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 15,500 cfs at the time of freeze-in and will then be increased to 16,000 to 16,500 cfs as conditions stabilize. Releases may have to be reduced for a short period during any re-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 20,500 cfs in December, 23,200 cfs in January and 24,400 cfs in February. The Garrison pool level is expected to fall from near elevation 1815 feet msl to near elevation 1810 feet msl by March 1, 27.5 feet below the base of the annual flood control storage zone. The Median simulation indicates the pool level will rise to elevation 1812 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 slightly from elevation 1578 feet msl at the end of November to elevation 1579 feet msl by the beginning of March, 28.5 feet below the base of the annual flood control storage zone. The pool is expected to rise to elevation 1581 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 during the winter season. The Fort Randall pool level is expected to rise from its actual fall drawdown elevation of 1338.8 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, the Fort Randall pool level will be raised to near 1353.0 feet msl by March 1. It is likely that a pool level as high as 1355.2 feet msl could be reached by the end of the winter period on March 31 if runoff conditions permit. The Fort Randall pool level above the White River delta near Chamberlain, South Dakota will 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.

System storage for all runoff conditions will be substantially below the base of the annual flood control zone by March 1, 2008, the beginning of next year's runoff season.

E. Regulation During the 2008 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. 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, 2008, 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 for targets in those reaches to conserve water in the System, as has been done since 2003.

Navigation flow support for the 2008 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. The normal 8-month navigation season is shortened as a water conservation measure for all runoff scenarios as shown in ***Table II***.

TABLE II
NAVIGATION SERVICE SUPPORT
FOR THE 2008 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	39.4	48.9	-6,000	-6,000	17
U.Q.**	30.6	39.2	46.9	-6,000	-6,000	29
Med *	24.6	37.4	43.0	-6,000	-6,000	30
L.Q.	19.5	35.9	38.7	-6,000	-6,000	46
L.D.	15.5	35.7	36.6	-6,000	-6,000	60

* Includes only a March Spring Pulse
**Includes both March and May Spring Pulses

As previously stated, the planned regulation for the 2008 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. Model runs included in this AOP have a Gavins Point release peaking cycle of 2 days down and 1 day up during May to keep birds from nesting at low elevations. Gavins Point releases will be adjusted to meet downstream targets as tributary flows recede, but ideally the initial steady release will be sufficient to meet downstream targets until the majority of the birds have nested. The purpose of this regulation is to continue to meet the project purposes while minimizing the loss of nesting T&E species and conserving water in the upper three reservoirs. Releases from Garrison and Fort Randall will follow repetitive daily patterns from early May, at the beginning of the T&E species' nesting season, to the end of the nesting in late August. In addition to the intra-day pattern, Fort Randall releases may also be cycled with 2 days of low releases and 1 day of higher releases during the early part of the nesting season to maintain release flexibility in that reach while minimizing the potential for take.

The simulation of March spring pulses are indicated for the Median through Upper Decile runoff scenarios, and the Upper Quartile and Upper Decile runoff scenarios also 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 15,800 cfs and 15,500 cfs, respectively. The actual System storage on March 1 and May 1, 2008 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.

Gavins Point releases may be quite variable during the 2008 navigation season but are expected to range from 18,000 to 32,000 cfs. Release reductions necessary to minimize downstream flooding are not reflected in the monthly averages shown in the simulations but will be implemented as conditions warrant. Reductions in System releases to integrate the use of downstream Missouri River flow support from the Kansas Reservoir System have not been included since they are based on downstream hydrologic conditions 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 6 through 11.*** Ample storage space exists in the System to control flood inflows under all scenarios simulated for this AOP.

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 Garrison from April through June for Lower Quartile and Lower Decile runoff

scenarios, however, the Oahe pool level 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 2008, the Corps will, to the extent reasonably possible, set releases to result in a steady to rising pools at Garrison during April and May. This will be accomplished at Garrison by setting releases at Fort Peck and Garrison at a level that would maintain a rising Garrison pool, but no less than the minimum required to supply downstream irrigation. 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 in even years, and Oahe and Fort Peck favored in odd years. 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.

F. Regulation Activities for T&E Species and Fish Propagation Enhancement. As discussed in the previous section, the 2007-2008 AOP includes no provisions for unbalancing the Fort Peck, Garrison, and Oahe reservoirs on March 1, 2008 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. In addition, while it appears to possible to maintain steady to rising reservoirs levels at Fort Peck, Garrison and Oahe during the forage fish spawn under all but the lowest runoff scenarios, the reservoirs will likely be below the levels required for optimum availability of spawning substrate.

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 2008 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 2007.

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. April releases should be adequate for trout spawning below the project. Maintaining a rising Fort Peck pool level will be dependent upon the daily inflow pattern to the reservoir, but appears possible under all the runoff scenarios.

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" via 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 2008. In 2005 plywood was attached to the lower 50 feet of the trash racks on two of the penstocks to allow water to be drawn from a higher, and therefore warmer, region of the reservoir. In 2007 plywood was installed on one additional trash rack. During 2008, releases from Garrison during the summer months will be made through the three hydropower units with modified intakes, to the extent reasonably possible. In addition, the manner in which the other hydropower units are operated will be adjusted to run them at or near full capacity when in use, which also has the effect of drawing water off the upper, warmer, portion of the reservoir. In combination, these two efforts are expected to save several hundred thousand acre-feet of coldwater habitat for the benefit of the coldwater fishery.

If runoff is not sufficient to keep all the pool levels rising during the fish spawn in 2008, the Corps will, to the extent reasonably possible while serving other Congressionally authorized project purposes, set releases to result in a steady to rising pool at Garrison during April and May. Adjustments to Garrison's releases, however, may be restricted when the terns and plovers begin nesting in May. A rising pool at Garrison during the fish spawn in April and May will be dependent upon the daily inflow pattern to the reservoir but appears possible with all runoff simulations.

Oahe Dam. Releases in the spring and summer will back up those from Gavins Point Dam. The pool level should be steady to rising in the spring during the fish spawn under median and above runoff scenarios, 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.

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.

To the extent reasonably possible, Fort Randall will be regulated to provide for a pool elevation near 1355 feet msl during the fish spawn period, provided water can be supplied from other reservoirs for downstream uses. The pool will not be drawn down below elevation 1337.5 feet msl in the fall to ensure adequate supply for water intakes. As a measure to minimize take while maintaining the flexibility to increase releases during the nesting season, hourly releases from Fort Randall during the 2008 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 with little or no incidental take if drier downstream conditions occur.

Gavins Point Dam. March and May spring pulses will be made from Gavins Point Dam for the benefit of the endangered pallid sturgeon if storage is above the precludes outlined in the spring pulse technical criteria. Details related to the spring pulses, including the specific technical criteria for the 2008 pulses, are presented in Plate 3.

Based on 2003 through 2007 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 Gavins Point pool will be regulated near 1206.0 feet msl in the spring and early summer, with minor day-to-day variations due to inflows resulting from rainfall runoff. Several factors can limit the ability to protect nests from inundation in the upper end of the Gavins Point pool. First, because there are greater numbers of T&E bird species nesting below the Gavins Point project, regulation to minimize 'take' usually involves restricting Gavins Point releases, which means that the Gavins Point pool can fluctuate significantly due to increased runoff from rainfall events. Second, rainfall runoff between Fort Randall Dam and Gavins Point Dam can result in relatively rapid pool rises because the Gavins Point project has a smaller storage capacity than the other System reservoirs. And third, the regulation of Gavins Point for downstream flood control may necessitate immediate release reductions to reduce downstream damage. When combined, all these factors make it difficult and sometimes impossible to prevent inundation of nests in the upper end of the Gavins Point reservoir. Planned habitat creation projects in Lewis and Clark Lake will reduce the inundation risk to T&E

bird species by providing higher 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 work with the Tribes utilizing 36 CFR Part 800 and the PA to address the exposure of these sites. The objective of a programmatic agreement is to deal "…with the potential adverse effects of complex projects or multiple undertakings…" The PA objective was to collaboratively develop a preservation program that would avoid, minimize and/or mitigate 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 14*** shows the locations of the Tribal Reservations.

Fort Peck Dam. Depending on runoff in the Missouri River basin, System regulation during 2008 could result in a Fort Peck pool elevation variation from a high of 2227 feet msl to a low of 2192 feet msl. This is based on the Upper and Lower Decile runoff scenarios (see ***Plate 8*** and the studies included at the end of this report). Based on a review of existing information, approximately 25 to 50 known sites could be affected during this period.

Garrison Dam. Based on the Upper and Lower Decile runoff scenarios (see ***Plate 9*** and the studies included at the end of this report), Garrison pool elevations could range between 1833 and 1803 feet msl during 2008. 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 1601 and 1567 feet msl (see ***Plate 10*** 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 2008. 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 2008. 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 2008. 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 2008

With regulation of the System in accordance with the 2007-2008 Draft AOP outlined in the preceding pages, the following results can be expected.

A. Flood Control. All runoff scenarios studied will begin the March 1, 2008 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 19.0 to 21.7 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. The Cheyenne River Sioux Tribe's Mni Waste' water intake on Oahe reservoir was recently relocated and should now be able to operate through a wider range of reservoir elevations. This intake serves over 14,000 residents of and near the Cheyenne River Indian Reservation in Dewey, Ziebach, and Meade Counties in South Dakota. 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. Although not below the critical shut-down elevations for any intake, the record low levels would require extra monitoring to ensure the continued operation of the intakes.

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 has been provided in the spring and fall of each season since the fall of 2004. If a non-navigation year would occur, summer releases averaging around 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 all 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. Below Fort Peck, localized dredging may once again be required in the vicinity of irrigation intakes in order to maintain access the water if releases are low next summer. Tributary irrigation water usage is fully accounted for in the estimates of water supply.

D. Navigation. Service to navigation in 2008 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 2008 navigation season will be based on actual System storage on March 15 and July 1, 2008.

All simulations have a shortened navigation season. The anticipated service level and season length for all runoff conditions simulated are shown in ***Table II***.

E. Power. ***Tables III and IV*** give the estimated monthly System load requirements and hydropower supply of the Eastern Division, Pick-Sloan Missouri Basin Program (P-S MBP), from August 2007 through December 2008. 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 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 2007 should provide adequate reservoir access in 2008 for runoff scenarios above the Lower Quartile. For the Lower Quartile runoff scenario, reservoir levels would be slightly above the minimum summer levels reached previously during the current drought but approaching the levels where many boat ramps become unusable.

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

2007	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		2054	2052	2048			207	203	205			2261	2255	2253	
Sep	1844		2046	2043	2035			209	203	203			2255	2246	2238	
Oct	1808		2012	2005	1994			210	203	203			2222	2208	2197	
Nov	1889		2019	2008	1995			207	203	203			2226	2211	2198	
Dec	2055		2040	2017	1998			202	203	202			2242	2220	2200	
2008																
Jan	2240		2057	2030	2011			196	203	199			2253	2233	2210	
Feb	1993		2063	2038	2015			191	203	199			2254	2241	2214	
		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	2092	2083	2053	2021	2018	193	195	199	198	198	2285	2278	2252	2219	2216
Apr	1778	2129	2115	2068	2020	2013	195	197	201	200	200	2324	2312	2269	2220	2213
May	1482	2156	2136	2085	2023	2007	202	203	206	203	204	2358	2339	2291	2226	2211
Jun	1723	2211	2183	2127	2052	2015	213	213	212	208	208	2424	2396	2339	2260	2223
Jul	2310	2231	2198	2132	2045	1996	213	213	210	207	209	2444	2411	2342	2252	2205
Aug	1858	2225	2190	2114	2027	1977	208	209	207	204	207	2433	2399	2321	2231	2184
Sep	1670	2235	2195	2117	1989	1936	207	207	207	203	207	2442	2402	2324	2192	2143
Oct	1488	2200	2158	2075	1985	1939	207	207	206	203	207	2407	2365	2281	2188	2146
Nov	1836	2200	2167	2081	1988	1941	206	205	205	203	207	2406	2372	2286	2191	2148
Dec	2039	2188	2154	2056	1957	1905	201	201	200	200	204	2389	2355	2256	2157	2109

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

2007	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		722	730	738			49	51	42			771	781	780	
Sep	718		508	519	524			47	48	40			555	567	564	
Oct	722		411	418	424			53	47	39			464	465	463	
Nov	783		262	272	277			72	44	38			334	316	315	
Dec	890		482	446	435			74	46	39			556	492	474	
2008																
Jan	903		461	441	450			72	45	39			533	486	489	
Feb	867		394	420	414			66	42	35			460	462	449	
		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	427	459	450	461	477	76	70	44	37	37	503	528	494	498	513
Apr	745	463	502	521	605	588	77	78	45	35	35	540	580	566	640	623
May	688	679	691	644	723	705	110	105	49	39	39	789	796	693	762	744
Jun	750	639	649	664	724	701	135	128	57	41	41	774	777	721	765	742
Jul	839	737	744	753	795	771	151	120	72	57	42	888	864	825	852	813
Aug	845	794	789	784	751	699	102	98	71	57	42	896	887	855	808	741
Sep	720	603	578	577	513	480	93	89	76	55	41	696	667	653	568	521
Oct	722	547	507	485	410	302	83	83	76	54	48	630	590	561	464	350
Nov	784	369	322	305	299	294	83	82	78	52	48	452	404	383	351	342
Dec	891	557	552	501	476	456	85	83	85	62	49	642	635	586	538	505
CY TOT	9550	6670	6648	6545	6622	6336	1133	1074	742	563	497	7803	7722	7287	7185	6834

* 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.

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 2008 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 2007 and 2008 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 2007-2008. Two critical components of the Five-Year plan that are applicable to this AOP are monitoring and mitigation, which will be briefly discussed in the following paragraphs.

First, a collaboratively developed plan, entitled "Draft Monitoring and Enforcement Plan, dated April 2005" (see https://www.nwo.usace.army.mil/CR/) is in place. This monitoring plan outlines the sites that require monitoring and specifies a frequency for monitoring. The Corps is strategically monitoring sites, including those sites within the potential operating pool elevations, to document the effects of the implementation of the 2007-2008 AOP. Specific sites are identified in the draft Monitoring and Enforcement Plan for the monitoring team, comprised of Corps rangers and tribal monitors, to visit and document impacts. This focused monitoring is resulting in more accurate data on the current impacts to sites along the river plus it is

assisting with the identification of sites for mitigation. Training for the monitoring team was held in June 2006 and again in July 2007.

Secondly, mitigation or protection of sites that are being adversely impacted continues. In the 2006 Annual Report by the Corps on the implementation of the Programmatic Agreement it states, "During the reporting period sixteen sites were either completed, started, or in the design phase." The annual report is available at https://www.nwo.usace.army.mil/CR/. In addition the Corps has awarded a contract to develop an erosion model that will compare modeling data against actual erosion data, collected by the monitoring team, to assist in the prioritization of sites for protection. The model is expected to be complete by April 2008.

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 August 1, 2007 Basic runoff forecast verifies, System storage will decline to 36.3 MAF by the close of CY 2007. This would be 2.4 MAF higher than the all-time record low storage of 33.9 MAF set on February 9, 2007 and nearly 2 MAF higher than last year's record low end-of-year storage of only 34.4 MAF. This end-of-year storage is 16.8 MAF less than the 1967 to 2006 average. The record low storage during the 1988-1992 drought was 40.8 MAF in January 1991. The end-of-year System storages have ranged from a maximum of 60.9 MAF, in 1975, to the 2006 minimum of 34.4 MAF. Forecasted System storage on December 31, 2008 is presented in ***Table V*** for the runoff scenarios simulated.

I. Summary of Water Use by Functions. Anticipated water use in CY 2007, under the regulation plan with the Basic forecast of water supply is shown in ***Table VI***. Actual water use data for CY 2006 are included for information and comparison**.** Under the reservoir regulation simulations in this AOP, estimated water use in CY 2008 also is shown in ***Table VI.***

TABLE V
ANTICIPATED DECEMBER 31, 2008 SYSTEM STORAGE

Water Supply Condition	Total (12/31/08)	Carryover Storage Remaining 1/	Unfilled Carryover Storage 2/	Total Change CY 2008
	(Volumes in 1,000 Acre-Feet)			
Upper Decile	50,500	32,500	6,500	13,200
Upper Quartile	47,800	29,800	9,200	10,500
Median	41,500	23,500	15,500	5,200
Lower Quartile	35,700	17,700	21,300	400
Lower Decile	32,700	14,700	24,300	-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 VI
MISSOURI RIVER MAINSTEM SYSTEM
WATER USE FOR CALENDAR YEARS 2006, 2007, AND 2008 ABOVE SIOUX CITY, IOWA
in Million Acre-Feet (MAF)

		CY 2006 Actual	CY 2007 Basic Simulation	Simulations for Calendar Year 2008 Upper Decile	Upper Quartile	Median	Lower Quartile	Lower Decile
Upstream Depletions	(1)							
Irrigation, Tributary Reservoir Evaporation & Other Uses		2.4	2.3					
Tributary Reservoir Storage Change		-0.1	0.0					
Total Upstream Depletions		2.3	2.3	2.8	2.7	2.9	2.7	2.6
System Reservoir Evaporation	(2)	2.3	1.9	1.1	1.1	1.4	1.6	1.5
Sioux City Flows								
Navigation Season								
Unregulated Flood Inflows Between Gavins Point & Sioux City	(3)	0.0	0.0					
Navigation Service Requirement	(4)	11.3	10.0	13.2	12.2	11.3	10.8	10.0
Supplementary Releases								
T&E Species	(5)	0.2	0.2	0.5	0.5	0.3	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		3.6	3.6	3.6	3.5	3.5	3.8	3.9
Flood Evacuation Releases	(7)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
System Storage Change		-1.6	2.9	13.3	10.6	5.2	0.4	-2.6
Total		18.2	21.0	34.5	30.6	24.6	19.5	15.5
Project Releases								
Fort Peck		5.3	4.6	5.1	5.1	4.9	4.9	4.7
Garrison		12.0	10.4	12.8	12.7	12.3	12.2	11.6
Oahe		12.2	9.7	11.3	11.5	12.1	13.1	12.8
Big Bend		11.2	9.2	11.2	11.5	12.0	13.0	12.7
Fort Randall		12.0	10.1	12.6	12.5	12.8	13.3	12.8
Gavins Point		13.2	11.6	14.7	14.3	14.1	14.4	13.9

(1) Tributary uses above the 1949 level of development including agricultural depletions and tributary storage effects.
(2) Net evaporation is shown for 2008.
(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 2008 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 FEBRUARY 2014

The 5-year extensions to the AOP (March 2009 to March 2014) have been prepared to serve as a guide for the Western Area Power Administration's marketing activities and to provide data to allow basin interests to conduct long-term planning. Three runoff conditions are modeled in the extension studies: Median, Lower Quartile, and Lower Decile.

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

A. Median Runoff. Studies 9 through 13 present the results of simulating Median runoff (24.6 MAF) from March 2009 through February 2014. The March 1, 2009 System storage would be 41.9 MAF and would rise to 53.0 MAF by March 1, 2014, 4.0 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 2009 to full service after the July 1 storage check in 2013. The 2009 navigation season would be shortened 23 days; a full 8-month navigation season would be supported in 2010 through 2013. Winter System releases would increase slightly from an average of the minimum 12,500 cfs to 12,900 cfs beginning the winter of 2012-2013. The winter of 2013-2014 releases would be 14,000 cfs. March and May spring pulses would occur each year, with the magnitude of the May pulse increasing from 13,200 cfs in 2009 to 16,000 cfs in 2013. Fort Peck, Garrison, and Oahe pools rise to the elevations described in ***Plate 3*** that permit unbalancing by March 1, 2011. The Fort Peck "mini-test" could be conducted in 2012 by unbalancing the upper three reservoirs beginning in 2011, as shown in ***Table VIII***. The Fort Peck release would average 12,800 cfs in June 2012. Fort Peck would not have to be favored again in 2013 to accommodate the full test, which would have a monthly average release of 18,200 cfs in June 2013.

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

	2009	2010	2011	2012	2013
MEDIAN					
Spring Pulse					
March (kcfs)	5.0	5.0	5.0	5.0	5.0
May (kcfs)	13.2	14.5	15.3	15.8	16.0
Flow Level Below Full Service					
Spring (kcfs)	-6.0	-6.0	-4.2	-2.1	-1.1
Summer/Fall (kcfs)	-6.0	-4.1	-1.7	-0.4	0.0
Season Length (Months)	8-23 days	8	8	8	8
Reservoir Unbalancing (ft)					
Fort Peck	0	0	+4.2	0	-4.2
Garrison	0	0	-3.0	+3.0	0
Oahe	0	0	0	-3.0	+3.0
Dec 31 Storage (MAF)	46.3	49.4	51.3	52.2	52.9
Winter Release (kcfs)	12.5	12.5	12.5	12.9	14.0
LOWER QUARTILE					
Spring Pulse					
March (kcfs)	0	5.0	0	5.0	5.0
May (kcfs)	0	0	9.1	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)	8-40 days	8-30 days	8-30days	8-30 days	8-30 days
Reservoir Unbalancing (ft)					
Fort Peck	0	0	0	0	0
Garrison	0	0	0	0	0
Oahe	0	0	0	0	0
Dec 31 Storage (MAF)	37.1	38.6	40.3	42.0	44.4
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	-6.0	-6.0	N/A	-6.0
Summer/Fall (kcfs)	-6.0	-6.0	-6.0	N/A	-6.0
Season Length (Months)	6	6	6	0	8-54
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)	31.1	30.3	30.2	35.1	35.3
Winter Release (kcfs)	12.5	12.5	12.5	12.5	12.5

Table VIII							
Median Extension Studies - Criteria Considered in the Modeling Process							
Study Number			**9**	**10**	**11**	**12**	**13**
	Units	**Criteria**	**2009-2010**	**2010-2011**	**2011-2012**	**2012-2013**	**2013-2014**
March 1 Storage	**MAF**	**Initially 36.5/40**	41.859	46.538	49.665	51.520	52.487
March Spring Pulse?	**N/A**		Yes	Yes	Yes	Yes	Yes
March 15 Storage	**MAF**	**31/49/54.5**	42.841	47.544	50.681	52.533	53.514
Service Level	**N/A or kcfs**	**No Sea/Min/Full Thresholds**	Minimum	Minimum	Full -4.2	Full -2.1	Full -1.1
3rd Period March GP Q	**kcfs**		22.9	22.9	24.7	26.8	27.8
April Gavins Point Q	**kcfs**		20.7	20.7	22.5	24.6	25.6
May 1 Storage	**MAF**	**40**	44.355	49.049	52.043	53.700	54.589
May Spring Pulse?	**N/A**		Yes	Yes	Yes	Yes	Yes
Pulse Magnitude	**kcfs**		13.20	14.50	15.31	15.79	16.00
Gavins Point Cycling Qs	**kcfs**		22.0/25.0	23.9/26.9	26.3/29.3	27.6/30.6	28.0/31.0
May Gavins Point Q	**kcfs**		25.6	27.7	30.4	31.7	32.1
June Gavins Point Q	**kcfs**		25.0	26.9	29.3	30.6	31.0
July 1 Storage	**MAF**	**50.5/57**	47.968	52.501	55.153	56.596	57.354
Service Level	**N/A**	**Min/Full Thresholds**	Minimum	Full -4.1	Full -1.7	Full -0.4	Full
July Gavins Point Q	**kcfs**		25.6	27.5	29.9	31.2	31.6
Aug Gavins Point Q	**kcfs**		27.2	29.1	31.5	32.8	33.2
Sept Gavins Point Q	**kcfs**		26.6	28.5	30.9	32.2	32.6
July 1 Storage	**MAF**	**36.5/41&46.8/51.5**	47.968	52.501	55.153	56.596	57.354
Season Length Shortening	**days**	**61/31&31/0 Thresholds**	23.0	0	0	0	0
Oct Gavins Point Q	**kcfs**		25.9	27.9	30.3	31.6	32.0
Nov 1-15 Gavins Point Q	**kcfs**		10.7	27.0	29.4	30.7	31.1
Nov last period/s Gavins Q	**kcfs**		9.0	16.0	17.2	18.6	18.6
September 1 Storage	**MAF**	**55/58**	47.459	51.702	54.004	55.256	55.969
Winter Gavins Point Q	**kcfs**	**12/17 Thresholds**	12.5	12.5	12.5	12.9	14.0
Feb 28 Storage	**MAF**		46.538	49.665	51.520	52.487	52.965
Ft. Peck Level 2/28/end of WY	**ft msl**		2218.5	2223.2	2230.3	2227.4	2224.0
Garrison Level 2/28/end of WY	**ft msl**		1824.5	1828.6	1827.9	1835.1	1832.4
Oahe Level 2/28/end of WY	**ft msl**		1594.2	1598.4	1600.9	1599.0	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	**N/A**		Yes	Yes	Yes	Yes	Yes
Garr Rise 3/31-6/30	**N/A**		Yes	Yes	Yes	Yes	Yes
Oahe Rise 3/31-6/30	**N/A**		Yes	Yes	Yes	Yes	Yes
Special Information	**N/A**					Peck Mini T	Peck Full T

Table IX							
Lower Quartile Extension Studies - Criteria Considered in the Modeling Process							
Study Number			**14**	**15**	**16**	**17**	**18**
	Units	**Criteria**	**2009-2010**	**2010-2011**	**2011-2012**	**2012-2013**	**2013-2014**
March 1 Storage	**MAF**	**Initially 36.5/40**	35.506	37.146	38.659	40.387	42.058
March Spring Pulse?	**N/A**		No	Yes	No	Yes	Yes
March 15 Storage	**MAF**	**31/49/54.5**	36.334	38.012	39.551	41.280	43.016
Service Level	**N/A or kcfs**	**No Sea/Min/Full Thresholds**	Minimum	Minimum	Minimum	Minimum	Minimum
3rd Period March GP Q	**kcfs**		23.8	26.0	23.8	26.0	26.0
April Gavins Point Q	**kcfs**		23.8	23.8	23.8	23.8	23.8
May 1 Storage	**MAF**	**40**	37.029	38.82	40.468	42.156	44.004
May Spring Pulse?	**N/A**		No	No	Yes	Yes	Yes
Pulse Magnitude	**kcfs**		0	0	9.10	9.45	9.83
Gavins Point Cycling Qs	**kcfs**		25/28	25/28	25/28	25/28	25/28
May Gavins Point Q	**kcfs**		26.2	26.2	27.5	27.6	27.7
June Gavins Point Q	**kcfs**		28.0	28.0	28.0	28.0	28.0
July 1 Storage	**MAF**	**50.5/57**	39.577	41.408	43.069	44.798	46.971
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**		28.0	28.0	28.0	28.0	28.0
Sept Gavins Point Q	**kcfs**		27.5	27.5	27.5	27.5	27.5
July 1 Storage	**MAF**	**36.5/41&46.8/51.5**	39.577	41.408	43.069	44.798	46.971
Season Length Shortening	**days**	**61/31&31/0 Thresholds**	40	30	30	30	29
Oct Gavins Point Q	**kcfs**		18.1	23.9	23.9	23.9	24.5
Nov 1-15 Gavins Point Q	**kcfs**		9.0	9.0	9.0	9.0	9.0
Nov last period/s Gavins Q	**kcfs**		9.0	9.0	9.0	9.0	9.0
September 1 Storage	**MAF**	**55/58**	38.315	40.146	41.844	43.500	45.795
Winter Gavins Point Q	**kcfs**	**12/17 Thresholds**	12.5	12.5	12.5	12.5	12.5
Feb 28 Storage	**MAF**		37.146	38.659	40.387	42.058	44.506
Ft. Peck Level 2/28/end of WY	**ft msl**		2201.7	2204.5	2207.7	2210.6	2214.8
Garrison Level 2/28/end of WY	**ft msl**		1810.9	1813.2	1815.8	1818.3	1821.7
Oahe Level 2/28/end of WY	**ft msl**		1579.8	1582.3	1585.1	1587.7	1591.3
Balance/Unbalance	**N/A**	**Bal <2227/1827/1600 ft msl**	Balance	Balance	Balance	Balance	Balance
Peck Rise 3/31-6/30	**N/A**		Yes	Yes	Yes	Yes	Yes
Garr Rise 3/31-6/30	**N/A**		Yes	Yes	Yes	Yes	Yes
Oahe Rise 3/31-6/30	**N/A**		Yes	Yes	Yes	Yes	Yes
Special Information	**N/A**						

Table X							
Lower Decile Extension Studies - Criteria Considered in the Modeling Process							
Study Number			**19**	**20**	**21**	**22**	**23**
	Units	**Criteria**	**2009-2010**	**2010-2011**	**2011-2012**	**2012-2013**	**2013-2014**
March 1 Storage	**MAF**	**Initially 36.5/40**	32.384	30.938	30.265	30.129	35.117
March Spring Pulse?	**N/A**		No	No	No	No	No
March 15 Storage	**MAF**	**31/49/54.5**	33.004	31.623	31.002	30.970	35.858
Service Level	**N/A or kcfs**	**No Sea/Min/Full Thresholds**	Minimum	Minimum	Minimum	No Season	Minimum
3rd Period March GP Q	**kcfs**		23.8	23.8	23.8	9.0	23.8
April Gavins Point Q	**kcfs**		23.8	23.8	23.8	9.0	23.8
May 1 Storage	**MAF**	**40**	33.354	32.148	31.620	33.013	36.643
May Spring Pulse?	**N/A**		No	No	No	No	No
Pulse Magnitude	**kcfs**		0	0	0	0	0
Gavins Point Cycling Qs	**kcfs**		25/28	25/28	25/28	9 to 18	25/28
May Gavins Point Q	**kcfs**		26.2	26.2	26.2	15.0	26.2
June Gavins Point Q	**kcfs**		28.0	28.0	28.0	18.0	28.0
July 1 Storage	**MAF**	**50.5/57**	34.286	32.275	32.615	35.539	37.934
Service Level	**N/A**	**Min/Full Thresholds**	Minimum	Minimum	Minimum	No Season	Minimum
July Gavins Point Q	**kcfs**		28.3	28.3	28.3	18	28.3
Aug Gavins Point Q	**kcfs**		28	28	28	18	28
Sept Gavins Point Q	**kcfs**		24.2	24.2	24.2	12	27.5
July 1 Storage	**MAF**	**36.5/41&46.8/51.5**	34.286	32.275	32.615	35.539	37.934
Season Length Shortening	**days**	**61/31&31/0 Thresholds**	61	61	61	No Season	54
Oct Gavins Point Q	**kcfs**		9.0	9.0	9.0	9.0	11.6
Nov 1-15 Gavins Point Q	**kcfs**		9.0	9.0	9.0	9.0	9.0
Nov last period/s Gavins Q	**kcfs**		9.0	9.0	9.0	9.0	9.0
September 1 Storage	**MAF**	**55/58**	32.041	30.935	30.691	34.898	36.072
Winter Gavins Point Q	**kcfs**	**12/17 Thresholds**	12.5	12.5	12.5	12.5	12.5
Feb 28 Storage	**MAF**		30.938	30.265	30.129	35.117	35.296
Ft. Peck Level 2/28/end of WY	**ft msl**		2189.2	2187.7	2187.4	2197.9	2198.2
Garrison Level 2/28/end of WY	**ft msl**		1800.3	1799.1	1798.8	1807.6	1807.9
Oahe Level 2/28/end of WY	**ft msl**		1568.3	1566.9	1566.6	1576.2	1576.6
Balance/Unbalance	**N/A**	**Bal <2227/1827/1600 ft msl**	Balance	Balance	Balance	Balance	Balance
Peck Rise 3/31-6/30	**N/A**		Yes	Yes	Yes	Yes	Yes
Garr Rise 3/31-6/30	**N/A**		No	Yes	No	Yes	Yes
Oahe Rise 3/31-6/30	**N/A**		Yes	No	Yes	Yes	Yes
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, 2009 is 35.5 MAF and rises to 44.5 MAF by March 1, 2014, with navigation service levels remaining at minimum service during the simulation period. The navigation season is shortened 40 days in 2009, 30 days in 2010 through 2012, and 29 days in 2013 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, in May 2011, and in both March and May 2012 and 2013. The magnitude of these three 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 unbalancing criteria in ***Plate 3*** 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 32.4 MAF on March 1, 2009, reaching a low of 29.9 MAF on October 1, 2011, and then rising through much of the remainder of the period, ending at 35.3 MAF on March 1, 2014. Since the System storage is only 30.97 MAF (less than 31.0 MAF) on March 15, 2012, there would be no navigation season in 2012 under the Lower Decile runoff extensions. The Gavins Point releases were modeled at 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 help 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 (2009, 2010, 2011, and 2013), the navigation service level remains at minimum service and the navigation season is shortened 2 months in 2009 through 2011 and 54 days in 2013. 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 14 presents System storage, Gavins Point releases, and System peaking capability for Median, Lower Quartile, and Lower Decile runoff for the period 2009 through February 2014. Peak power, or peaking capability, is the amount of power available when all powerplants are operating at maximum.

Plate 15 presents reservoir pool elevations for Fort Peck, Garrison, Oahe, and Fort Randall for Median, Lower Quartile, and Lower Decile runoff for the period 2009 through February 2014.

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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)	1,087	2,318	2,717
55	Initial generation, first and last unit	July 1943 - June 1961	January 1956 - October 1960	April 1962 - June 1963
56	Estimated cost September 1999 completed project (13)	$158,428,000	$305,274,000	$346,521,000

Summary of Engineering Data -- Missouri River Mainstem System

Big Bend Dam - Lake Sharpe	Fort Randall Dam - Lake Francis Case	Gavins Point Dam - Lewis & Clark Lake	Total	Item No.	Remarks
21 miles upstream Chamberlain, SD	Near Lake Andes, SD	Near Yankton, SD		1	(1) Includes 4,280 square miles of non-contributing areas.
Mile 987.4	Mile 880.0	Mile 811.1		2	
249,330 (1) 5,840	263,480 (1) 14,150	279,480 (1) 16,000		3	(2) Includes 1,350 square miles of non-contributing areas.
80, ending near Pierre, SD	107, ending at Big Bend Dam	25, ending near Niobrara, NE	755 miles	4	
200 (elevation 1420)	540 (elevation 1350)	90 (elevation 1204.5)	5,940 miles	5	(3) With pool at base of flood control.
28,900	30,000 1,100	32,000 2,000		6	
440,000 (April 1952)	447,000 (April 1952)	480,000 (April 1952)		7	(4) Storage first available for regulation of flows.
1959	1946	1952		8	(5) Damming height is height from low water to maximum operating pool. Maximum height is from average streambed to top of dam.
1964	1953	1955		9	
1440	1395	1234		10	
10,570 (including spillway)	10,700 (including spillway)	8,700 (including spillway)	71,596	11	(6) Based on latest available storage data.
78	140	45	863 feet	12	
95	165	74		13	(7) River regulation is attained by flows over low-crested spillway and through turbines.
1200, 700	4300, 1250	850, 450		14	
Pierre shale & Niobrara chalk	Niobrara chalk	Niobrara chalk & Carlile shale		15	(8) Length from upstream face of outlet or to spiral case.
Rolled earth, shale, chalk fill	Rolled earth fill & chalk berms	Rolled earth & chalk fill		16	
17,000,000	28,000,000 & 22,000,000	7,000,000	358,128,000 cu. yds	17	(9) Based on 8th year (1961) of drought drawdown (From study 8-83-1985).
540,000	961,000	308,000	5,554,000 cu. yds.	18	
24 July 1963	20 July 1952	31 July 1955		19	
Left bank - adjacent	Left bank - adjacent	Right bank - adjacent		20	(10) Affected by level of Lake Francis case. Applicable to pool at elevation 1350.
1385	1346	1180		21	
376 gated	1000 gated	664 gated		22	(11) Spillway crest.
8 - 40' x 38' Tainter	21 - 40' x 29' Tainter	14 - 40' x 30' Tainter		23	(12) 1967-2006 Average
390,000 at elev 1433.6	620,000 at elev 1379.3	584,000 at elev 1221.4		24	(13) Source: Annual Report on Civil Works Activities of the Corps of Engineers. Extract Report Fiscal Year 1999.
270,000	508,000	345,000		25	
1423 msl 61,000 acres	1375 msl 102,000 acres	1210 msl 31,000 acres	1,194,000 acres	26	(14) Based on Study 8-83-1985
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	2,501,200 kw	52	
497,000	293,000	74,000	1,967,000 kw	53	Corps of Engineers, U.S. Army
1,001	1,778	740	9,642 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		January 2007

Plate 3
Summary of Master Manual Technical Criteria

NAVIGATION TARGET FLOWS

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

RELATION OF SYSTEM STORAGE TO NAVIGATION SERVICE LEVEL

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

RELATION OF SYSTEM STORAGE TO NAVIGATION SEASON LENGTH

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

GAVINS POINT RELEASES NEEDED TO MEET TARGET FLOWS

1950 to 1996 Data (kcfs)

Median, Upper Quartile, Upper Decile Runoff

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

Lower Quartile, Lower Decile Runoff

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

RESERVOIR UNBALANCING SCHEDULE

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

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

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

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

MRNRC RECOMMENDED RESERVOIR ELEVATION GUIDELINES FOR UNBALANCING

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

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

TECHNICAL CRITERIA FOR SPRING PULSES FROM GAVINS POINT DAM

Criteria Applicable to Both the March and May Spring Pulses

Flood Control Constraints	No change from current levels

Criteria Applicable to the March Spring Pulse

Drought Preclude	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

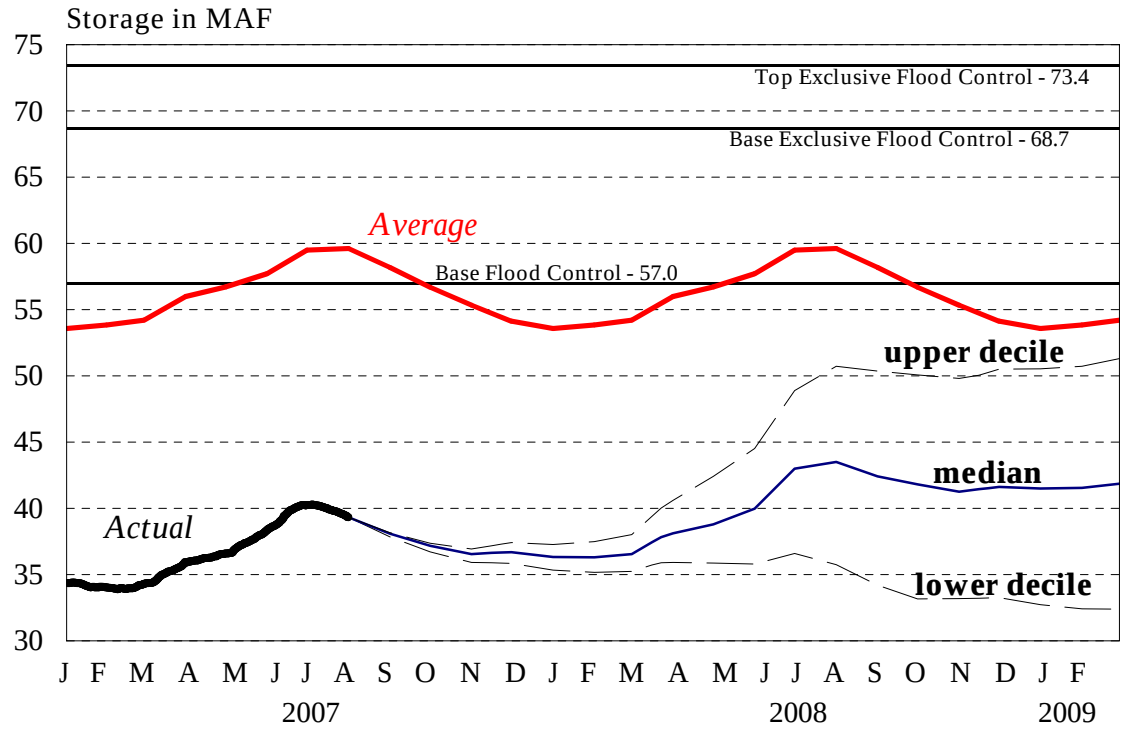
Drought Preclude	40.0 MAF or below measured on May 1.
Proration of Pulse Magnitude Based On System Storage*	Prorated from 16 kcfs based on a May 1 System Storage check; 100% at 54.5 MAF; straight line interpolation to 75% at 40.0 MAF.
Proration of Pulse Magnitude Based On Projected Runoff*	After the 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, the decision will be informed by the potential for 'take' of Threatened and Endangered bird species.
Rate of Rise before Peak	Approximately 6 kcfs per day.
Duration of Peak	Two days.
Rate of Fall after Peak	Approximately 30% drop over 2 days followed by a proportional reduction in releases back to the existing Master Manual criteria over an 8-day period.

Spring Pulse Downstream Flow Limits

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

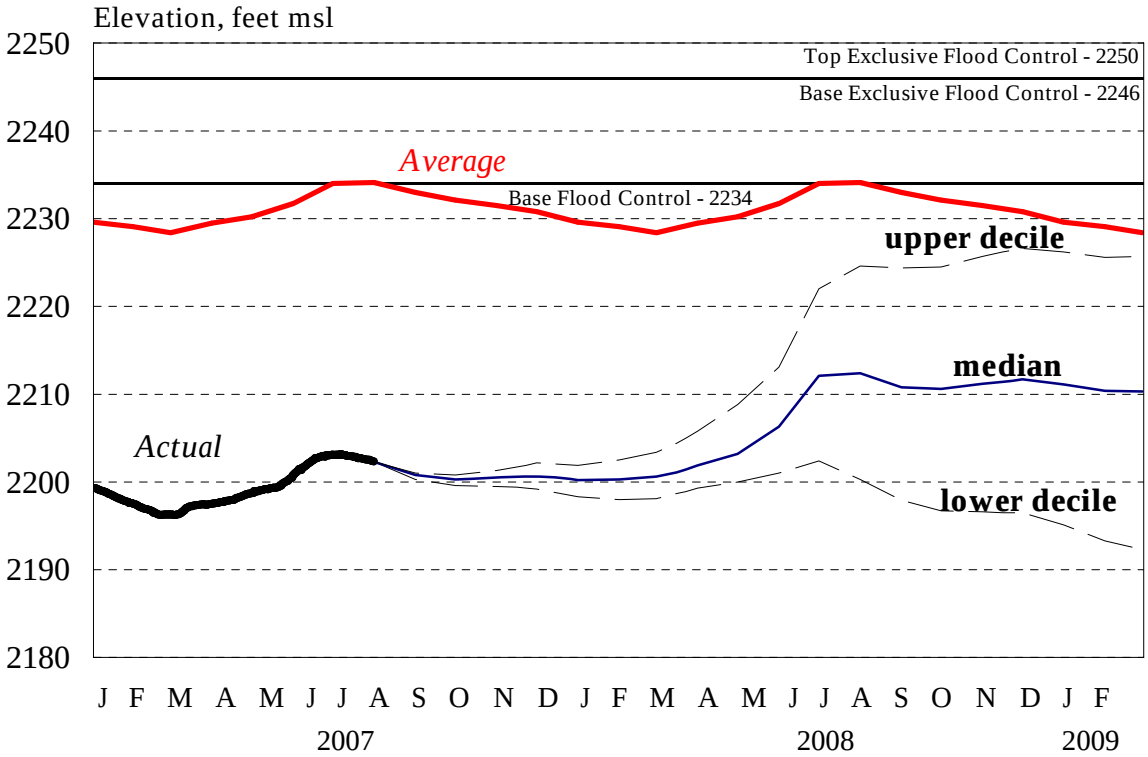
* Spring pulse magnitudes will be determined by taking the difference between pre-pulse Gavins Point releases and the peak pulse Missouri River flows measured just downstream of the mouth of the James River.

System Storage
2007-2008 AOP



Average: 1967-2006

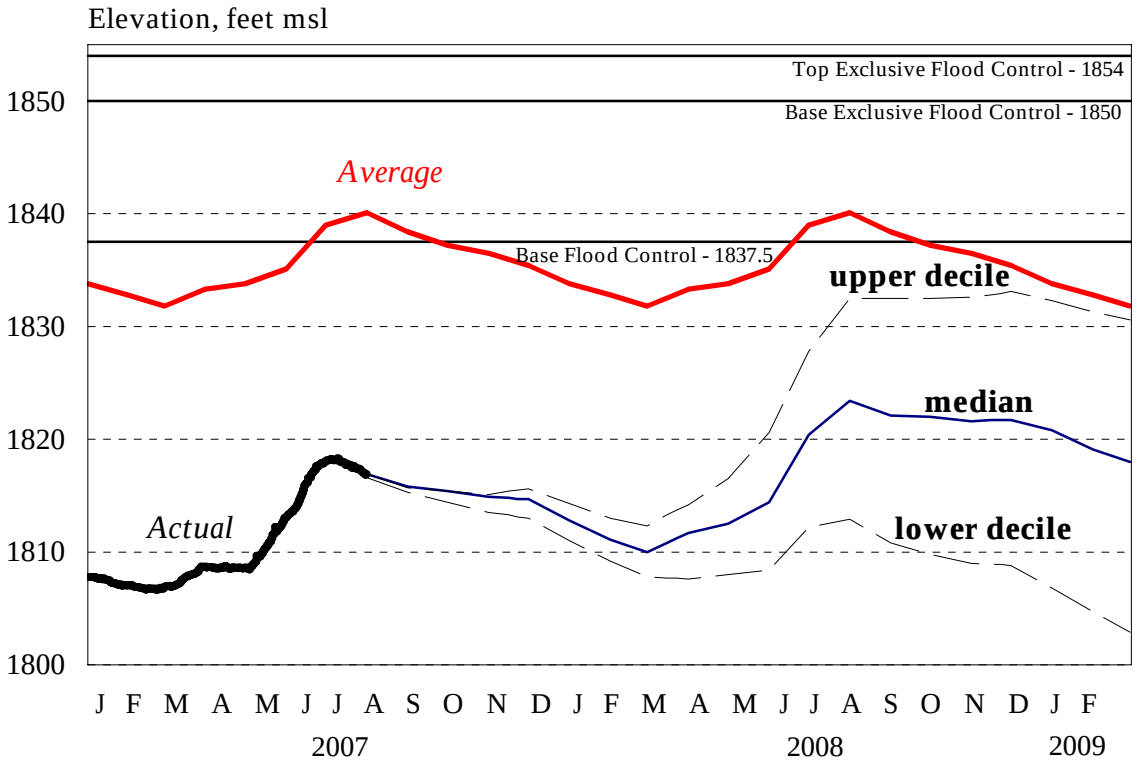
Fort Peck
2007-2008 AOP



Average: 1967-2006

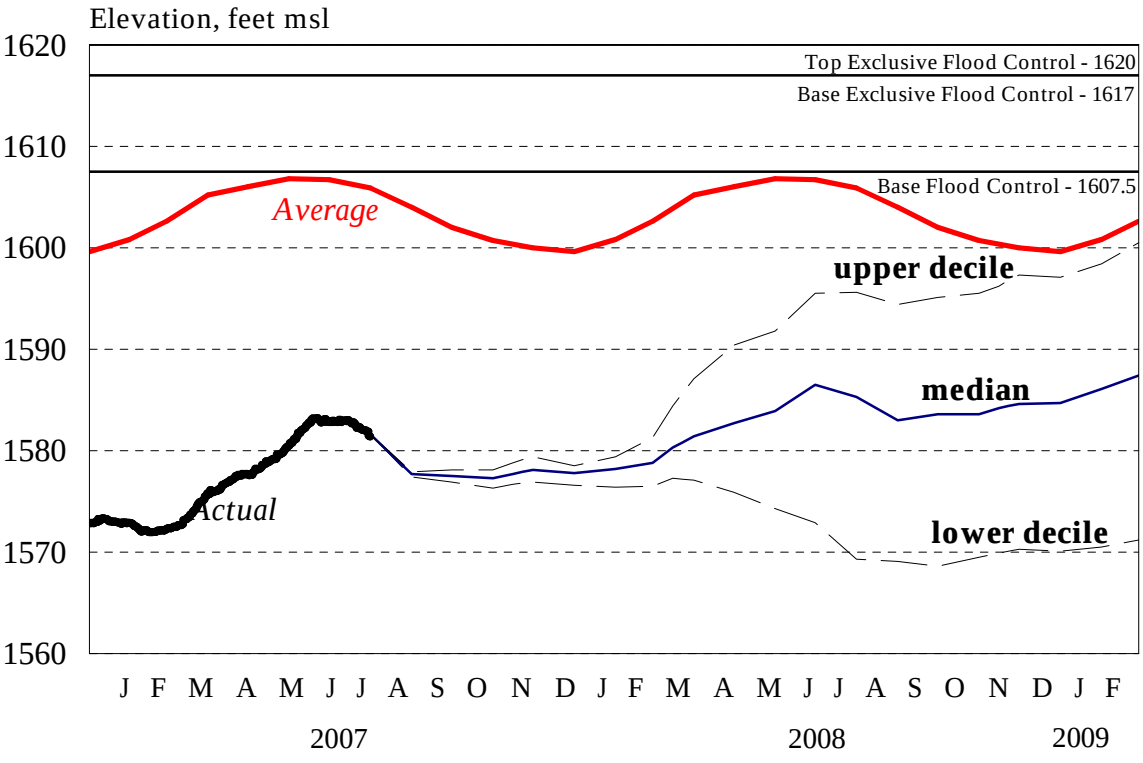
Plate 4

Garrison
2007-2008 AOP



Average: 1967-2006

Oahe
2007-2008 AOP



Average: 1967-2006

Plate 5

System Storage

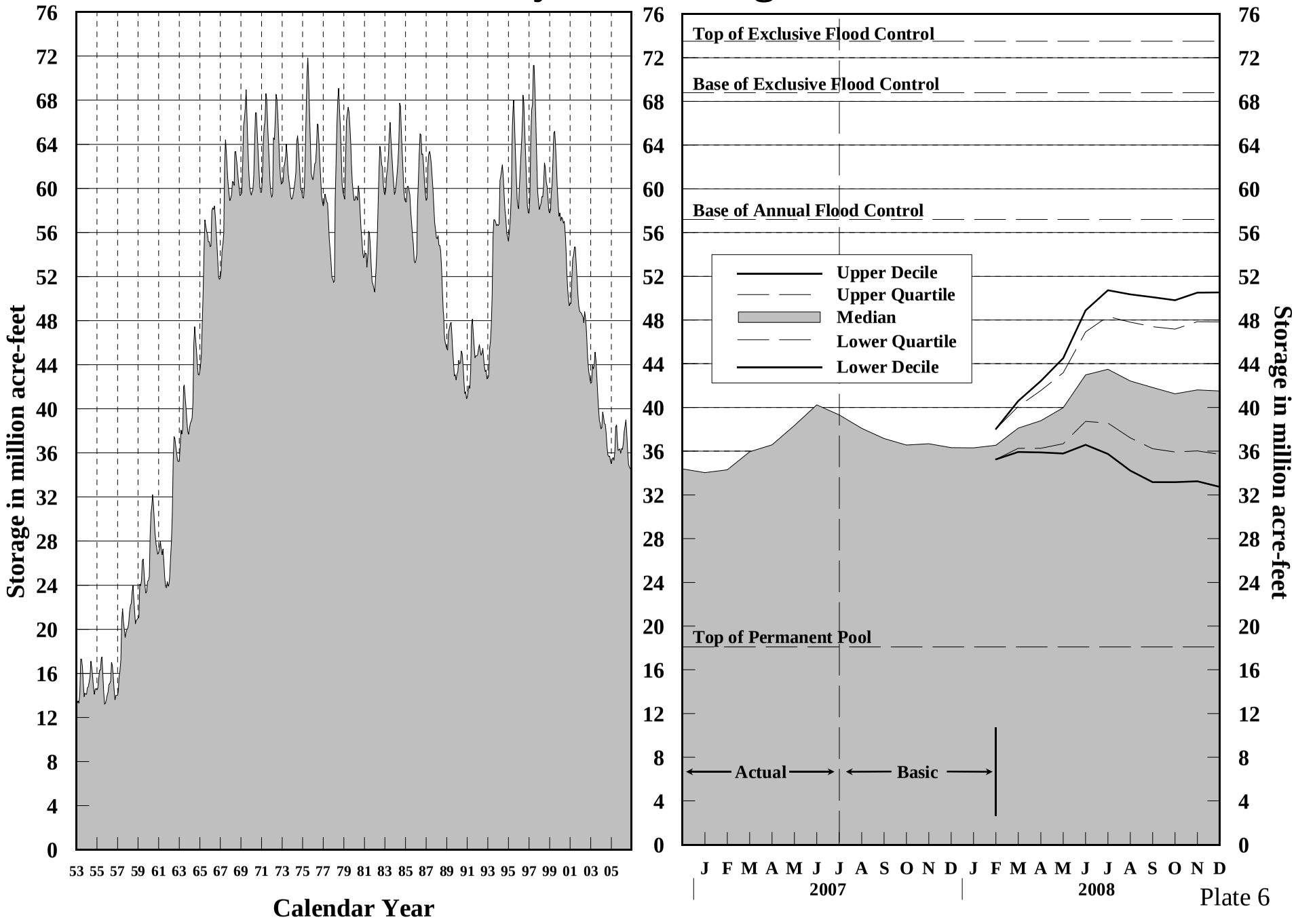


Plate 6

Gavins Point Releases

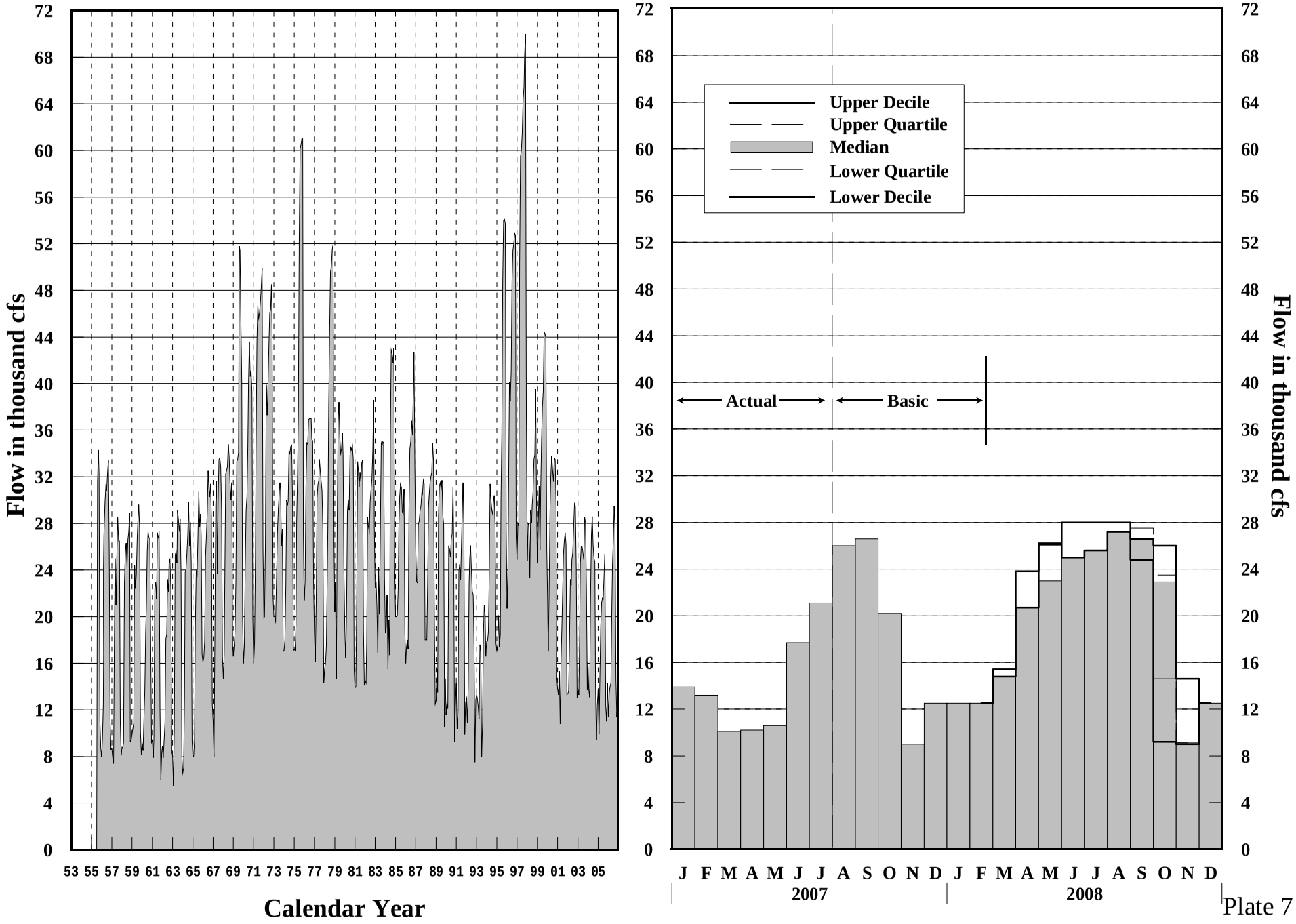
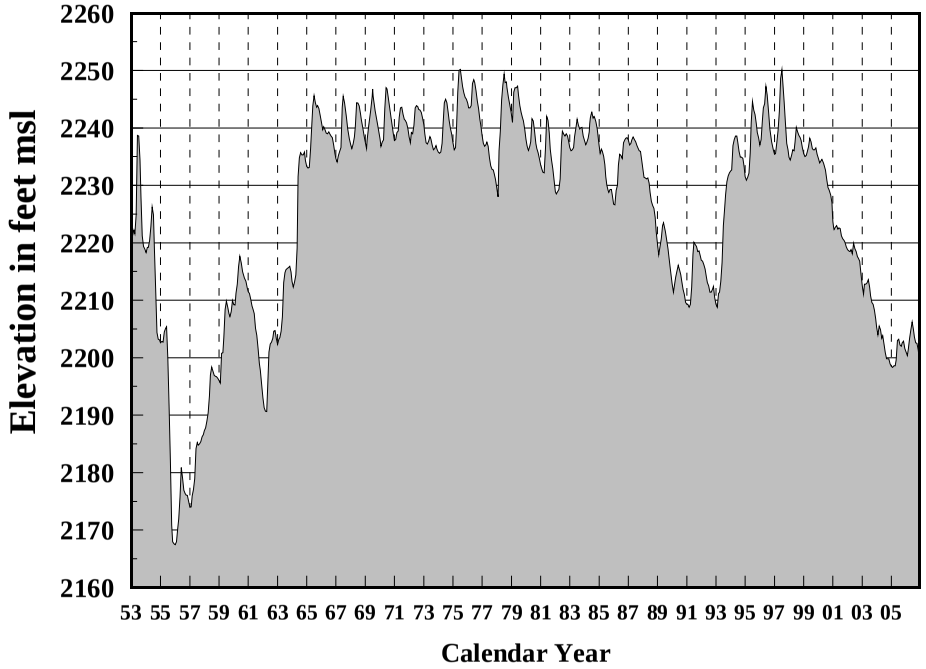
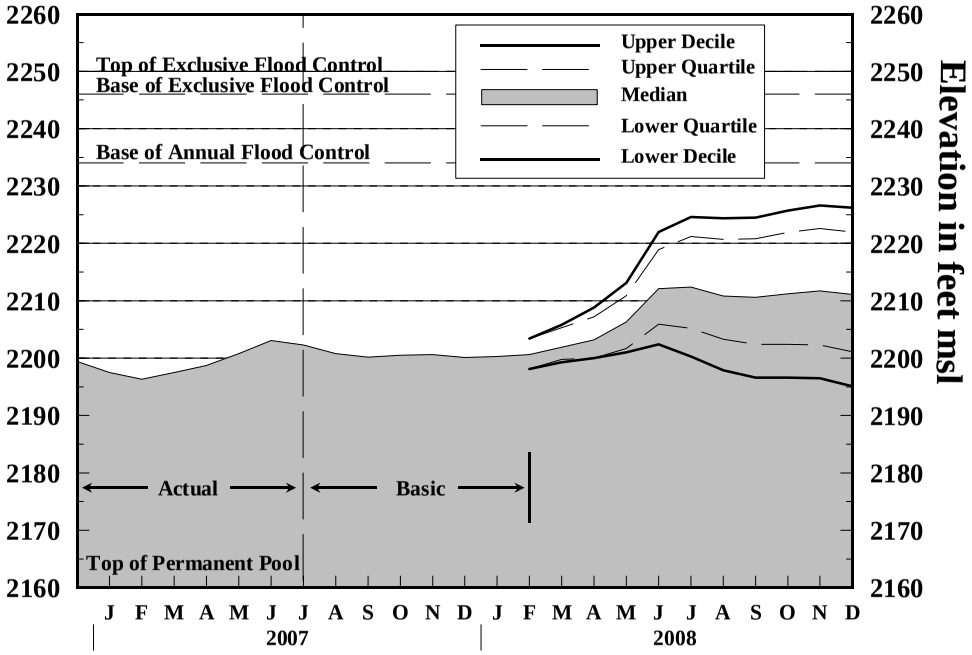
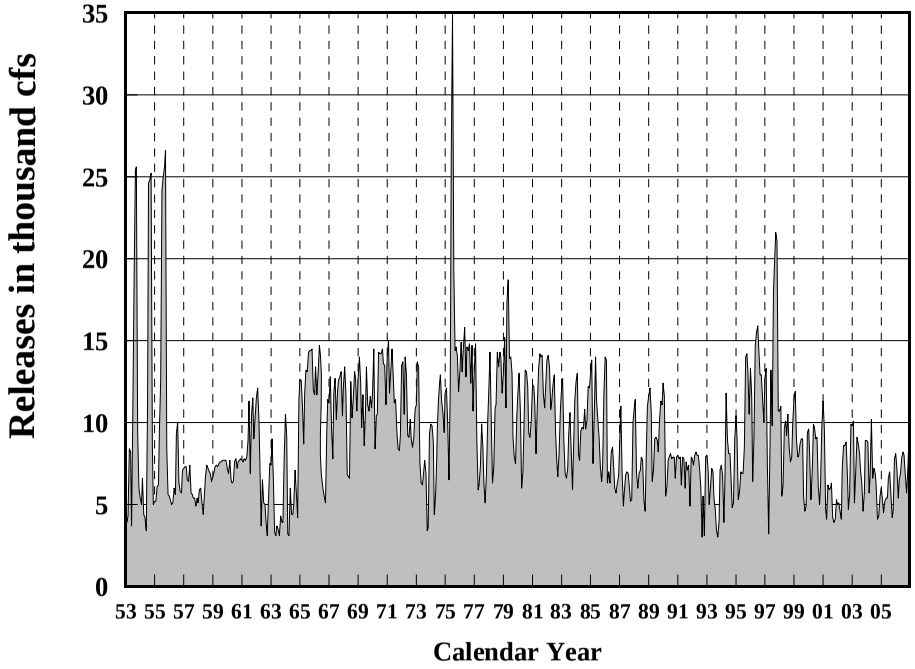


Plate 7

Fort Peck
Elevations and Releases







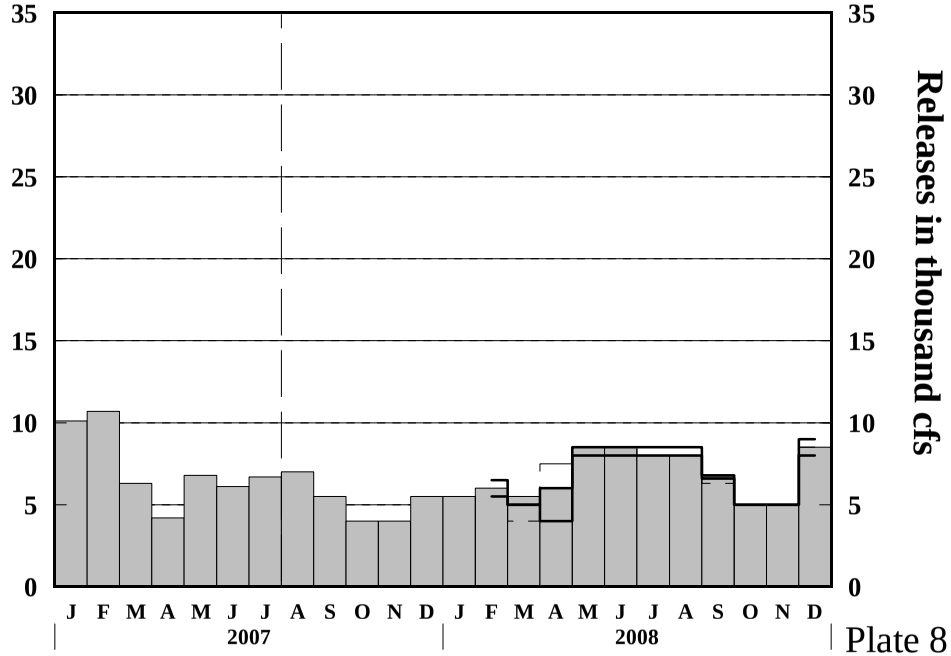
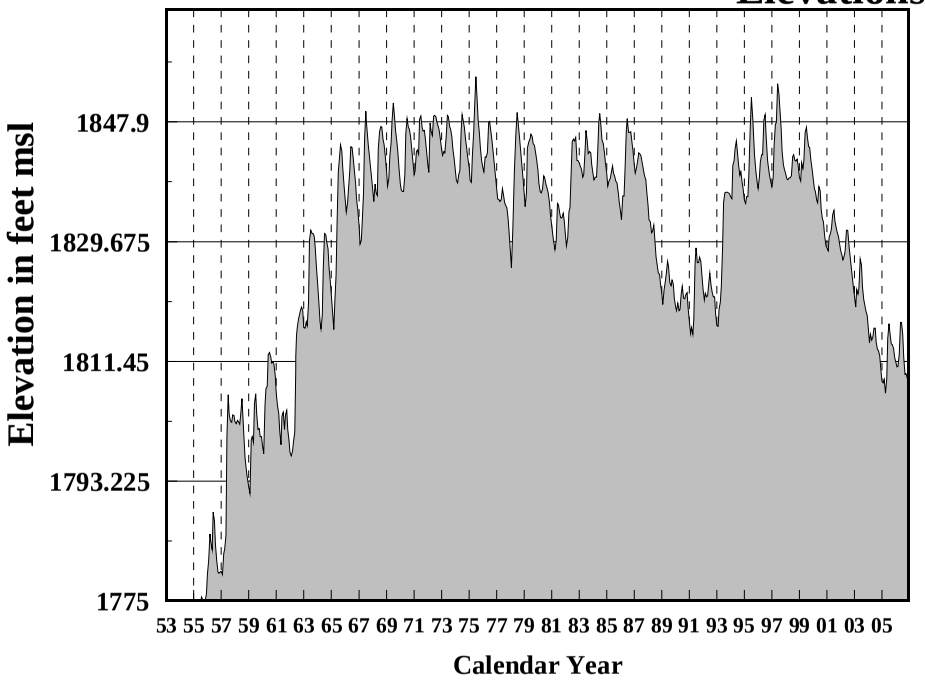
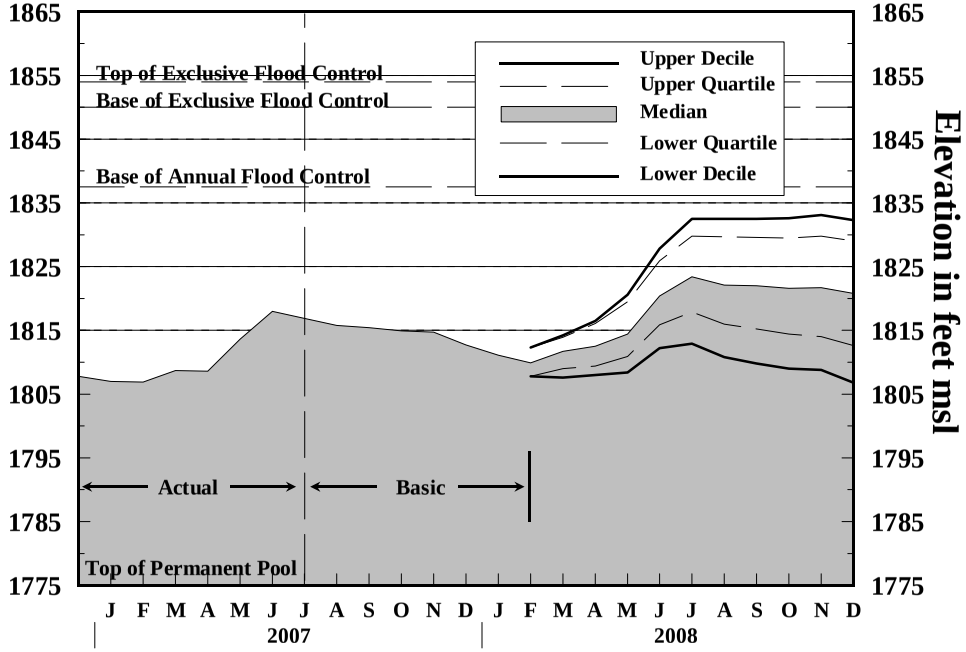


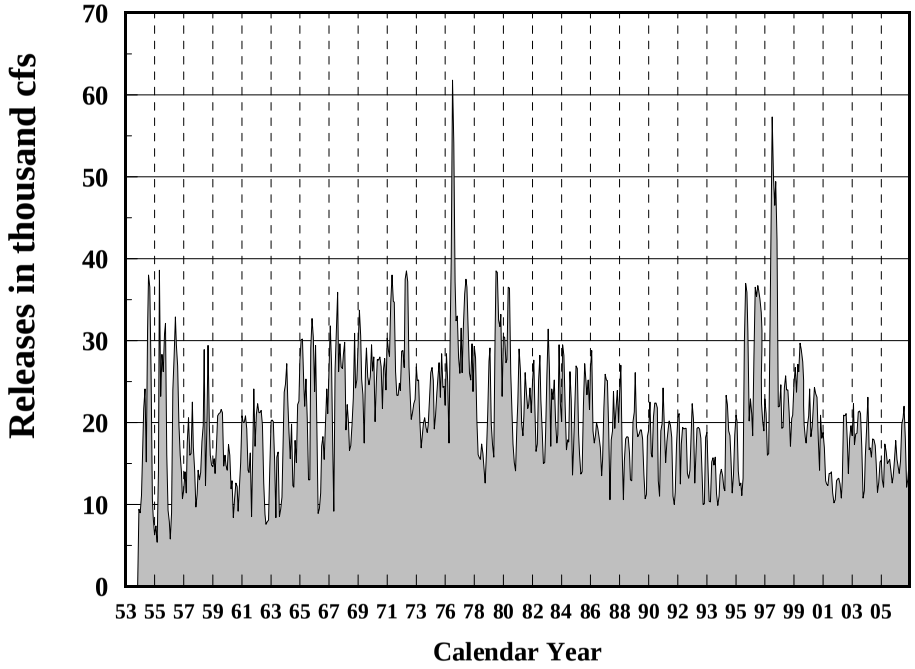
Plate 8

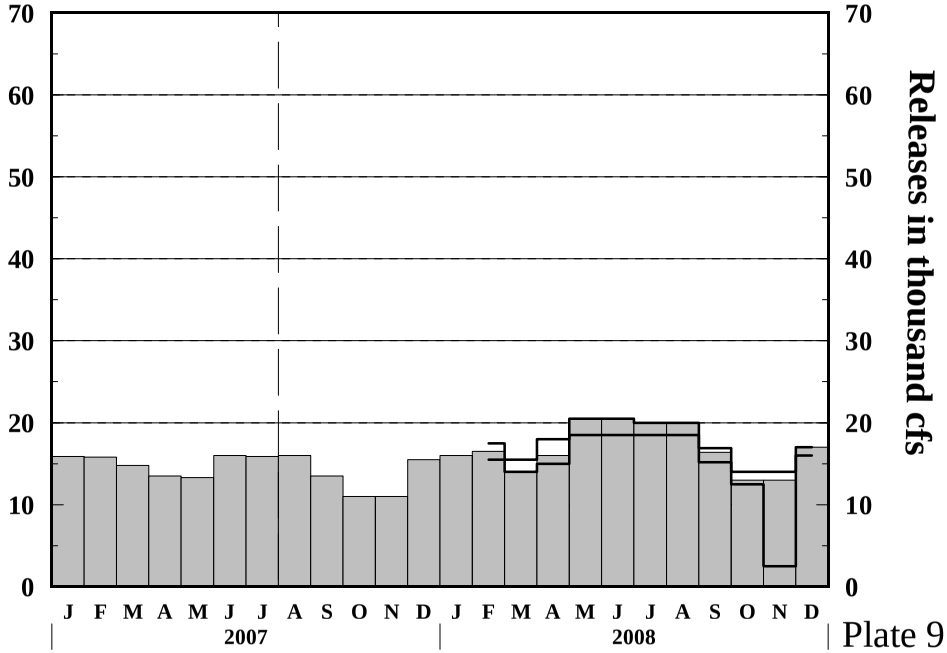
Garrison

Elevations and Releases



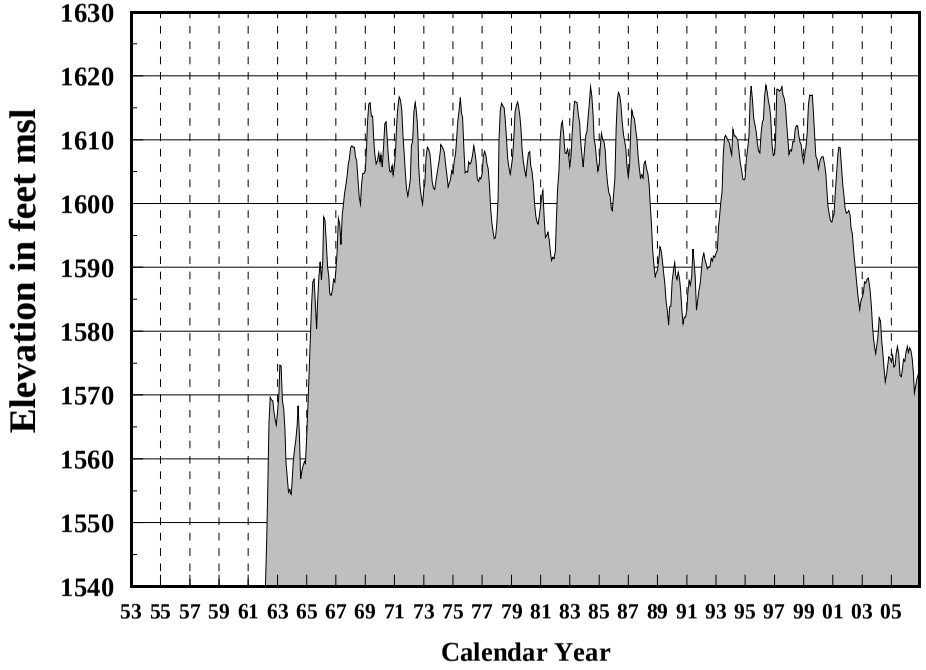


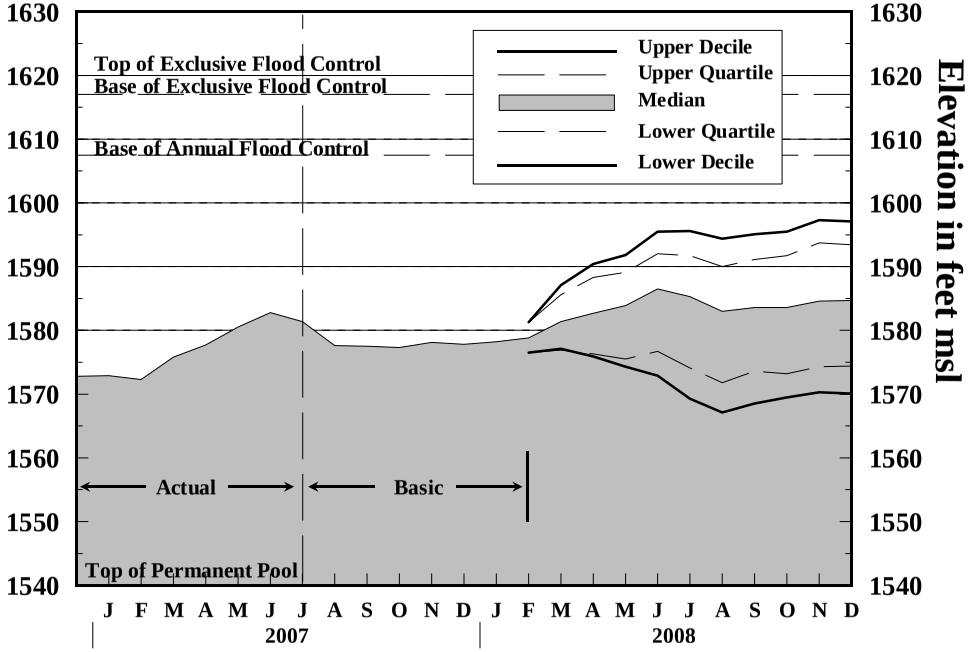


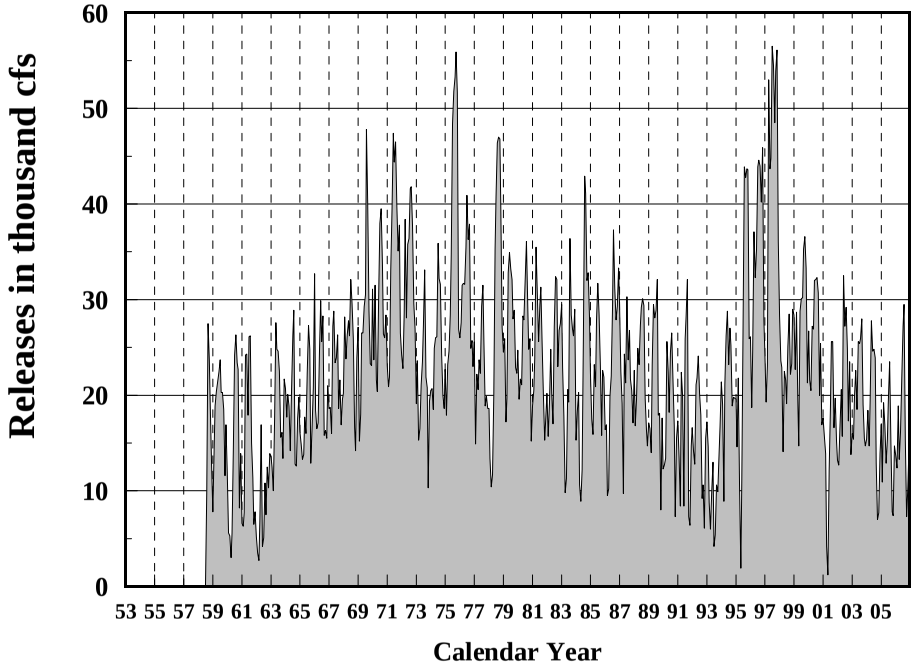


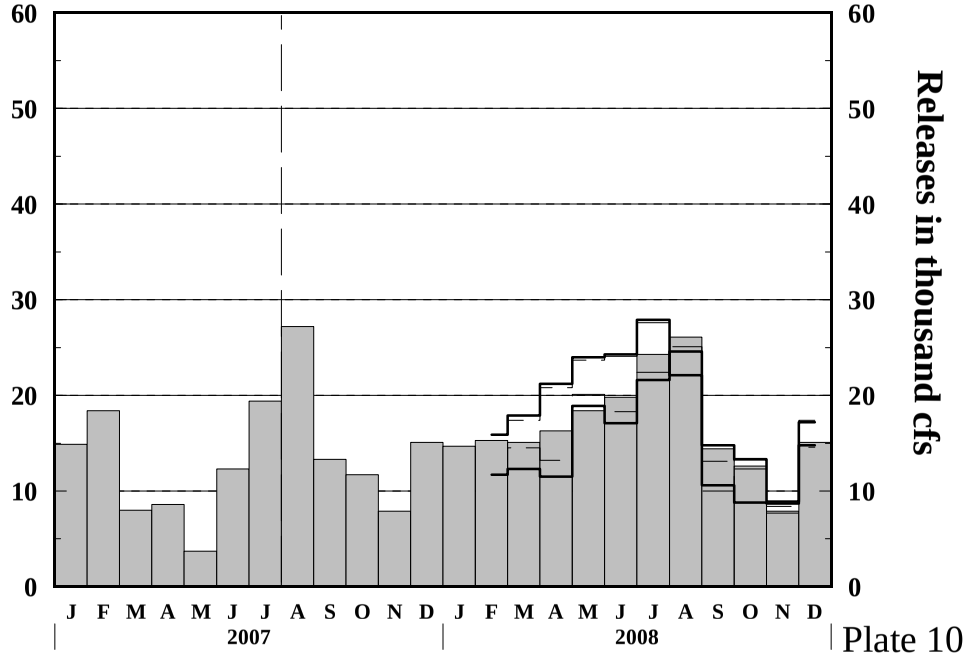
Oahe

Elevations and Releases

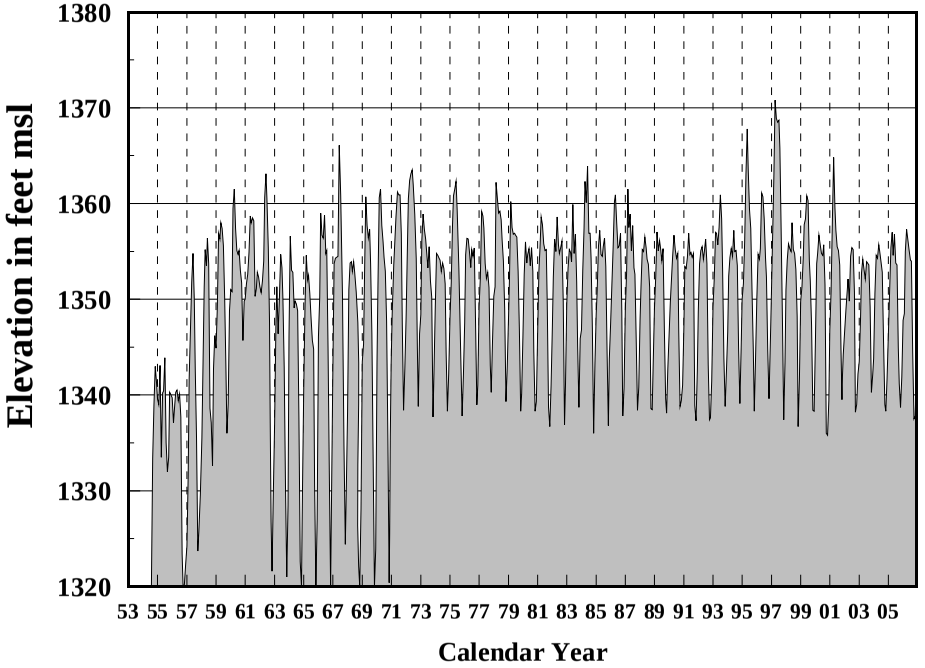


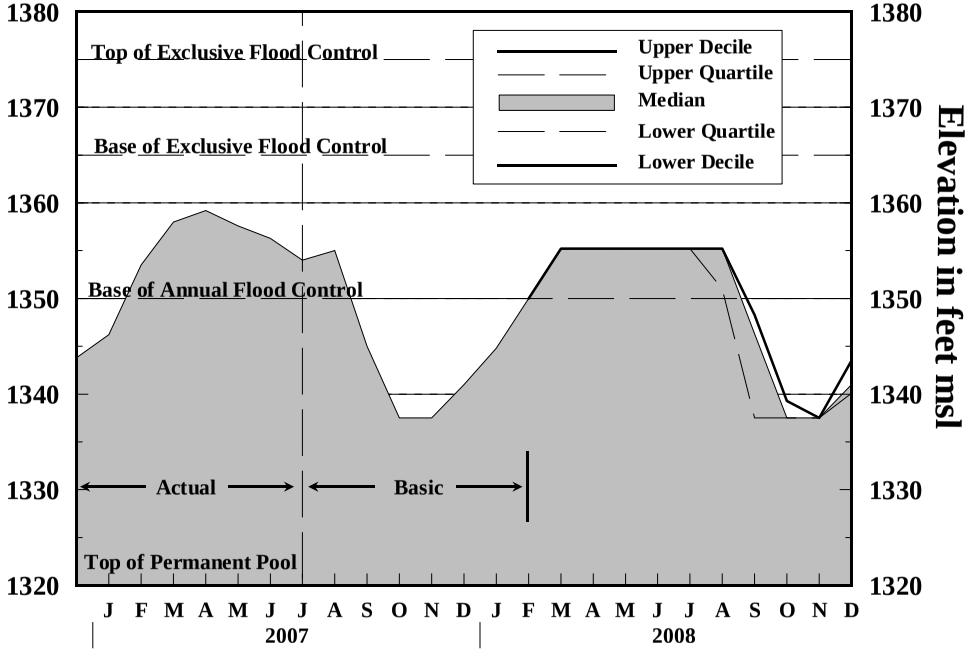


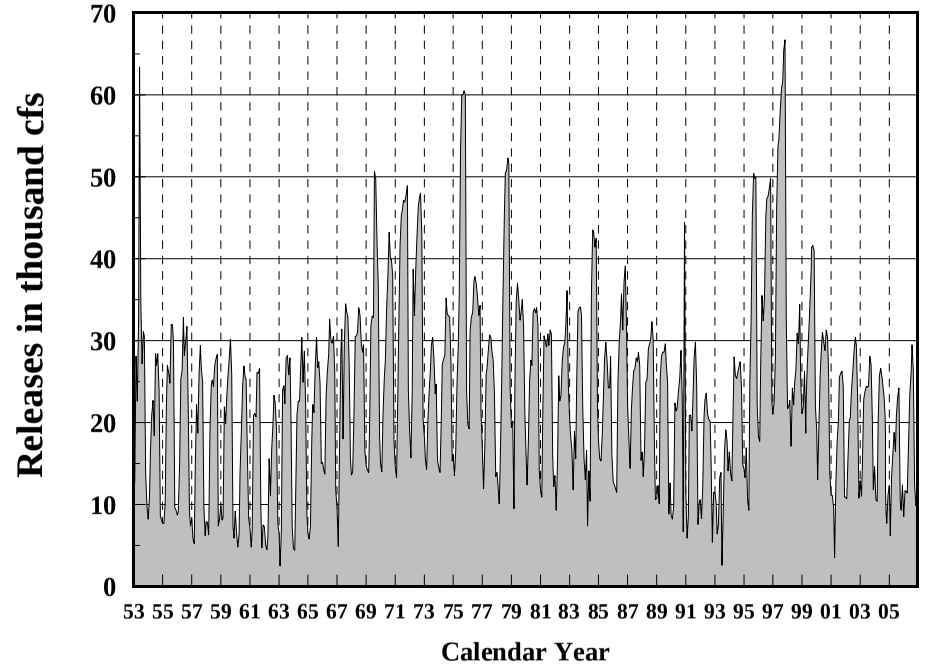




Fort Randall
Elevations and Releases







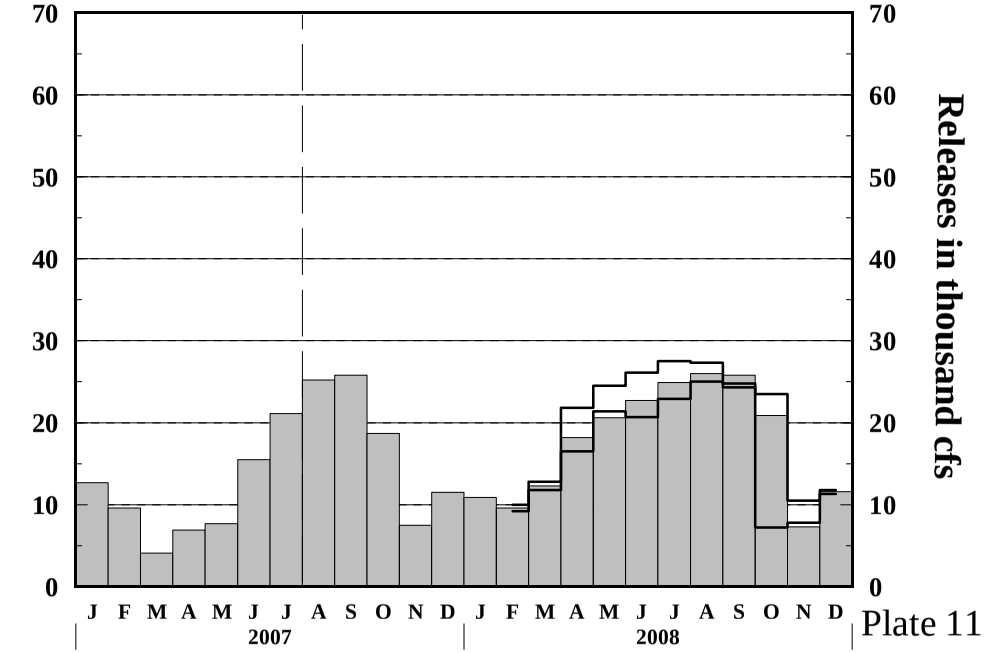
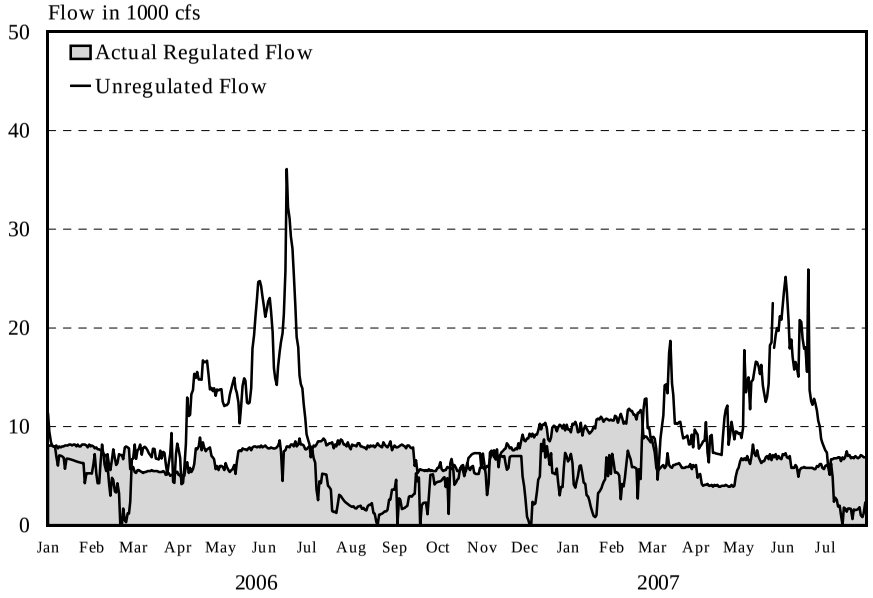


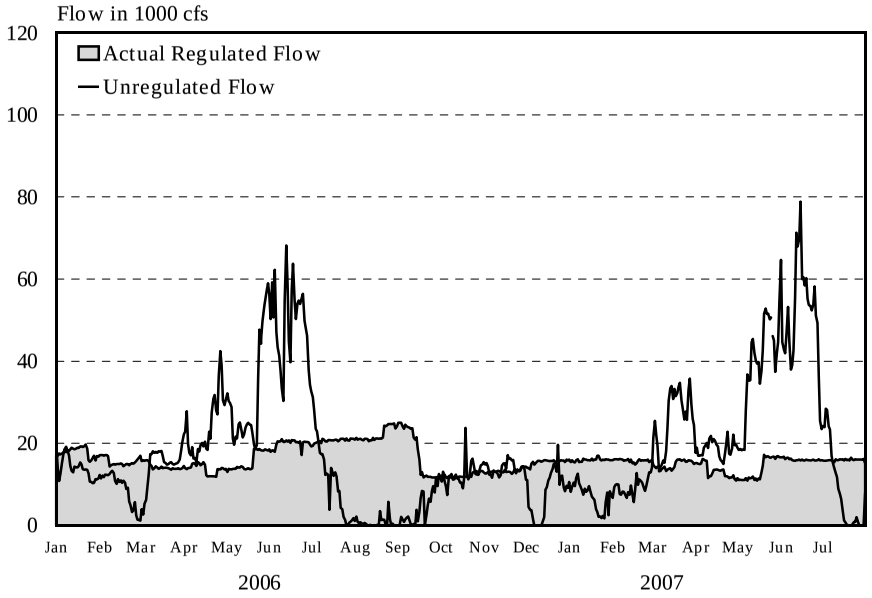
Plate 11

Reservoir Release and Unregulated Flow

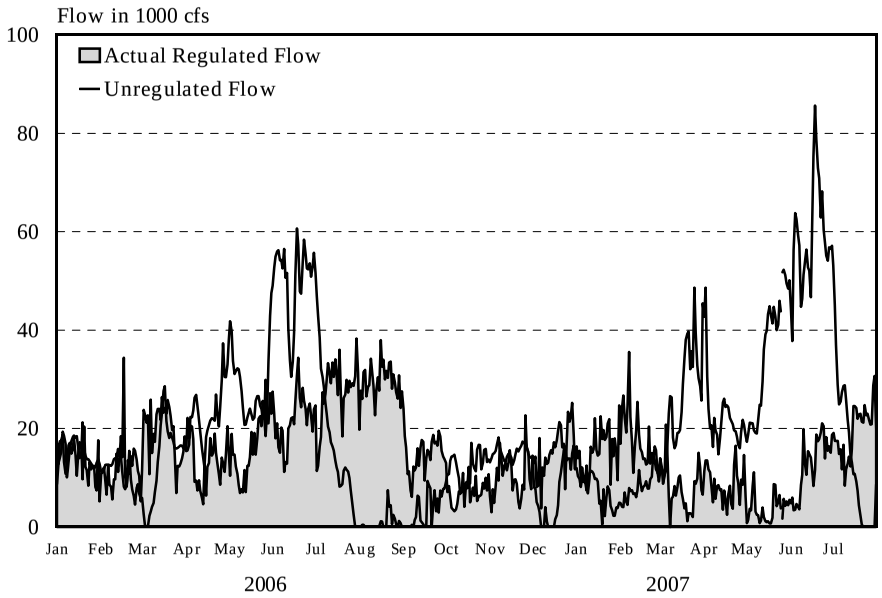
Fort Peck



Garrison



Oahe



Gavins Point

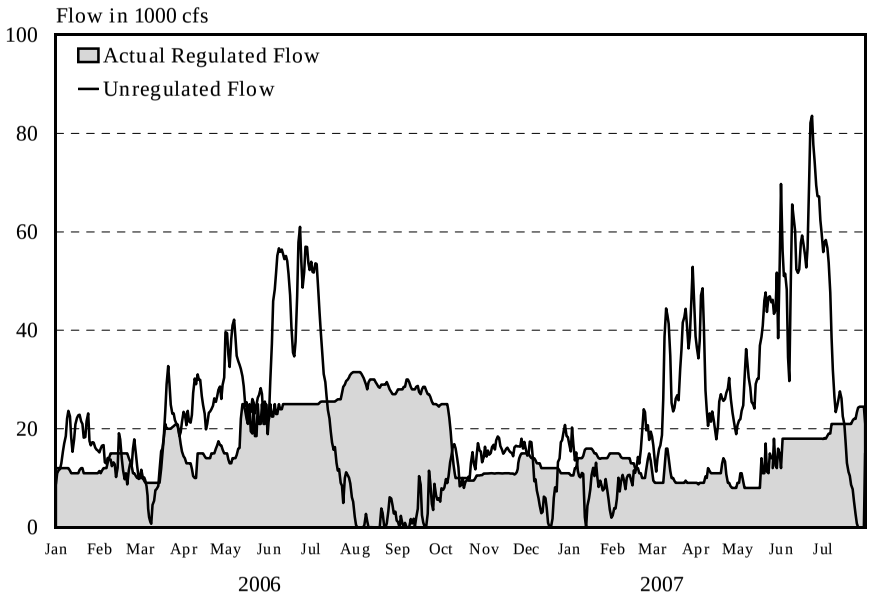


Plate 12

System Gross Capability and Average Monthly Generation

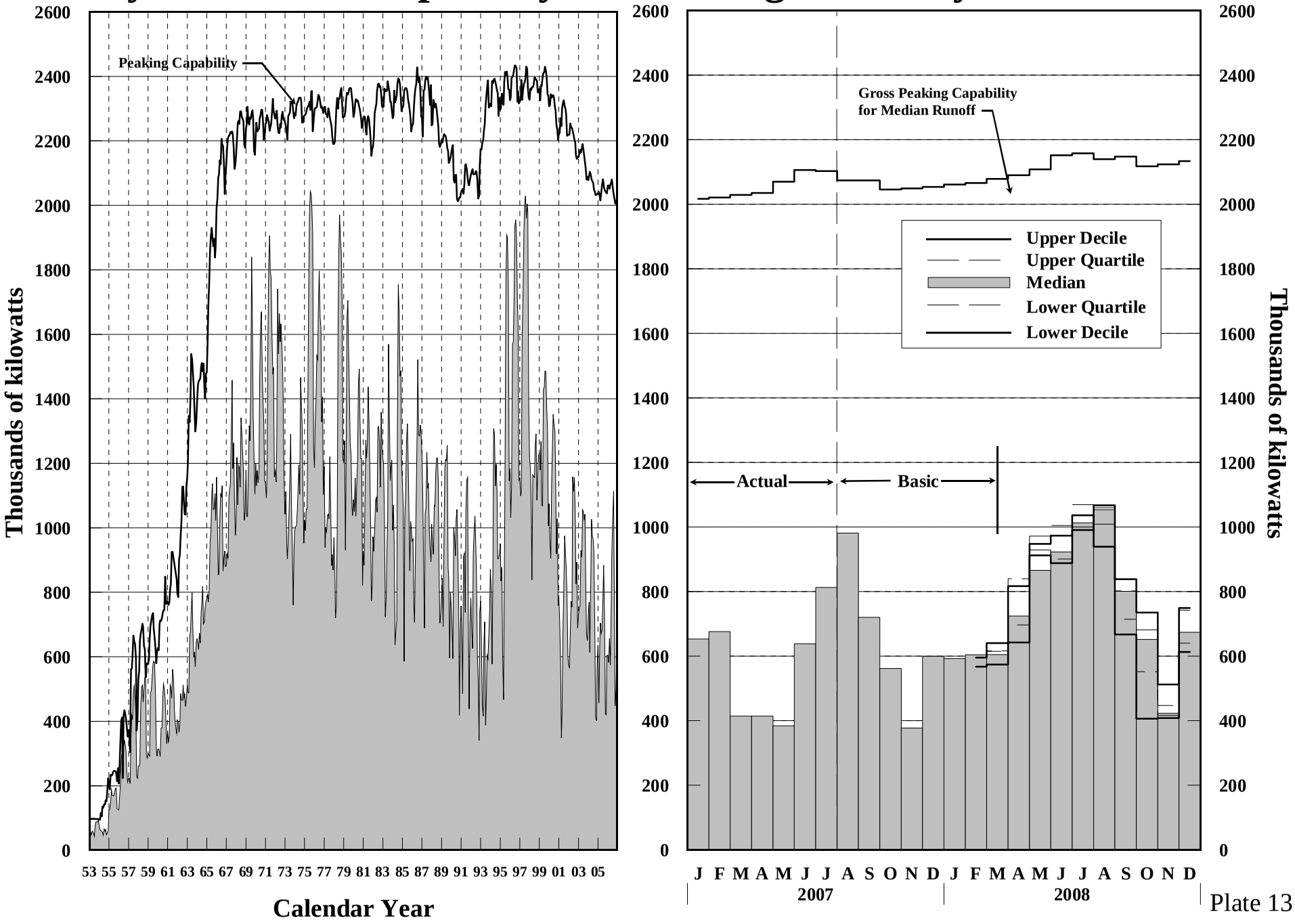


Plate 13

Tentative 5-Year Extensions of 2007-2008 AOP

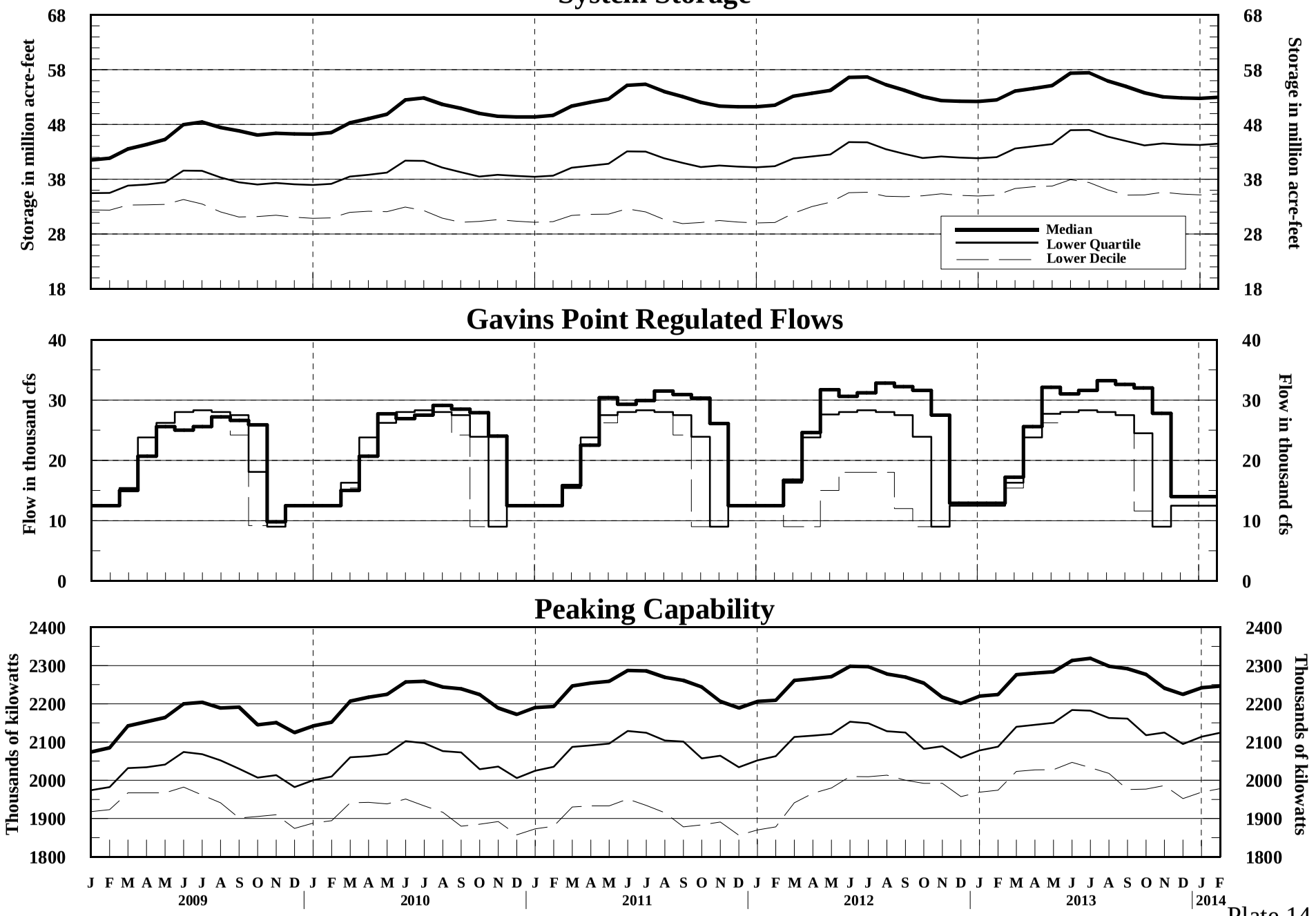


Plate 14

Tentative 5-Year Extensions of 2007-2008 AOP

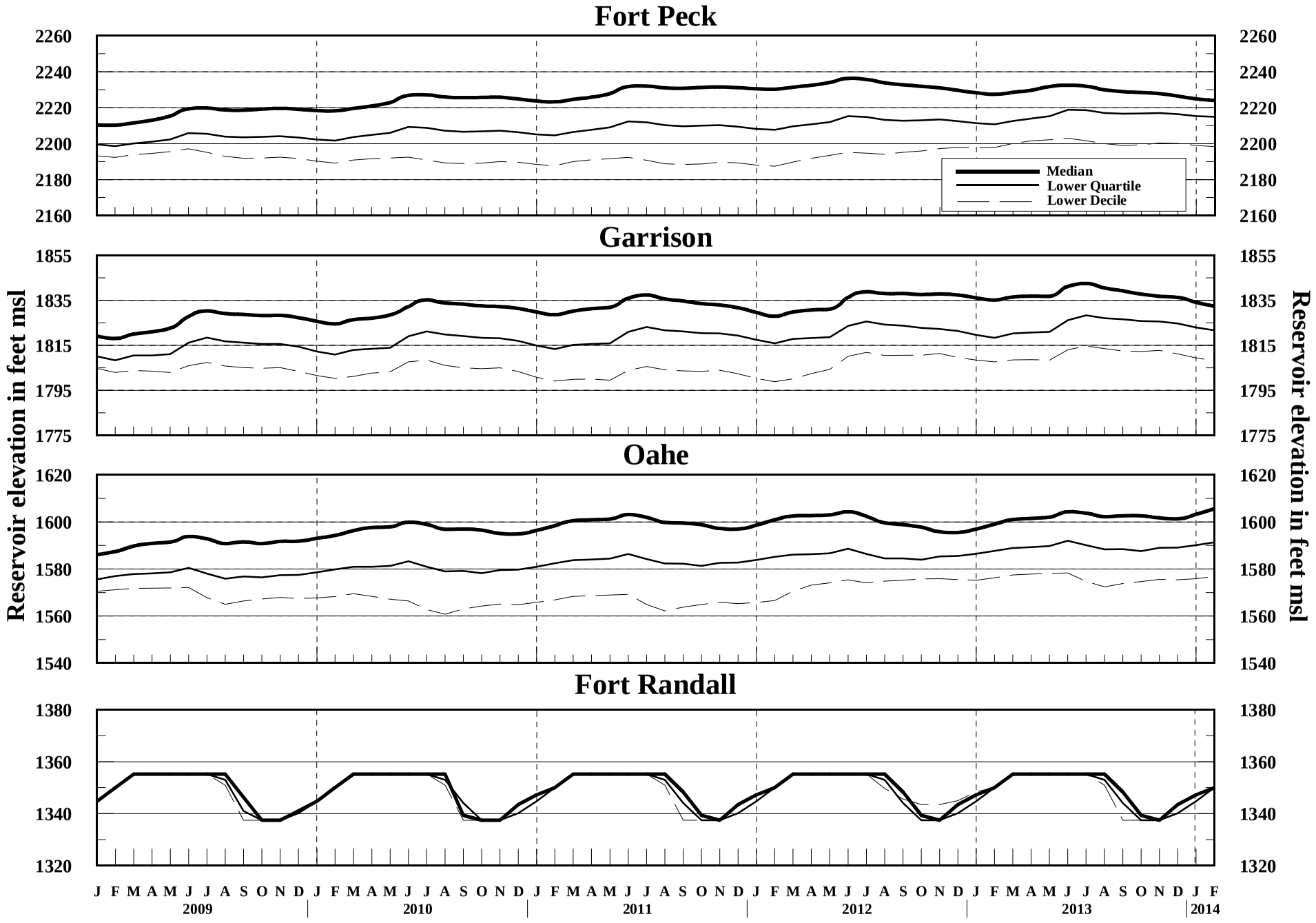
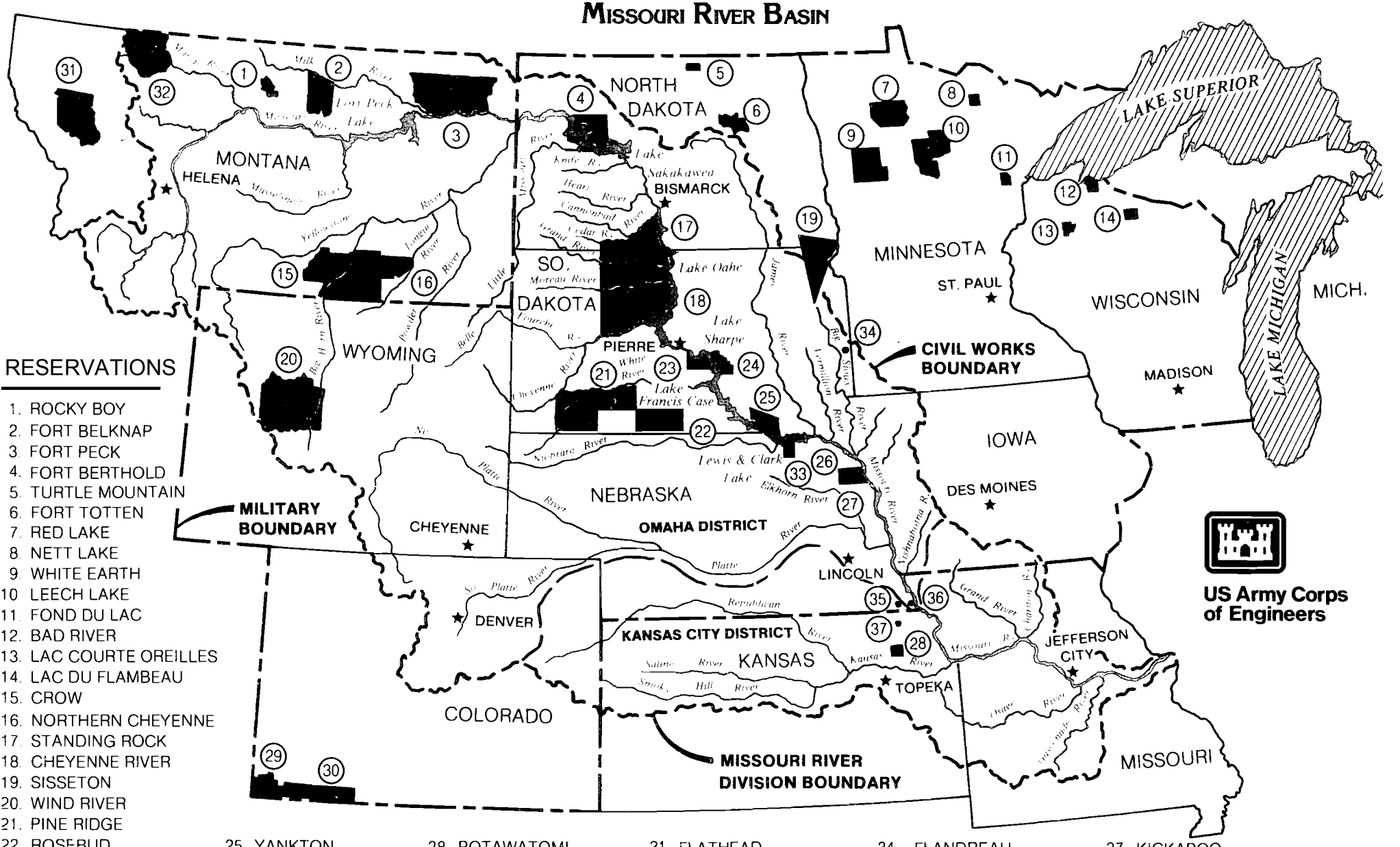


Plate 15

AMERICAN INDIAN RESERVATIONS

MISSOURI RIVER BASIN



RESERVATIONS

1. ROCKY BOY
2. FORT BELKNAP
3. FORT PECK
4. FORT BERTHOLD
5. TURTLE MOUNTAIN
6. FORT TOTTEN
7. RED LAKE
8. NETT LAKE
9. WHITE EARTH
10. LEECH LAKE
11. FOND DU LAC
12. BAD RIVER
13. LAC COURTE OREILLES
14. LAC DU FLAMBEAU
15. CROW
16. NORTHERN CHEYENNE
17. STANDING ROCK
18. CHEYENNE RIVER
19. SISSETON
20. WIND RIVER
21. PINE RIDGE
22. ROSEBUD
23. LOWER BRULE
24. CROW CREEK
25. YANKTON
26. WINNEBAGO
27. OMAHA
28. POTAWATOMI
29. UTE MOUNTAIN
30. SOUTHERN UTE
31. FLATHEAD
32. BLACKFEET
33. SANTEE
34. FLANDREAU
35. IOWA
36. SAC AND FOX
37. KICKAPOO

For illustrative purposes. No legal boundaries are implied.

	31JUl07 INI-SUM	31AUG	2007 30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	2008 31JAN	29FEB
--FORT PECK--										
NAT INFLOW	1995	245	240	290	145	68	77	250	315	365
DEPLETION	-308	-13	-85	-62	-13	-6	-7	-55	-40	-28
EVAPORATION	302	62	77	67	31	14	16	35		
MOD INFLOW	2001	196	248	285	127	59	68	270	355	393
RELEASE	2262	430	326	246	119	56	63	338	338	345
STOR CHANGE	-261	-234	-78	39	8	4	4	-68	17	48
STORAGE	9342	9108	9030	9069	9077	9080	9085	9016	9033	9081
ELEV FTMSL	2202.3	2200.8	2200.2	2200.5	2200.5	2200.6	2200.6	2200.1	2200.3	2200.6
DISCH KCFS	6.7	7.0	5.5	4.0	4.0	4.0	4.0	5.5	5.5	6.0
POWER										
AVE POWER MW		83	65	47	47	47	47	65	65	71
PEAK POW MW		129	128	128	128	128	128	128	128	128
ENERGY GWH	323.2	61.7	46.5	35.2	17.0	7.9	9.1	48.3	48.2	49.2
--GARRISON--										
NAT INFLOW	2220	390	340	390	145	68	77	190	260	360
DEPLETION	-271	23	-123	25	-75	-35	-40	-39	-13	6
CHAN STOR	7	-3	17	16				-16		-6
EVAPORATION	360	74	92	80	36	17	19	41		
REG INFLOW	4400	720	713	547	303	141	162	509	611	694
RELEASE	6004	984	803	676	327	153	175	953	984	949
STOR CHANGE	-1604	-263	-90	-130	-25	-11	-13	-444	-373	-256
STORAGE	12514	12251	12160	12031	12006	11995	11982	11538	11165	10910
ELEV FTMSL	1816.9	1815.8	1815.4	1814.9	1814.8	1814.7	1814.7	1812.7	1811.1	1809.9
DISCH KCFS	15.9	16.0	13.5	11.0	11.0	11.0	11.0	15.5	16.0	16.5
POWER										
AVE POWER MW		173	145	118	118	118	118	165	168	171
PEAK POW MW		389	387	385	385	385	384	377	371	367
ENERGY GWH	772.7	128.8	104.7	88.1	42.5	19.8	22.7	122.4	124.7	119.0
--OAHE--										
NAT INFLOW	275	30	60	35	25	12	13		10	90
DEPLETION	187	99	25	-7	2	1	1	14	20	32
CHAN STOR	-3	-1	13	13		0	0	-24	-3	-3
EVAPORATION	316	66	80	70	32	15	17	37		
REG INFLOW	5773	849	771	662	319	149	170	878	971	1004
RELEASE	6365	1674	794	718	223	116	131	927	901	880
STOR CHANGE	-592	-825	-23	-56	95	33	39	-49	70	125
STORAGE	12045	11220	11197	11140	11235	11268	11307	11258	11328	11453
ELEV FTMSL	1581.5	1577.6	1577.5	1577.3	1577.7	1577.9	1578.1	1577.8	1578.2	1578.8
DISCH KCFS	19.4	27.2	13.3	11.7	7.5	8.4	8.2	15.1	14.7	15.3
POWER										
AVE POWER MW		299	146	127	82	92	90	165	160	168
PEAK POW MW		554	554	552	554	555	556	555	557	560
ENERGY GWH	843.8	222.8	105.0	94.9	29.6	15.4	17.4	122.7	119.4	116.8
--BIG BEND--										
EVAPORATION	97	20	25	22	10	5	5	11		
REG INFLOW	6268	1654	770	696	214	111	125	916	901	880
RELEASE	6258	1644	770	696	214	111	125	916	901	880
STORAGE	1611	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL	1419.8	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	17.6	26.7	12.9	11.3	7.2	8.0	7.9	14.9	14.7	15.3
POWER										
AVE POWER MW		125	64	57	36	41	40	75	72	73
PEAK POW MW		511	538	538	538	538	538	538	538	529
ENERGY GWH	369.7	93.2	45.8	42.6	13.1	6.8	7.7	55.6	53.7	51.1
--FORT RANDALL--										
NAT INFLOW	160	30	30	10	5	2	3	10	20	50
DEPLETION	34	15	7	1	1	0	1	3	3	3
EVAPORATION	100	25	29	20	8	4	4	10		
REG INFLOW	6284	1634	764	685	210	109	123	913	918	927
RELEASE	6605	1549	1534	1148	210	110	123	710	668	553
STOR CHANGE	-321	85	-770	-463	0	0	0	203	250	374
STORAGE	3445	3530	2760	2297	2297	2297	2297	2500	2750	3124
ELEV FTMSL	1354.0	1355.0	1345.0	1337.5	1337.5	1337.5	1337.5	1341.0	1344.8	1350.0
DISCH KCFS	21.1	25.2	25.8	18.7	7.1	7.9	7.8	11.5	10.9	9.6
POWER										
AVE POWER MW		211	208	140	52	58	57	86	83	77
PEAK POW MW		355	319	285	285	285	285	301	319	339
ENERGY GWH	630.4	157.3	150.0	104.4	18.6	9.7	10.9	63.8	62.1	53.5
--GAVINS POINT--										
NAT INFLOW	650	85	80	90	45	21	24	80	100	125
DEPLETION	27	10	-5	1	5	2	3	10	1	
CHAN STOR	21	-8	-1	13	22	-2	0	-7	1	2
EVAPORATION	36	7	9	8	4	2	2	4		
REG INFLOW	7213	1610	1609	1242	268	125	143	769	769	680
RELEASE	7215	1599	1583	1242	268	125	143	769	769	719
STOR CHANGE	-2	11	26							-39
STORAGE	360	371	397	397	397	397	397	397	397	358
ELEV FTMSL	1206.1	1206.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS	21.1	26.0	26.6	20.2	9.0	9.0	9.0	12.5	12.5	12.5
POWER										
AVE POWER MW		89	92	71	32	32	32	44	44	44
PEAK POW MW		115	117	117	117	117	117	117	117	114
ENERGY GWH	305.9	66.4	66.6	53.0	11.6	5.4	6.2	33.0	33.0	30.7
--GAVINS POINT - SIOUX CITY--										
NAT INFLOW	540	130	95	75	38	18	20	45	35	85
DEPLETION	118	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY										
KAF	7637	1694	1655	1307	300	140	160	802	791	790
KCFS		27.5	27.8	21.3	10.1	10.1	10.1	13.0	12.9	13.7
--TOTAL--										
NAT INFLOW	5840	910	845	890	403	188	215	575	740	1075
DEPLETION	-213	169	-158	-32	-74	-35	-39	-55	-16	27
CHAN STOR	25	-12	29	42	22	-2	0	-47	-1	-6
EVAPORATION	1211	252	312	268	120	56	64	139		
STORAGE	39317	38100	37165	36554	36633	36658	36688	36331	36295	36547
SYSTEM POWER										
AVE POWER MW		981	720	562	368	388	385	599	593	604
PEAK POW MW		2052	2043	2005	2008	2008	2009	2017	2030	2038
ENERGY GWH	3245.7	730.2	518.7	418.1	132.5	65.1	73.9	445.8	441.1	420.2
DAILY GWH		23.6	17.3	13.5	8.8	9.3	9.2	14.4	14.2	14.5

	31JUL07	2007						2008		
	INI-SUM	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--										
NAT INFLOW	2394	294	288	348	174	81	93	300	378	438
DEPLETION	-378	21	-51	-36	-19	-9	-10	-85	-110	-79
EVAPORATION	207	46	58	51	12	6	7	27		
MOD INFLOW	2565	227	281	333	181	84	96	358	488	517
RELEASE	2398	430	311	246	119	56	63	400	400	374
STOR CHANGE	167	-204	-30	87	62	29	33	-42	88	143
STORAGE	9342	9138	9109	9196	9257	9286	9319	9278	9366	9509
ELEV FTMSL	2202.3	2201.0	2200.8	2201.3	2201.7	2201.9	2202.2	2201.9	2202.5	2203.4
DISCH KCFS	6.7	7.0	5.2	4.0	4.0	4.0	4.0	6.5	6.5	6.5
POWER										
AVE POWER MW		83	62	47	48	48	48	77	77	78
PEAK POW MW		129	129	129	130	130	130	130	131	132
ENERGY GWH	344.8	61.7	44.5	35.3	17.1	8.0	9.2	57.5	57.5	54.0
--GARRISON--										
NAT INFLOW	2664	468	408	468	174	81	93	228	312	432
DEPLETION	-251	141	-66	53	-99	-46	-53	-89	-63	-30
CHAN STOR	2	-3	19	13				-27		
EVAPORATION	246	56	70	61	14	7	8	32		
REG INFLOW	5069	699	734	614	377	176	201	658	775	836
RELEASE	6153	984	803	676	327	153	175	953	1076	1007
STOR CHANGE	-1084	-285	-68	-63	50	23	27	-295	-301	-171
STORAGE	12514	12229	12161	12098	12148	12171	12197	11902	11601	11430
ELEV FTMSL	1816.9	1815.7	1815.4	1815.1	1815.4	1815.5	1815.6	1814.3	1813.0	1812.3
DISCH KCFS	15.9	16.0	13.5	11.0	11.0	11.0	11.0	15.5	17.5	17.5
POWER										
AVE POWER MW		173	145	119	118	119	119	166	186	184
PEAK POW MW		388	387	386	387	387	388	383	378	376
ENERGY GWH	796.6	128.7	104.6	88.2	42.7	19.9	22.8	123.5	138.0	128.2
--OAHE--										
NAT INFLOW	330	36	72	42	30	14	16		12	108
DEPLETION	187	99	25	-7	2	1	1	14	20	32
CHAN STOR	-8	-1	13	13		0	0	-23	-10	
EVAPORATION	218	50	61	53	13	6	7	28		
REG INFLOW	6070	871	802	685	342	160	183	887	1058	1083
RELEASE	6129	1637	757	686	200	105	118	1066	884	674
STOR CHANGE	-59	-767	45	-1	142	55	64	-179	173	408
STORAGE	12045	11278	11323	11323	11465	11519	11584	11405	11578	11986
ELEV FTMSL	1581.5	1577.9	1578.1	1578.1	1578.8	1579.1	1579.4	1578.5	1579.4	1581.3
DISCH KCFS	19.4	26.6	12.7	11.2	6.7	7.6	7.5	17.3	14.4	11.7
POWER										
AVE POWER MW		293	139	122	74	84	83	191	158	130
PEAK POW MW		555	557	557	560	562	563	559	563	573
ENERGY GWH	816.5	218.1	100.3	91.0	26.7	14.1	15.8	141.9	117.8	90.7
--BIG BEND--										
EVAPORATION	66	15	19	16	4	2	2	9		
REG INFLOW	6063	1623	738	669	196	103	116	1058	884	674
RELEASE	6053	1613	738	669	196	103	116	1058	884	674
STORAGE	1611	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL	1419.8	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	17.6	26.2	12.4	10.9	6.6	7.5	7.3	17.2	14.4	11.7
POWER										
AVE POWER MW		123	61	55	34	38	37	85	70	56
PEAK POW MW		511	538	538	538	538	538	538	538	529
ENERGY GWH	356.5	91.4	44.0	41.0	12.1	6.4	7.1	63.3	52.1	39.2
--FORT RANDALL--										
NAT INFLOW	192	36	36	12	6	3	3	12	24	60
DEPLETION	34	15	7	1	1	0	1	3	3	3
EVAPORATION	69	19	21	15	3	1	2	8		
REG INFLOW	6142	1615	746	665	199	104	117	1059	905	731
RELEASE	6463	1530	1516	1128	199	104	117	693	648	527
STOR CHANGE	-321	85	-770	-463	0	0	0	366	257	204
STORAGE	3445	3530	2760	2297	2297	2297	2297	2663	2920	3124
ELEV FTMSL	1354.0	1355.0	1345.0	1337.5	1337.5	1337.5	1337.5	1343.5	1347.2	1350.0
DISCH KCFS	21.1	24.9	25.5	18.3	6.7	7.5	7.4	11.3	10.5	9.2
POWER										
AVE POWER MW		209	206	138	49	55	54	85	83	74
PEAK POW MW		355	319	285	285	285	285	313	330	339
ENERGY GWH	619.8	155.4	148.2	102.6	17.7	9.3	10.4	63.0	61.6	51.6
--GAVINS POINT--										
NAT INFLOW	780	102	96	108	54	25	29	96	120	150
DEPLETION	27	10	-5	1	5	2	3	10	1	
CHAN STOR	22	-7	-1	13	22	-2	0	-7	1	3
EVAPORATION	24	5	7	6	1	1	1	3		
REG INFLOW	7213	1610	1609	1242	268	125	143	769	769	680
RELEASE	7215	1599	1583	1242	268	125	143	769	769	719
STOR CHANGE	-2	11	26							-39
STORAGE	360	371	397	397	397	397	397	397	397	358
ELEV FTMSL	1206.1	1206.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS	21.1	26.0	26.6	20.2	9.0	9.0	9.0	12.5	12.5	12.5
POWER										
AVE POWER MW		89	92	71	32	32	32	44	44	44
PEAK POW MW		115	117	117	117	117	117	117	117	114
ENERGY GWH	305.9	66.4	66.6	53.0	11.6	5.4	6.2	33.0	33.0	30.7
--GAVINS POINT - SIOUX CITY--										
NAT INFLOW	648	156	114	90	45	21	24	54	42	102
DEPLETION	118	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY										
KAF	7745	1720	1674	1322	307	143	164	811	798	807
KCFS		28.0	28.1	21.5	10.3	10.3	10.3	13.2	13.0	14.0
--TOTAL--										
NAT INFLOW	7008	1092	1014	1068	483	225	258	690	888	1290
DEPLETION	-263	321	-67	22	-104	-49	-55	-135	-136	-60
CHAN STOR	16	-11	31	39	22	-2	0	-58	-9	3
EVAPORATION	830	190	235	202	48	22	26	106		
STORAGE	39317	38167	37370	36931	37185	37292	37415	37265	37483	38028
SYSTEM POWER										
AVE POWER MW		970	706	552	355	375	372	648	618	567
PEAK POW MW		2054	2046	2012	2017	2019	2021	2040	2057	2063
ENERGY GWH	3240.0	721.9	508.2	411.0	127.7	63.0	71.5	482.2	460.1	394.3
DAILY GWH		23.3	16.9	13.3	8.5	9.0	8.9	15.6	14.8	13.6
	INI-SUM	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB

	31JUL07		2007					2008		
	INI-SUM	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	29FEB
--FORT PECK--										
NAT INFLOW	1596	196	192	232	116	54	62	200	252	292
DEPLETION	-361	-7	-110	-89	-15	-7	-8	-42	-50	-33
EVAPORATION	375	77	96	83	38	18	20	43		
MOD INFLOW	1582	126	206	238	93	44	50	199	302	325
RELEASE	2217	430	310	246	119	56	63	338	338	316
STOR CHANGE	-634	-304	-103	-8	-26	-12	-14	-140	-36	9
STORAGE	9342	9038	8934	8926	8900	8888	8875	8735	8699	8708
ELEV FTMSL	2202.3	2200.3	2199.6	2199.5	2199.4	2199.3	2199.2	2198.3	2198.0	2198.1
DISCH KCFS	6.7	7.0	5.2	4.0	4.0	4.0	4.0	5.5	5.5	5.5
POWER										
AVE POWER MW		83	61	47	47	47	47	64	64	64
PEAK POW MW		128	127	127	127	127	127	126	125	125
ENERGY GWH	314.8	61.6	44.1	35.0	16.9	7.9	9.0	47.9	47.7	44.6
--GARRISON--										
NAT INFLOW	1776	312	272	312	116	54	62	152	208	288
DEPLETION	-267	44	-117	11	-77	-36	-41	-40	-12	
CHAN STOR	13	-3	20	13				-16		
EVAPORATION	448	93	115	100	45	21	24	51		
REG INFLOW	3825	603	603	460	267	125	142	463	558	604
RELEASE	5884	984	803	676	327	153	175	922	953	892
STOR CHANGE	-2059	-381	-200	-216	-61	-28	-32	-459	-395	-287
STORAGE	12514	12133	11933	11717	11656	11628	11596	11137	10742	10455
ELEV FTMSL	1816.9	1815.3	1814.4	1813.5	1813.3	1813.1	1813.0	1811.0	1809.2	1807.8
DISCH KCFS	15.9	16.0	13.5	11.0	11.0	11.0	11.0	15.0	15.5	15.5
POWER										
AVE POWER MW		173	145	117	117	117	117	157	160	158
PEAK POW MW		387	384	380	379	379	378	371	364	360
ENERGY GWH	750.4	128.5	104.1	87.4	42.1	19.6	22.4	117.1	119.1	110.0
--OAHE--										
NAT INFLOW	220	24	48	28	20	9	11		8	72
DEPLETION	187	99	25	-7	2	1	1	14	20	32
CHAN STOR	2	-1	13	13		0	0	-21	-3	
EVAPORATION	394	82	100	87	39	18	21	46		
REG INFLOW	5526	826	739	638	306	143	163	841	938	932
RELEASE	6585	1710	832	751	239	123	139	901	975	915
STOR CHANGE	-1059	-884	-93	-113	67	20	24	-60	-37	17
STORAGE	12045	11161	11068	10955	11022	11042	11066	11006	10969	10986
ELEV FTMSL	1581.5	1577.4	1576.9	1576.3	1576.7	1576.8	1576.9	1576.6	1576.4	1576.5
DISCH KCFS	19.4	27.8	14.0	12.2	8.0	8.9	8.8	14.7	15.9	15.9
POWER										
AVE POWER MW		306	152	133	87	97	95	159	172	172
PEAK POW MW		552	550	547	549	550	550	549	548	548
ENERGY GWH	867.9	227.3	109.6	98.7	31.4	16.2	18.3	118.4	127.9	119.9
--BIG BEND--										
EVAPORATION	121	24	31	27	12	6	7	14		
REG INFLOW	6464	1686	801	724	227	117	132	887	975	915
RELEASE	6454	1676	801	724	227	117	132	887	975	915
STORAGE	1611	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL	1419.8	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	17.6	27.3	13.5	11.8	7.6	8.5	8.3	14.4	15.9	15.9
POWER										
AVE POWER MW		128	66	59	39	43	42	73	78	76
PEAK POW MW		511	538	538	538	538	538	538	538	529
ENERGY GWH	381.5	95.0	47.7	44.3	13.9	7.2	8.1	54.1	58.1	53.1
--FORT RANDALL--										
NAT INFLOW	128	24	24	8	4	2	2	8	16	40
DEPLETION	34	15	7	1	1	0	1	3	3	3
EVAPORATION	125	31	36	25	10	5	5	12		
REG INFLOW	6424	1654	782	705	220	114	129	880	988	952
RELEASE	6745	1569	1552	1168	220	114	129	727	688	578
STOR CHANGE	-321	85	-770	-463	0	0	0	153	300	374
STORAGE	3445	3530	2760	2297	2297	2297	2297	2450	2750	3124
ELEV FTMSL	1354.0	1355.0	1345.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	21.1	25.5	26.1	19.0	7.4	8.2	8.1	11.8	11.2	10.0
POWER										
AVE POWER MW		214	211	143	54	60	59	87	86	80
PEAK POW MW		355	319	285	285	285	285	297	319	339
ENERGY GWH	642.9	159.3	151.7	106.2	19.5	10.1	11.4	65.0	63.7	55.9
--GAVINS POINT--										
NAT INFLOW	520	68	64	72	36	17	19	64	80	100
DEPLETION	27	10	-5	1	5	2	3	10	1	
CHAN STOR	20	-8	-1	13	21	-2	0	-7	1	2
EVAPORATION	45	9	11	10	5	2	2	5		
REG INFLOW	7213	1610	1609	1242	268	125	143	769	769	680
RELEASE	7215	1599	1583	1242	268	125	143	769	769	719
STOR CHANGE	-2	11	26							-39
STORAGE	360	371	397	397	397	397	397	397	397	358
ELEV FTMSL	1206.1	1206.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1206.0
DISCH KCFS	21.1	26.0	26.6	20.2	9.0	9.0	9.0	12.5	12.5	12.5
POWER										
AVE POWER MW		89	92	71	32	32	32	44	44	44
PEAK POW MW		115	117	117	117	117	117	117	117	114
ENERGY GWH	305.9	66.4	66.6	53.0	11.6	5.4	6.2	33.0	33.0	30.7
--GAVINS POINT - SIOUX CITY--										
NAT INFLOW	432	104	76	60	30	14	16	36	28	68
DEPLETION	118	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY										
KAF	7529	1668	1636	1292	292	136	156	793	784	773
KCFS		27.1	27.5	21.0	9.8	9.8	9.8	12.9	12.7	13.4
--TOTAL--										
NAT INFLOW	4672	728	676	712	322	150	172	460	592	860
DEPLETION	-262	196	-177	-73	-78	-36	-42	-43	-25	16
CHAN STOR	35	-12	32	39	22	-2	0	-45	-2	2
EVAPORATION	1506	316	389	332	149	69	79	171		
STORAGE	39317	37853	36713	35913	35894	35873	35851	35346	35178	35251
SYSTEM POWER										
AVE POWER MW		992	728	571	376	396	393	585	604	595
PEAK POW MW		2048	2035	1994	1995	1995	1995	1998	2011	2015
ENERGY GWH	3263.3	738.2	523.9	424.5	135.4	66.5	75.4	435.5	449.6	414.3
DAILY GWH		23.8	17.5	13.7	9.0	9.5	9.4	14.0	14.5	14.3

	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	9600	319	149	192	797	1604	2491	1219	456	379	531	210	98	112	346	297	400
DEPLETION	235	-11	-5	-6	72	367	424	191	-71	-129	-60	-41	-19	-22	-156	-180	-119
EVAPORATION	274							18	57	72	63	15	7	8	34		
MOD INFLOW	9091	330	154	198	725	1237	2067	1010	470	436	528	236	110	126	468	477	519
RELEASE	5263	179	56	71	238	523	506	523	523	403	307	149	69	79	553	584	500
STOR CHANGE	3829	152	98	127	487	714	1561	488	-53	33	220	87	41	46	-85	-107	19
STORAGE	9509	9661	9759	9886	10373	11087	12648	13136	13083	13116	13337	13424	13464	13511	13426	13318	13338
ELEV FTMSL	2203.4	2204.4	2205.0	2205.8	2208.8	2213.1	2222.0	2224.6	2224.4	2224.5	2225.7	2226.2	2226.4	2226.6	2226.2	2225.6	2225.7
DISCH KCFS	6.5	6.0	4.0	4.0	4.0	8.5	8.5	8.5	8.5	6.8	5.0	5.0	5.0	5.0	9.0	9.5	9.0
POWER																	
AVE POWER MW		72	48	48	49	106	109	112	112	90	66	67	67	67	120	126	119
PEAK POW MW		133	133	134	138	143	152	155	155	155	156	156	157	157	156	156	156
ENERGY GWH	828.5	25.9	8.1	10.5	35.3	78.5	78.4	83.1	83.6	64.5	49.4	24.0	11.2	12.8	89.1	93.8	80.3
--GARRISON--																	
NAT INFLOW	14199	515	240	309	1376	1934	3530	2647	841	574	652	260	121	139	278	348	434
DEPLETION	1293	-2	-1	-1	2	134	956	582	79	-113	27	-91	-42	-49	-84	-71	-32
CHAN STOR	-26	6	22			-49	0	0		17	18			0	-40	-5	5
EVAPORATION	319							21	67	84	74	18	8	9	39		
REG INFLOW	17824	702	319	382	1612	2274	3080	2567	1218	1024	877	482	225	257	836	998	971
RELEASE	13163	476	208	268	1071	1261	1220	1230	1230	1003	861	417	194	222	1045	1291	1166
STOR CHANGE	4661	226	111	114	541	1013	1860	1337	-12	20	16	66	31	35	-209	-293	-195
STORAGE	11430	11656	11767	11881	12422	13435	15295	16632	16621	16641	16657	16723	16753	16788	16579	16286	16091
ELEV FTMSL	1812.3	1813.3	1813.7	1814.2	1816.5	1820.6	1827.8	1832.5	1832.5	1832.5	1832.6	1832.8	1832.9	1833.1	1832.3	1831.3	1830.6
DISCH KCFS	17.5	16.0	15.0	15.0	18.0	20.5	20.5	20.0	20.0	16.9	14.0	14.0	14.0	14.0	17.0	21.0	21.0
POWER																	
AVE POWER MW		169	159	160	193	225	233	237	241	203	169	169	169	170	205	251	250
PEAK POW MW		379	381	383	391	406	433	450	450	450	450	451	451	452	449	445	443
ENERGY GWH	1853.3	60.7	26.7	34.5	139.0	167.1	168.1	176.3	179.0	146.3	125.9	61.0	28.5	32.6	152.6	187.1	168.0
--OAHE--																	
NAT INFLOW	3850	559	261	335	474	347	881	297	123	163	102	109	51	58	22	10	59
DEPLETION	640	23	11	14	48	68	135	160	106	26	-9	1	0	1	12	17	27
CHAN STOR	-15	8	5	0	-15	-12		2		14	13			0	-13	-18	
EVAPORATION	293							19	61	77	68	16	8	9	36		
REG INFLOW	16064	1019	463	589	1482	1528	1966	1350	1186	1078	917	508	237	271	1006	1267	1198
RELEASE	11287	319	189	251	687	1164	1017	1326	1511	882	820	326	86	118	1057	914	619
STOR CHANGE	4778	700	274	338	795	364	949	24	-325	196	97	182	151	153	-51	352	579
STORAGE	11986	12686	12960	13298	14093	14457	15406	15430	15104	15300	15397	15579	15730	15883	15832	16184	16764
ELEV FTMSL	1581.3	1584.4	1585.6	1587.1	1590.4	1591.8	1595.5	1595.6	1594.4	1595.1	1595.5	1596.2	1596.8	1597.3	1597.1	1598.4	1600.5
DISCH KCFS	11.7	10.7	13.6	14.0	11.5	18.9	17.1	21.6	24.6	14.8	13.3	11.0	6.2	7.4	17.2	14.9	11.1
POWER																	
AVE POWER MW		121	155	162	135	224	205	261	296	179	162	133	75	91	210	182	138
PEAK POW MW		590	596	604	621	628	646	646	640	644	646	649	652	655	654	660	671
ENERGY GWH	1641.9	43.6	26.1	34.9	97.1	166.3	147.5	194.0	220.2	128.8	120.2	48.0	12.7	17.5	156.3	135.7	92.9
--BIG BEND--																	
EVAPORATION	71							5	15	19	16	4	2	2	9		
REG INFLOW	11216	319	189	251	687	1164	1017	1321	1496	863	804	323	84	116	1049	914	619
RELEASE	11216	319	189	251	687	1164	1017	1321	1496	863	804	323	84	116	1049	914	619
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	11.7	10.7	13.6	14.0	11.5	18.9	17.1	21.5	24.3	14.5	13.1	10.8	6.0	7.3	17.1	14.9	11.1
POWER																	
AVE POWER MW		51	64	66	54	89	80	101	114	70	66	55	31	37	84	72	54
PEAK POW MW		517	509	509	509	509	509	509	509	535	538	538	538	538	538	538	529
ENERGY GWH	649.7	18.3	10.7	14.2	38.9	66.0	57.6	74.8	84.8	50.6	49.1	19.7	5.2	7.1	62.7	53.9	36.0
--FORT RANDALL--																	
NAT INFLOW	1501	190	89	114	298	159	224	111	72	92	60	5	2	3	23	10	49
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	77							6	19	22	16	3	1	2	8		
REG INFLOW	12561	508	277	364	982	1314	1229	1408	1535	926	846	323	85	116	1061	921	665
RELEASE	12561	217	143	364	982	1314	1229	1408	1535	1475	1446	426	85	117	695	664	461
STOR CHANGE	0	291	134					0	0	-549	-600	-103	0	0	366	257	204
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3000	2400	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	1348.3	1339.3	1337.5	1337.5	1337.5	1343.5	1347.2	1350.0
DISCH KCFS	9.2	7.3	10.3	20.4	16.5	21.4	20.7	22.9	25.0	24.8	23.5	14.3	6.1	7.3	11.3	10.8	8.3
POWER																	
AVE POWER MW		61	87	173	140	181	175	194	211	204	180	105	45	54	85	85	67
PEAK POW MW		351	356	356	356	356	356	356	356	333	293	285	285	285	313	330	339
ENERGY GWH	1243.8	21.9	14.6	37.3	100.9	134.5	125.9	144.0	156.8	146.5	134.2	37.9	7.5	10.3	63.2	63.1	45.1
--GAVINS POINT--																	
NAT INFLOW	2252	107	50	64	246	319	281	211	170	135	157	60	28	32	95	106	191
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	1	4	-6	-19	7	-9	1	-4	-4	0	2	17	15	-2	-7	1	5
EVAPORATION	26							2	5	7	6	1	1	1	3		
REG INFLOW	14676	328	187	409	1232	1605	1488	1574	1685	1609	1599	497	125	143	769	770	657
RELEASE	14676	328	187	409	1232	1605	1488	1574	1672	1583	1599	497	125	143	769	770	696
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	26.1	25.0	25.6	27.2	26.6	26.0	16.7	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	47	79	71	89	86	88	93	92	91	59	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	615.6	13.9	7.9	17.0	51.4	66.3	61.6	65.1	69.3	66.6	67.8	21.3	5.4	6.2	33.1	33.1	29.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	3100	195	91	117	1006	553	318	246	184	127	66	26	12	14	30	12	105
DEPLETION	255	6	3	4	21	35	30	38	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	17521	517	275	522	2217	2123	1776	1782	1821	1687	1655	517	134	153	787	769	787
KCFS		17.4	19.8	29.2	37.3	34.5	29.8	29.0	29.6	28.3	26.9	17.4	9.7	9.7	12.8	12.5	14.2
--TOTAL--																	
NAT INFLOW	34502	1885	879	1131	4197	4916	7725	4731	1846	1470	1568	670	312	357	794	783	1238
DEPLETION	2614	17	8	10	150	632	1581	1028	174	-191	-30	-120	-56	-64	-203	-217	-107
CHAN STOR	-41	17	21	-19	-7	-70	1	-2	-4	32	33	17	16	-2	-61	-22	10
EVAPORATION	1060							70	223	280	243	58	27	31	128		
STORAGE	38028	39396	40014	40593	42416	44507	48877	50726	50349	50075	49808	50040	50263	50497	50517	50726	51295
SYSTEM POWER																	
AVE POWER MW		512	560	687	642	912	888	991	1067	838	735	588	419	451	749	762	673
PEAK POW MW		2084	2090	2100	2129	2156	2211	2231	2225	2235	2200	2197	2200	2203	2188	2207	2214
ENERGY GWH	6832.7	184.4	94.1	148.4	462.6	678.7	639.1	737.4	793.6	603.5	546.6	211.9	70.4	86.5	557.0	566.7	451.9
DAILY GWH		12.3	13.4	16.5	15.4	21.9	21.3	23.8	25.6	20.1	17.6	14.1	10.1	10.8	18.0	18.3	16.1

TIME OF STUDY 11:27:37 SR-FTT SHTN NAV SEAS 29-DAYS, SP MAR 5/MAY 15.6 STUDY NO 5
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	8900	296	138	178	738	1487	2309	1130	423	351	492	195	91	104	321	276	371
DEPLETION	207	-11	-5	-6	72	367	424	182	-76	-128	-85	-43	-20	-23	-150	-174	-118
EVAPORATION	290							17	55	69	61	28	13	15	32		
MOD INFLOW	8403	307	143	184	666	1120	1885	931	444	410	516	210	98	112	439	450	489
RELEASE	5414	179	69	89	357	523	506	523	523	404	307	149	69	79	553	584	500
STOR CHANGE	2989	128	74	95	309	597	1379	408	-79	6	209	61	28	32	-115	-134	-11
STORAGE	9509	9637	9711	9806	10115	10712	12091	12499	12421	12427	12635	12696	12725	12757	12643	12509	12498
ELEV FTMSL	2203.4	2204.2	2204.7	2205.3	2207.2	2210.9	2218.9	2221.2	2220.7	2220.8	2221.9	2222.3	2222.4	2222.6	2222.0	2221.2	2221.2
DISCH KCFS	6.5	6.0	5.0	5.0	6.0	8.5	8.5	8.5	8.5	6.8	5.0	5.0	5.0	5.0	9.0	9.5	9.0
POWER																	
AVE POWER MW		72	60	60	73	105	108	110	111	88	65	66	66	66	118	124	117
PEAK POW MW		133	133	134	136	140	149	152	151	151	152	153	153	153	152	152	152
ENERGY GWH	839.1	25.9	10.1	13.1	52.5	77.8	77.4	82.0	82.3	63.7	48.6	23.6	11.0	12.6	87.6	92.2	78.8
--GARRISON--																	
NAT INFLOW	12900	482	225	289	1250	1723	3207	2405	763	522	593	236	110	126	260	316	394
DEPLETION	1236	15	7	9	1	161	873	606	64	-131	11	-95	-44	-51	-88	-70	-33
CHAN STOR	-27	6	11		-11	-27	0	0		18	18			0	-41	-5	5
EVAPORATION	341							20	65	82	72	32	15	17	37		
REG INFLOW	16711	650	298	369	1595	2057	2840	2302	1157	993	836	447	209	239	823	965	932
RELEASE	13072	476	208	268	1071	1230	1190	1230	1199	1004	861	417	194	222	1045	1291	1166
STOR CHANGE	3639	174	90	101	524	828	1650	1072	-42	-11	-25	31	14	16	-222	-326	-234
STORAGE	11430	11604	11694	11795	12319	13146	14796	15868	15826	15815	15790	15821	15835	15852	15629	15303	15069
ELEV FTMSL	1812.3	1813.0	1813.4	1813.9	1816.1	1819.5	1825.9	1829.8	1829.7	1829.6	1829.5	1829.7	1829.7	1829.8	1829.0	1827.8	1826.9
DISCH KCFS	17.5	16.0	15.0	15.0	18.0	20.0	20.0	20.0	19.5	16.9	14.0	14.0	14.0	14.0	17.0	21.0	21.0
POWER																	
AVE POWER MW		169	159	159	193	218	225	233	231	200	166	166	166	166	201	246	244
PEAK POW MW		379	380	382	390	402	426	440	439	439	439	439	440	440	437	433	429
ENERGY GWH	1813.1	60.7	26.7	34.4	138.6	162.1	162.3	173.7	171.5	143.7	123.4	59.7	27.9	31.9	149.4	182.9	164.1
--OAHE--																	
NAT INFLOW	3200	460	214	276	394	285	749	246	103	135	85	91	42	48	18	5	49
DEPLETION	640	23	11	14	48	68	135	160	106	26	-9	1	0	1	12	17	27
CHAN STOR	-16	8	5	0	-15	-10			2	12	13			0	-14	-18	
EVAPORATION	307							18	58	73	64	29	14	16	35		
REG INFLOW	15309	920	417	530	1402	1437	1804	1297	1141	1052	904	477	222	254	1003	1261	1188
RELEASE	11578	500	101	288	786	1236	1090	1380	1544	780	755	219	112	126	1068	918	677
STOR CHANGE	3731	421	316	242	617	201	714	-83	-403	272	149	257	111	128	-65	343	512
STORAGE	11986	12407	12723	12965	13581	13783	14497	14414	14011	14282	14432	14689	14799	14927	14862	15205	15717
ELEV FTMSL	1581.3	1583.2	1584.6	1585.6	1588.3	1589.1	1592.0	1591.7	1590.0	1591.1	1591.7	1592.7	1593.2	1593.7	1593.4	1594.8	1596.7
DISCH KCFS	11.7	16.8	7.3	16.1	13.2	20.1	18.3	22.4	25.1	13.1	12.3	7.4	8.0	8.0	17.4	14.9	12.2
POWER																	
AVE POWER MW		188	83	184	153	234	216	266	295	155	146	88	96	96	208	179	148
PEAK POW MW		583	591	596	610	614	629	627	619	624	627	632	634	637	636	642	652
ENERGY GWH	1651.7	67.8	13.9	39.8	109.8	174.1	155.2	197.7	219.8	111.4	108.3	31.7	16.2	18.3	154.8	133.5	99.4
--BIG BEND--																	
EVAPORATION	78							5	15	19	16	7	3	4	9		
REG INFLOW	11501	500	101	288	786	1236	1090	1376	1529	762	738	212	108	122	1060	918	677
RELEASE	11501	500	101	288	786	1236	1090	1376	1529	762	738	212	108	122	1060	918	677
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	11.7	16.8	7.3	16.1	13.2	20.1	18.3	22.4	24.9	12.8	12.0	7.1	7.8	7.7	17.2	14.9	12.2
POWER																	
AVE POWER MW		79	34	75	62	94	86	105	116	63	61	36	40	39	85	73	58
PEAK POW MW		510	509	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	665.5	28.3	5.7	16.3	44.5	70.0	61.7	77.9	86.6	45.1	45.2	13.0	6.6	7.5	63.4	54.2	39.3
--FORT RANDALL--																	
NAT INFLOW	1200	142	66	85	239	150	195	89	65	64	38	3	1	1	18	5	39
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	82							6	19	22	15	6	3	3	8		
REG INFLOW	12540	640	166	372	1022	1377	1273	1441	1560	797	760	208	106	120	1067	920	713
RELEASE	12541	232	149	372	1022	1377	1273	1441	1560	1496	1313	208	106	120	701	683	489
STOR CHANGE	-1	408	17					0	0	-699	-553	0	0	0	366	237	224
STORAGE	3124	3532	3549	3549	3549	3549	3549	3549	3549	2850	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	1355.2	1346.3	1337.5	1337.5	1337.5	1337.5	1343.5	1347.0	1350.0
DISCH KCFS	9.2	7.8	10.7	20.8	17.2	22.4	21.4	23.4	25.4	25.1	21.4	7.0	7.6	7.6	11.4	11.1	8.8
POWER																	
AVE POWER MW		65	92	176	146	189	181	198	214	205	161	51	56	55	86	87	71
PEAK POW MW		355	356	356	356	356	356	356	356	325	284	285	285	285	313	328	339
ENERGY GWH	1241.6	23.5	15.4	38.1	104.9	140.9	130.3	147.3	159.4	147.3	119.9	18.5	9.4	10.6	63.7	64.7	47.8
--GAVINS POINT--																	
NAT INFLOW	1899	93	44	56	207	257	237	178	144	114	132	51	24	27	86	89	161
DEPLETION	112	0	0	0	4	19	24	39	10	-5	1	5	2	3	10	1	
CHAN STOR	0	3	-6	-19	7	-10	2	-4	-4	0	7	27	-1	0	-7	1	4
EVAPORATION	28							2	5	7	6	3	1	1	3		
REG INFLOW	14299	329	187	409	1232	1605	1488	1574	1685	1609	1445	277	125	143	767	771	654
RELEASE	14299	329	187	409	1232	1605	1488	1574	1672	1583	1445	277	125	143	767	771	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	13.5	22.9	20.7	26.1	25.0	25.6	27.2	26.6	23.5	9.3	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	47	79	71	89	86	88	93	92	83	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	599.8	13.9	7.9	17.0	51.4	66.3	61.6	65.1	69.3	66.6	61.4	12.0	5.4	6.2	33.0	33.1	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	2500	181	85	109	811	406	252	199	148	97	53	21	10	11	24	10	84
DEPLETION	255	6	3	4	21	35	30	38	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	16544	504	269	514	2022	1976	1710	1735	1785	1657	1488	292	132	151	779	768	763
KCFS		16.9	19.4	28.8	34.0	32.1	28.7	28.2	29.0	27.8	24.2	9.8	9.5	9.5	12.7	12.5	13.7
--TOTAL--																	
NAT INFLOW	30599	1654	772	992	3639	4308	6949	4247	1646	1283	1393	595	278	317	727	701	1098
DEPLETION	2529	35	16	21	149	659	1498	1043	154	-208	-71	-125	-58	-67	-201	-210	-107
CHAN STOR	-42	16	10	-19	-19	-47	2	-4	-1	30	39	27	-1	0	-62	-23	9
EVAPORATION	1125							68	216	271	235	106	49	57	124		
STORAGE	38028	39159	39656	40093	41543	43169	46912	48309	47798	47392	47172	47521	47674	47851	47815	47935	48386
SYSTEM POWER																	
AVE POWER MW		612	474	734	697	929	901	1000	1060	802	681	440	456	454	742	753	683
PEAK POW MW		2075	2083	2091	2115	2136	2183	2198	2190	2195	2158	2164	2167	2170	2154	2171	2177
ENERGY GWH	6810.8	220.2	79.7	158.6	501.7	691.2	648.6	743.7	788.9	577.8	506.9	158.5	76.6	87.2	551.9	560.6	458.9
DAILY GWH		14.7	11.4	17.6	16.7	22.3	21.6	24.0	25.4	19.3	16.4	10.6	10.9	10.9	17.8	18.1	16.4

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

	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	227	6	3	3	68	206	386	279	17	-124	-77	-38	-18	-20	-157	-179	-129
EVAPORATION	354							21	67	85	74	34	16	18	39		
MOD INFLOW	6819	258	121	155	560	1004	1465	529	240	358	401	191	89	102	428	440	478
RELEASE	5286	179	69	89	357	523	506	492	492	398	307	149	69	79	523	553	500
STOR CHANGE	1533	80	51	66	203	481	959	37	-252	-40	93	43	20	23	-95	-113	-22
STORAGE	9081	9161	9212	9278	9481	9962	10921	10958	10706	10665	10759	10801	10821	10844	10749	10636	10614
ELEV FTMSL	2200.6	2201.1	2201.4	2201.9	2203.2	2206.3	2212.1	2212.4	2210.8	2210.6	2211.2	2211.4	2211.5	2211.7	2211.1	2210.4	2210.3
DISCH KCFS	6.0	6.0	5.0	5.0	6.0	8.5	8.5	8.0	8.0	6.7	5.0	5.0	5.0	5.0	8.5	9.0	9.0
POWER																	
AVE POWER MW		71	59	59	72	102	105	100	100	83	62	62	62	62	106	112	111
PEAK POW MW		129	129	130	131	135	142	142	140	140	140	141	141	141	140	140	139
ENERGY GWH	787.4	25.5	10.0	12.8	51.5	76.1	75.3	74.4	74.1	59.9	46.3	22.5	10.5	12.0	78.7	83.0	74.8
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1168	33	16	20	55	225	794	549	87	-133	-10	-105	-49	-56	-115	-90	-53
CHAN STOR	-33		11		-11	-28	0	5		14	18			0	-37	-5	
EVAPORATION	413							25	79	99	87	39	18	21	45		
REG INFLOW	14673	615	284	351	1144	1693	2670	1989	907	943	703	406	190	217	808	875	879
RELEASE	12807	417	194	250	952	1261	1220	1230	1230	978	799	387	180	206	1045	1291	1166
STOR CHANGE	1866	198	90	101	192	433	1450	760	-323	-35	-97	19	9	10	-237	-416	-287
STORAGE	10910	11108	11198	11298	11490	11923	13373	14133	13810	13774	13678	13697	13706	13717	13480	13064	12776
ELEV FTMSL	1809.9	1810.8	1811.2	1811.7	1812.5	1814.4	1820.4	1823.4	1822.1	1822.0	1821.6	1821.7	1821.7	1821.7	1820.8	1819.1	1818.0
DISCH KCFS	16.5	14.0	14.0	14.0	16.0	20.5	20.5	20.0	20.0	16.4	13.0	13.0	13.0	13.0	17.0	21.0	21.0
POWER																	
AVE POWER MW		145	146	146	168	217	223	224	226	185	146	146	146	146	190	232	230
PEAK POW MW		371	372	374	377	384	406	416	412	411	410	410	410	410	407	401	397
ENERGY GWH	1701.6	52.3	24.5	31.6	120.9	161.1	160.4	166.8	167.8	133.2	108.9	52.6	24.6	28.1	141.5	172.8	154.5
--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	-22	13			-10	-23		2		18	17				-20	-20	
EVAPORATION	368							23	70	88	77	35	16	19	41		
REG INFLOW	14076	723	331	426	1258	1406	1774	1212	1087	1001	763	356	166	190	953	1254	1179
RELEASE	12163	402	227	300	971	1133	1177	1492	1604	855	775	226	115	130	931	942	886
STOR CHANGE	1913	321	104	126	287	273	597	-280	-518	145	-12	130	51	60	22	313	294
STORAGE	11453	11774	11878	12004	12291	12564	13161	12881	12363	12509	12497	12627	12678	12738	12760	13072	13366
ELEV FTMSL	1578.8	1580.3	1580.8	1581.4	1582.7	1583.9	1586.5	1585.3	1583.0	1583.6	1583.6	1584.2	1584.4	1584.6	1584.7	1586.1	1587.4
DISCH KCFS	15.3	13.5	16.4	16.8	16.3	18.4	19.8	24.3	26.1	14.4	12.6	7.6	8.3	8.2	15.1	15.3	15.9
POWER																	
AVE POWER MW		149	182	187	183	208	226	277	295	162	143	86	94	93	172	175	184
PEAK POW MW		568	571	574	581	587	601	594	582	586	585	588	589	591	591	599	605
ENERGY GWH	1669.7	53.8	30.5	40.5	131.6	154.7	162.4	206.4	219.5	117.0	106.2	31.1	15.9	17.9	128.3	130.4	123.5
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	12060	402	227	300	971	1133	1177	1486	1585	830	753	216	110	125	919	942	886
RELEASE	12060	402	227	300	971	1133	1177	1486	1585	830	753	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	15.3	13.5	16.4	16.8	16.3	18.4	19.8	24.2	25.8	14.0	12.2	7.3	7.9	7.9	14.9	15.3	15.9
POWER																	
AVE POWER MW		64	77	79	76	86	93	113	121	68	62	37	40	40	75	75	77
PEAK POW MW		517	509	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	698.8	23.1	12.9	17.0	55.0	64.2	66.7	84.1	89.7	49.2	46.0	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	109							8	25	29	20	8	4	4	10		
REG INFLOW	12772	523	283	373	1083	1264	1350	1534	1601	836	733	209	107	121	916	939	902
RELEASE	12773	232	149	373	1083	1264	1350	1534	1601	1535	1286	209	107	121	713	689	528
STOR CHANGE	-1	291	134					0	0	-699	-553	0	0	0	203	250	374
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	2850	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	1355.2	1346.3	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	20.6	22.7	24.9	26.0	25.8	20.9	7.0	7.7	7.6	11.6	11.2	9.5
POWER																	
AVE POWER MW		65	91	177	154	174	192	211	220	210	158	52	56	56	86	86	76
PEAK POW MW		351	356	356	356	356	356	356	356	325	284	285	285	285	301	319	339
ENERGY GWH	1262.0	23.3	15.3	38.2	111.0	129.4	138.1	156.7	163.5	151.1	117.5	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	-5	-4	-4	-2	0	9	26	-1	0	-7	1	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	14072	328	187	409	1232	1414	1488	1574	1685	1609	1408	276	125	143	769	767	658
RELEASE	14072	328	187	409	1232	1414	1488	1574	1672	1583	1408	276	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	23.0	25.0	25.6	27.2	26.6	22.9	9.3	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	47	79	71	79	86	88	93	92	81	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	590.7	13.9	7.9	17.0	51.4	58.7	61.6	65.1	69.3	66.6	59.9	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	15367	492	263	507	1410	1689	1682	1665	1733	1620	1440	287	130	148	778	759	765
KCFS		16.5	19.0	28.4	23.7	27.5	28.3	27.1	28.2	27.2	23.4	9.6	9.3	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	2481	70	33	42	199	562	1381	1083	270	-206	-84	-130	-61	-69	-235	-235	-138
CHAN STOR	-56	17	5	-19	-16	-55	-4	3	-2	32	44	26	-1	0	-64	-24	3
EVAPORATION	1385							85	268	334	288	129	60	69	151		
STORAGE	36547	37437	37815	38108	38790	39977	42983	43499	42419	41816	41248	41440	41520	41613	41506	41539	41859
SYSTEM POWER																	
AVE POWER MW		533	602	727	724	866	923	1013	1054	801	652	416	432	430	674	725	722
PEAK POW MW		2050	2052	2057	2068	2085	2127	2132	2114	2117	2075	2079	2081	2082	2056	2074	2085
ENERGY GWH	6710.0	191.9	101.1	157.1	521.4	644.2	664.4	753.5	784.0	576.9	484.8	149.9	72.6	82.5	501.4	539.2	485.1
DAILY GWH		12.8	14.4	17.5	17.4	20.8	22.1	24.3	25.3	19.2	15.6	10.0	10.4	10.3	16.2	17.4	17.3

TIME OF STUDY 14:00:52 SHTN NAV SEAS 46 DAYS, SP MAR 0 MAY 0 STUDY NO 7
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	6000	242	113	145	525	925	1454	633	263	252	324	167	78	89	295	212	283
DEPLETION	308	-1	-1	-1	50	146	301	212	-5	-93	-64	-12	-5	-6	-85	-93	-35
EVAPORATION	411							25	79	99	86	39	18	21	45		
MOD INFLOW	5281	243	114	146	475	779	1153	396	189	246	302	140	65	75	335	305	318
RELEASE	5207	119	56	71	446	523	506	492	492	380	307	149	69	79	523	523	472
STOR CHANGE	74	124	58	75	29	256	647	-96	-303	-134	-5	-9	-4	-5	-187	-218	-154
STORAGE	8708	8832	8890	8965	8993	9250	9897	9801	9498	9364	9359	9350	9345	9341	9153	8936	8782
ELEV FTMSL	2198.1	2198.9	2199.3	2199.8	2200.0	2201.7	2205.9	2205.2	2203.3	2202.4	2202.4	2202.3	2202.3	2202.3	2201.1	2199.6	2198.6
DISCH KCFS	5.5	4.0	4.0	4.0	7.5	8.5	8.5	8.0	8.0	6.4	5.0	5.0	5.0	5.0	8.5	8.5	8.5
POWER																	
AVE POWER MW		47	47	47	88	100	102	97	96	76	60	60	60	60	101	100	99
PEAK POW MW		127	127	128	128	130	134	134	132	131	130	130	130	130	129	127	126
ENERGY GWH	747.8	16.8	7.9	10.2	63.4	74.6	73.3	71.9	71.5	54.9	44.4	21.5	10.0	11.4	74.9	74.4	66.7
--GARRISON--																	
NAT INFLOW	9400	443	207	266	712	1197	2521	1765	496	417	400	164	76	87	222	165	262
DEPLETION	1160	32	15	19	71	135	640	509	104	-98	27	-79	-37	-42	-71	-44	-22
CHAN STOR	-34	17			-39	-11	0	5		17	15			0	-38		0
EVAPORATION	483							30	94	116	101	45	21	24	52		
REG INFLOW	12931	547	247	318	1048	1573	2387	1724	790	796	595	346	161	185	726	732	756
RELEASE	12841	417	194	250	952	1261	1220	1261	1230	981	799	387	180	206	1045	1291	1166
STOR CHANGE	90	130	53	68	96	313	1167	463	-439	-185	-205	-41	-19	-22	-320	-560	-410
STORAGE	10455	10585	10638	10706	10802	11115	12282	12745	12305	12120	11916	11875	11856	11834	11514	10955	10545
ELEV FTMSL	1807.8	1808.4	1808.7	1809.0	1809.4	1810.9	1815.9	1817.9	1816.0	1815.2	1814.4	1814.2	1814.1	1814.0	1812.6	1810.1	1808.3
DISCH KCFS	15.5	14.0	14.0	14.0	16.0	20.5	20.5	20.5	20.0	16.5	13.0	13.0	13.0	13.0	17.0	21.0	21.0
POWER																	
AVE POWER MW		143	143	143	164	211	216	222	217	177	139	139	139	139	180	218	215
PEAK POW MW		362	363	364	366	371	389	396	389	387	383	383	383	382	377	368	361
ENERGY GWH	1635.4	51.3	24.0	31.0	118.1	157.0	155.8	165.1	161.2	127.7	103.7	50.0	23.3	26.6	133.8	162.4	144.1
--OAHE--																	
NAT INFLOW	1449	154	72	92	229	130	577	102	24	65	9				-35	-6	36
DEPLETION	640	23	11	14	48	68	135	160	106	26	-9	1	0	1	12	17	27
CHAN STOR	-29	8			-11	-24			3	19	19				-22	-22	
EVAPORATION	395							24	74	94	83	38	18	20	44		
REG INFLOW	13226	555	255	328	1122	1298	1662	1178	1076	946	754	348	162	186	933	1247	1175
RELEASE	13133	438	262	367	1235	1455	1432	1695	1510	597	827	243	119	135	897	1009	912
STOR CHANGE	93	117	-7	-39	-113	-156	229	-516	-434	349	-73	105	43	50	36	238	263
STORAGE	10986	11103	11096	11057	10945	10788	11018	10501	10067	10416	10343	10448	10491	10542	10578	10815	11079
ELEV FTMSL	1576.5	1577.1	1577.0	1576.9	1576.3	1575.5	1576.7	1574.1	1571.8	1573.6	1573.2	1573.8	1574.0	1574.3	1574.4	1575.6	1577.0
DISCH KCFS	15.9	14.7	18.9	20.6	20.8	23.7	24.1	27.6	24.6	10.0	13.4	8.2	8.6	8.5	14.6	16.4	16.4
POWER																	
AVE POWER MW		160	205	223	225	255	259	295	259	106	143	87	92	91	156	176	178
PEAK POW MW		551	551	550	547	543	549	535	523	533	531	534	535	536	537	544	551
ENERGY GWH	1704.5	57.6	34.4	48.2	161.7	189.5	186.7	219.6	192.9	76.6	106.4	31.4	15.4	17.5	116.1	131.1	119.4
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13004	438	262	367	1235	1455	1432	1687	1486	566	800	231	113	129	883	1009	912
RELEASE	13004	438	262	367	1235	1455	1432	1687	1486	566	800	231	113	129	883	1009	912
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	14.7	18.9	20.6	20.8	23.7	24.1	27.4	24.2	9.5	13.0	7.8	8.2	8.1	14.4	16.4	16.4
POWER																	
AVE POWER MW		70	89	96	97	111	113	128	114	48	66	39	41	41	72	81	79
PEAK POW MW		517	510	509	509	509	509	509	519	538	538	538	538	538	538	538	529
ENERGY GWH	754.2	25.1	14.9	20.8	70.0	82.4	81.1	95.5	85.0	34.7	48.9	14.2	7.0	7.9	53.8	60.0	52.9
--FORT RANDALL--																	
NAT INFLOW	500	68	32	41	64	51	130	26	49	23	1				5	-5	15
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	12		
REG INFLOW	13289	505	293	407	1296	1497	1550	1685	1489	542	777	220	108	123	872	1001	924
RELEASE	13291	232	158	390	1296	1497	1550	1685	1673	1610	777	221	108	123	719	701	550
STOR CHANGE	-1	273	135	17				0	-184	-1069	0	0	0	0	153	300	374
STORAGE	3124	3397	3532	3549	3549	3549	3549	3549	3365	2296	2296	2296	2296	2296	2449	2749	3123
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.0	1337.5	1337.5	1337.5	1337.5	1337.5	1340.1	1344.8	1350.0
DISCH KCFS	10.0	7.8	11.4	21.8	21.8	24.3	26.1	27.4	27.2	27.1	12.6	7.4	7.8	7.7	11.7	11.4	9.9
POWER																	
AVE POWER MW		65	96	185	184	206	220	231	227	210	92	54	57	57	87	87	79
PEAK POW MW		350	355	356	356	356	356	356	349	284	285	285	285	285	297	319	339
ENERGY GWH	1306.4	23.3	16.2	39.9	132.6	153.0	158.3	171.9	169.1	151.0	68.6	19.6	9.6	10.9	64.4	64.8	53.2
--GAVINS POINT--																	
NAT INFLOW	1251	91	43	55	124	138	143	81	80	58	105	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	0	0	27	10	-1	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	14382	328	194	425	1416	1611	1666	1722	1735	1662	898	268	125	143	767	769	654
RELEASE	14382	328	194	425	1416	1611	1666	1722	1722	1636	898	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	28.0	28.0	27.5	14.6	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	49	82	82	89	95	95	96	95	52	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	601.8	13.9	8.2	17.6	58.7	66.6	68.6	70.9	71.3	68.7	38.5	11.6	5.4	6.2	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	900	115	54	69	90	174	125	75	56	35	24	13	6	7	13	-3	48
DEPLETION	255	6	3	4	21	35	30	38	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	15027	437	245	490	1485	1750	1761	1759	1743	1648	912	275	128	147	768	753	727
KCFS		14.7	17.6	27.5	25.0	28.5	29.6	28.6	28.3	27.7	14.8	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	2554	61	29	37	197	412	1142	976	265	-140	-34	-78	-36	-42	-119	-103	-13
CHAN STOR	-72	29	-7	-20	-50	-40	-3	3	3	29	61	10	-1	0	-67	-21	3
EVAPORATION	1592							100	311	383	329	149	69	79	172		
STORAGE	35251	35895	36135	36255	36268	36681	38724	38575	37227	36215	35931	35986	36006	36030	35712	35472	35506
SYSTEM POWER																	
AVE POWER MW		523	628	776	840	972	1005	1069	1009	714	552	412	421	419	640	707	693
PEAK POW MW		2022	2021	2021	2020	2023	2052	2045	2027	1989	1985	1987	1988	1989	1957	1974	1982
ENERGY GWH	6750.1	188.1	105.6	167.6	604.6	723.0	723.9	795.0	751.0	513.8	410.5	148.2	70.7	80.5	475.9	525.8	465.9
DAILY GWH		12.5	15.1	18.6	20.2	23.3	24.1	25.6	24.2	17.1	13.2	9.9	10.1	10.1	15.4	17.0	16.6

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

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	5100	234	109	140	515	783	996	439	253	242	320	159	74	85	271	205	275
DEPLETION	467	-1	-1	-1	50	146	301	249	35	-59	-61	-17	-8	-9	-65	-59	-33
EVAPORATION	389							24	75	93	81	37	17	20	42		
MOD INFLOW	4244	236	110	141	465	637	695	166	143	208	300	139	65	74	294	264	308
RELEASE	5071	149	69	89	357	492	476	492	492	391	307	149	69	79	492	523	444
STOR CHANGE	-827	87	41	52	108	145	219	-326	-349	-183	-7	-10	-5	-5	-198	-259	-136
STORAGE	8708	8795	8835	8887	8995	9140	9359	9033	8684	8501	8493	8483	8479	8474	8276	8017	7881
ELEV FTMSL	2198.1	2198.7	2198.9	2199.3	2200.0	2201.0	2202.4	2200.3	2197.9	2196.6	2196.6	2196.5	2196.5	2196.5	2195.1	2193.2	2192.3
DISCH KCFS	5.5	5.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	6.6	5.0	5.0	5.0	5.0	8.0	8.5	8.0
POWER																	
AVE POWER MW		58	59	59	70	94	95	95	94	76	58	58	58	58	92	96	90
PEAK POW MW		126	127	127	128	129	131	128	125	123	123	123	123	123	121	118	117
ENERGY GWH	711.7	21.0	9.8	12.7	50.7	70.1	68.2	70.4	69.6	54.8	43.0	20.8	9.7	11.1	68.1	71.5	60.2
--GARRISON--																	
NAT INFLOW	7299	270	126	162	700	903	2020	1277	361	277	390	161	75	86	108	160	223
DEPLETION	1063	32	15	19	73	143	547	445	94	-94	18	-81	-38	-43	-45	-18	-5
CHAN STOR	-28	6			-11	-22				16	18			0	-34	-6	6
EVAPORATION	449							28	88	108	93	42	20	22	48		
REG INFLOW	10830	392	180	232	973	1229	1949	1296	671	670	603	349	163	186	563	695	678
RELEASE	11837	417	194	250	893	1138	1101	1138	1138	909	769	372	174	198	984	1138	1027
STOR CHANGE	-1007	-25	-14	-18	80	92	848	158	-466	-239	-165	-23	-11	-12	-420	-443	-349
STORAGE	10455	10430	10416	10398	10478	10570	11418	11577	11110	10871	10706	10683	10672	10660	10240	9797	9448
ELEV FTMSL	1807.8	1807.7	1807.7	1807.6	1808.0	1808.4	1812.2	1812.9	1810.8	1809.8	1809.0	1808.9	1808.8	1808.8	1806.8	1804.7	1802.9
DISCH KCFS	15.5	14.0	14.0	14.0	15.0	18.5	18.5	18.5	18.5	15.3	12.5	12.5	12.5	12.5	16.0	18.5	18.5
POWER																	
AVE POWER MW		142	142	142	152	188	191	194	193	158	129	128	128	128	162	184	181
PEAK POW MW		359	359	359	360	362	376	378	371	367	364	364	363	363	356	348	342
ENERGY GWH	1462.1	51.2	23.9	30.7	109.5	139.7	137.5	144.6	143.9	113.8	95.8	46.2	21.5	24.6	120.7	136.9	121.7
--OAHE--																	
NAT INFLOW	1049	197	92	118	183	100	215	82	21	64	5	-5	-2	-3	-48	-12	41
DEPLETION	640	23	11	14	48	68	135	160	106	26	-9	1	0	1	12	17	27
CHAN STOR	-15	8			-5	-19				19	16				-20	-14	
EVAPORATION	369							23	69	87	78	35	17	19	41		
REG INFLOW	11861	599	276	354	1022	1151	1181	1037	983	878	721	330	154	176	863	1094	1041
RELEASE	12893	442	282	377	1260	1478	1447	1713	1361	629	542	259	120	138	908	1016	920
STOR CHANGE	-1032	157	-7	-23	-238	-327	-267	-676	-378	250	179	71	34	38	-45	78	121
STORAGE	10986	11143	11136	11113	10875	10548	10282	9606	9228	9477	9656	9727	9761	9799	9754	9833	9954
ELEV FTMSL	1576.5	1577.3	1577.2	1577.1	1575.9	1574.3	1572.9	1569.3	1567.1	1568.5	1569.5	1569.9	1570.1	1570.3	1570.1	1570.5	1571.2
DISCH KCFS	15.9	14.8	20.3	21.1	21.2	24.0	24.3	27.9	22.1	10.6	8.8	8.7	8.7	8.7	14.8	16.5	16.6
POWER																	
AVE POWER MW		161	221	230	229	257	258	290	227	109	91	91	90	91	154	172	173
PEAK POW MW		552	552	551	545	537	529	510	499	507	512	514	515	516	514	517	520
ENERGY GWH	1641.8	58.1	37.2	49.6	164.9	191.5	185.7	215.9	168.8	78.1	68.0	32.7	15.2	17.4	114.4	128.0	116.4
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12764	442	282	377	1260	1478	1447	1705	1337	598	515	247	115	131	894	1016	920
RELEASE	12764	442	282	377	1260	1478	1447	1705	1337	598	515	247	115	131	894	1016	920
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	14.8	20.3	21.1	21.2	24.0	24.3	27.7	21.7	10.0	8.4	8.3	8.3	8.3	14.5	16.5	16.6
POWER																	
AVE POWER MW		70	95	99	99	113	114	130	104	51	42	42	42	42	73	81	80
PEAK POW MW		518	510	509	509	509	509	509	525	538	538	538	538	538	538	538	529
ENERGY GWH	740.2	25.3	16.0	21.4	71.4	83.7	82.0	96.5	77.1	36.6	31.6	15.2	7.0	8.0	54.5	60.5	53.4
--FORT RANDALL--																	
NAT INFLOW	300	55	26	33	43	35	120	13	36	-10	-52	-3	-1	-1		-6	12
DEPLETION	79	1	1	1	3	9	12	18	15	7	1	1	0	1	3	3	3
EVAPORATION	126							10	30	31	22	10	5	5	12		
REG INFLOW	12853	495	308	410	1300	1504	1555	1690	1328	544	440	233	108	124	879	1007	929
RELEASE	12855	235	160	393	1300	1504	1555	1690	1677	1447	440	234	108	124	726	707	555
STOR CHANGE	-2	260	148	17				0	-349	-904	0	0	0	0	153	300	374
STORAGE	3124	3384	3532	3549	3549	3549	3549	3549	3200	2296	2296	2296	2296	2296	2448	2748	3122
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	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	24.3	7.2	7.9	7.8	7.8	11.8	11.5	10.0
POWER																	
AVE POWER MW		66	97	186	185	207	221	232	226	187	53	58	57	57	87	88	80
PEAK POW MW		350	355	356	356	356	356	356	342	284	285	285	285	285	297	319	339
ENERGY GWH	1265.3	23.6	16.3	40.2	133.0	153.7	158.8	172.4	168.1	134.7	39.1	20.7	9.6	11.0	64.9	65.4	53.7
--GAVINS POINT--																	
NAT INFLOW	1200	87	41	52	120	131	138	76	76	55	104	45	21	24	67	65	98
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	0	6	32	-1	0	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	13895	327	194	425	1416	1611	1666	1722	1735	1502	565	268	125	143	770	772	656
RELEASE	13895	327	194	425	1416	1611	1666	1722	1722	1476	565	268	125	143	770	772	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	14.0	23.8	23.8	26.2	28.0	28.0	28.0	24.8	9.2	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	49	82	82	89	95	95	96	86	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	581.4	13.9	8.2	17.6	58.7	66.6	68.6	70.9	71.3	62.3	24.4	11.6	5.4	6.2	33.1	33.2	29.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	550	36	17	22	77	144	106	47	22	15	14	10	4	5	10	-5	26
DEPLETION	255	6	3	4	21	35	30	38	35	23	10	6	3	3	12	13	14
REGULATED FLOW AT SIOUX CITY																	
KAF	14190	357	208	443	1472	1720	1742	1731	1709	1468	569	272	127	145	768	754	707
KCFS		12.0	15.0	24.8	24.7	28.0	29.3	28.1	27.8	24.7	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	2616	61	29	37	199	420	1049	949	295	-102	-40	-86	-40	-46	-73	-43	6
CHAN STOR	-50	18	-7	-20	-16	-46	-3	-3	0	34	65	-1	0	0	-61	-19	8
EVAPORATION	1509							95	295	362	312	141	66	75	163		
STORAGE	35251	35730	35898	35926	35876	35786	36587	35743	34214	33164	33170	33208	33226	33247	32736	32413	32384
SYSTEM POWER																	
AVE POWER MW		536	663	797	817	948	973	1036	939	667	406	409	408	408	613	666	647
PEAK POW MW		2020	2018	2017	2013	2007	2015	1996	1977	1936	1939	1940	1941	1942	1905	1918	1923
ENERGY GWH	6402.5	193.0	111.4	172.1	588.3	705.2	700.9	770.8	698.7	480.4	301.7	147.1	68.5	78.3	455.7	495.5	435.1
DAILY GWH		12.9	15.9	19.1	19.6	22.7	23.4	24.9	22.5	16.0	9.7	9.8	9.8	9.8	14.7	16.0	15.5

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	538	7	3	4	11	332	672	226	-51	-146	-86	-39	-18	-21	-127	-141	-89
EVAPORATION	379							23	72	91	80	36	17	19	42		
MOD INFLOW	6483	257	120	154	617	878	1179	580	303	374	404	190	89	101	395	402	438
RELEASE	5133	179	69	89	357	492	476	492	492	387	307	149	69	87	492	523	472
STOR CHANGE	1350	79	51	65	260	386	703	88	-189	-13	97	41	19	14	-97	-121	-34
STORAGE	10614	10693	10744	10809	11069	11455	12158	12246	12057	12044	12141	12182	12201	12215	12119	11998	11964
ELEV FTMSL	2210.3	2210.8	2211.1	2211.5	2213.0	2215.3	2219.3	2219.8	2218.7	2218.6	2219.2	2219.4	2219.5	2219.6	2219.1	2218.4	2218.2
DISCH KCFS	9.0	6.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	6.5	5.0	5.0	5.0	5.5	8.0	8.5	8.5
POWER																	
AVE POWER MW		74	62	62	75	101	102	103	103	84	65	65	65	71	103	110	109
PEAK POW MW		140	140	141	143	145	150	150	149	149	149	150	150	150	149	149	148
ENERGY GWH	795.8	26.8	10.5	13.5	54.1	75.1	73.7	77.0	76.9	60.4	48.1	23.3	10.9	13.7	76.9	81.5	73.4
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1054	-7	-3	-4	-5	194	837	592	70	-131	-9	-111	-52	-59	-112	-90	-55
CHAN STOR	6	32	11		-11	-21				15	16			-5	-26	-5	0
EVAPORATION	448							27	86	108	94	42	20	23	49		
REG INFLOW	14638	688	303	375	1204	1700	2597	1939	917	923	692	409	191	221	782	844	853
RELEASE	12994	417	194	250	952	1291	1220	1261	1261	1012	830	402	187	214	1045	1291	1166
STOR CHANGE	1644	271	108	125	252	408	1377	678	-344	-90	-138	7	3	7	-263	-447	-313
STORAGE	12776	13047	13155	13281	13533	13941	15318	15997	15653	15564	15426	15433	15436	15443	15180	14733	14420
ELEV FTMSL	1818.0	1819.1	1819.5	1820.0	1821.0	1822.6	1827.8	1830.3	1829.1	1828.7	1828.2	1828.3	1828.3	1828.3	1827.3	1825.7	1824.5
DISCH KCFS	21.0	14.0	14.0	14.0	16.0	21.0	20.5	20.5	20.5	17.0	13.5	13.5	13.5	13.5	17.0	21.0	21.0
POWER																	
AVE POWER MW		154	155	155	178	235	235	241	242	200	159	159	159	159	199	243	240
PEAK POW MW		401	402	404	408	414	433	442	437	436	434	434	434	434	431	425	420
ENERGY GWH	1813.8	55.4	26.0	33.6	128.3	175.0	169.2	179.4	180.1	144.2	118.2	57.1	26.7	30.5	147.9	180.6	161.6
--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	1	34			-10	-23	2			16	16				-16	-19	
EVAPORATION	406							25	78	97	85	38	18	21	45		
REG INFLOW	14237	744	331	426	1259	1435	1773	1234	1107	1023	785	367	171	196	952	1256	1179
RELEASE	12552	403	227	300	971	1298	1171	1492	1604	981	841	265	112	130	931	942	886
STOR CHANGE	1685	341	104	126	288	137	602	-258	-497	42	-56	102	59	65	22	314	294
STORAGE	13366	13707	13811	13937	14225	14362	14964	14706	14208	14251	14195	14297	14356	14422	14443	14757	15051
ELEV FTMSL	1587.4	1588.8	1589.2	1589.7	1590.9	1591.4	1593.8	1592.8	1590.8	1591.0	1590.8	1591.2	1591.4	1591.7	1591.8	1593.0	1594.2
DISCH KCFS	15.9	13.5	16.4	16.8	16.3	21.1	19.7	24.3	26.1	16.5	13.7	8.9	8.1	8.2	15.1	15.3	15.9
POWER																	
AVE POWER MW		157	191	197	192	249	234	290	309	195	162	105	96	98	180	182	191
PEAK POW MW		613	615	617	623	626	638	633	623	624	622	624	626	627	627	634	639
ENERGY GWH	1799.2	56.7	32.1	42.5	138.2	185.3	168.8	215.4	229.5	140.1	120.2	38.0	16.1	18.7	133.6	135.7	128.4
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	12449	403	227	300	971	1298	1171	1486	1585	956	819	255	107	125	919	942	886
RELEASE	12449	403	227	300	971	1298	1171	1486	1585	956	819	255	107	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	15.9	13.5	16.4	16.8	16.3	21.1	19.7	24.2	25.8	16.1	13.3	8.6	7.7	7.9	14.9	15.3	15.9
POWER																	
AVE POWER MW		64	77	79	76	99	92	113	121	78	67	43	39	40	75	75	77
PEAK POW MW		517	509	509	509	509	509	509	509	537	538	538	538	538	538	538	529
ENERGY GWH	721.1	23.1	12.9	17.0	55.0	73.5	66.4	84.2	89.7	56.2	50.0	15.6	6.6	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	110							8	25	30	21	8	4	4	10		
REG INFLOW	13160	524	283	373	1083	1429	1344	1534	1601	961	798	248	104	121	916	939	902
RELEASE	13160	232	149	373	1083	1429	1344	1534	1601	1535	1476	248	104	121	713	689	528
STOR CHANGE	0	292	134		0	0		0	0	-574	-678	0	0	0	203	250	374
STORAGE	3123	3415	3549	3549	3549	3549	3549	3549	3549	2975	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	1355.2	1348.0	1337.5	1337.5	1337.5	1337.5	1341.0	1344.8	1350.0
DISCH KCFS	9.5	7.8	10.8	20.9	18.2	23.2	22.6	24.9	26.0	25.8	24.0	8.3	7.5	7.6	11.6	11.2	9.5
POWER																	
AVE POWER MW		65	91	177	154	196	191	211	220	211	182	61	55	56	86	86	76
PEAK POW MW		351	356	356	356	356	356	356	356	332	284	285	285	285	301	319	339
ENERGY GWH	1300.6	23.3	15.3	38.2	111.0	146.1	137.5	156.7	163.5	152.2	135.7	22.0	9.2	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	-10	1	-5	-2	0	3	29	2	0	-7	1	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	14459	328	187	409	1232	1574	1488	1574	1685	1609	1593	318	125	143	769	767	658
RELEASE	14459	328	187	409	1232	1574	1488	1574	1672	1583	1593	318	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	25.6	25.0	25.6	27.2	26.6	25.9	10.7	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	47	79	71	88	86	88	93	92	91	38	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	606.5	13.9	7.9	17.0	51.4	65.1	61.6	65.1	69.3	66.6	67.6	13.7	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	258	6	3	4	21	35	31	38	36	23	10	6	3	3	12	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	15751	491	263	507	1410	1849	1681	1665	1732	1620	1625	329	130	148	778	758	765
KCFS		16.5	19.0	28.4	23.7	30.1	28.2	27.1	28.2	27.2	26.4	11.1	9.3	9.4	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	2693	30	14	18	82	658	1714	1077	189	-225	-92	-137	-64	-73	-202	-196	-100
CHAN STOR	6	70	5	-19	-15	-54	4	-5	-2	32	34	30	2	-5	-49	-23	3
EVAPORATION	1484							91	287	359	309	138	65	74	161		
STORAGE	41859	42841	43238	43554	44355	45286	47968	48477	47459	46851	46076	46227	46309	46395	46260	46256	46538
SYSTEM POWER																	
AVE POWER MW		554	623	749	747	968	941	1045	1087	861	726	472	446	456	687	740	738
PEAK POW MW		2135	2137	2142	2153	2164	2200	2204	2189	2195	2145	2148	2150	2151	2125	2142	2152
ENERGY GWH	7037.1	199.3	104.6	161.7	537.9	720.1	677.2	777.7	809.1	619.7	539.8	169.7	74.9	87.5	511.3	550.8	495.7
DAILY GWH		13.3	14.9	18.0	17.9	23.2	22.6	25.1	26.1	20.7	17.4	11.3	10.7	10.9	16.5	17.8	17.7

	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	443	-22	-10	-13	48	337	588	238	-50	-147	-81	-40	-19	-21	-130	-143	-91
EVAPORATION	404							25	77	97	85	38	18	20	44		
MOD INFLOW	6553	287	134	172	580	873	1263	566	297	369	394	189	88	101	396	404	440
RELEASE	5649	179	69	89	357	523	506	523	523	428	369	179	83	95	584	615	528
STOR CHANGE	904	108	64	83	223	350	757	44	-226	-59	25	11	5	6	-188	-211	-88
STORAGE	11964	12072	12136	12219	12442	12792	13549	13593	13367	13308	13334	13344	13349	13355	13166	12956	12868
ELEV FTMSL	2218.2	2218.8	2219.2	2219.6	2220.9	2222.8	2226.8	2227.1	2225.9	2225.6	2225.7	2225.8	2225.8	2225.8	2224.8	2223.7	2223.2
DISCH KCFS	8.5	6.0	5.0	5.0	6.0	8.5	8.5	8.5	8.5	7.2	6.0	6.0	6.0	6.0	9.5	10.0	9.5
POWER																	
AVE POWER MW		77	65	65	78	111	112	113	113	96	80	80	80	80	126	132	125
PEAK POW MW		149	149	150	151	153	157	157	156	156	156	156	156	156	155	154	154
ENERGY GWH	902.0	27.9	10.9	14.0	56.1	82.6	81.0	84.3	84.2	68.8	59.3	28.7	13.4	15.3	93.7	97.9	83.9
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1029	-9	-4	-5	-8	178	838	600	76	-134	-14	-115	-53	-61	-114	-90	-56
CHAN STOR	-10	26	10		-10	-26	0	0		13	12				-36	-5	5
EVAPORATION	469							29	91	113	98	44	21	24	51		
REG INFLOW	15141	683	303	376	1208	1742	2626	1960	937	959	751	440	206	235	865	937	915
RELEASE	14044	417	194	250	1012	1353	1309	1353	1353	1128	984	476	222	254	1107	1383	1250
STOR CHANGE	1098	266	109	126	196	389	1317	607	-416	-169	-233	-36	-17	-19	-242	-447	-335
STORAGE	14420	14686	14795	14921	15117	15506	16823	17430	17014	16846	16613	16577	16561	16542	16300	15853	15518
ELEV FTMSL	1824.5	1825.5	1825.9	1826.4	1827.1	1828.5	1833.2	1835.2	1833.8	1833.3	1832.4	1832.3	1832.3	1832.2	1831.4	1829.8	1828.6
DISCH KCFS	21.0	14.0	14.0	14.0	17.0	22.0	22.0	22.0	22.0	19.0	16.0	16.0	16.0	16.0	18.0	22.5	22.5
POWER																	
AVE POWER MW		161	162	162	197	256	262	267	268	230	193	193	193	193	216	267	265
PEAK POW MW		424	426	427	430	435	452	460	455	453	450	449	449	449	446	440	435
ENERGY GWH	2024.7	57.9	27.2	35.0	142.1	190.8	188.4	198.9	199.3	165.4	143.9	69.4	32.4	37.0	160.6	198.6	177.8
--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	-6	32			-13	-22				13	13				-9	-20	
EVAPORATION	432							27	84	104	90	40	19	22	47		
REG INFLOW	15240	741	331	426	1313	1497	1857	1319	1190	1129	932	440	205	234	1019	1346	1263
RELEASE	14115	402	227	300	971	1431	1284	1609	1721	1526	1010	475	219	195	1082	949	716
STOR CHANGE	1125	339	104	125	343	66	573	-290	-532	-397	-78	-35	-14	40	-63	397	547
STORAGE	15051	15390	15494	15619	15962	16028	16601	16310	15779	15382	15304	15268	15255	15294	15232	15629	16176
ELEV FTMSL	1594.2	1595.5	1595.9	1596.3	1597.6	1597.9	1599.9	1598.9	1596.9	1595.4	1595.1	1595.0	1595.0	1595.1	1594.9	1596.4	1598.4
DISCH KCFS	15.9	13.5	16.4	16.8	16.3	23.3	21.6	26.2	28.0	25.6	16.4	16.0	15.8	12.3	17.6	15.4	12.9
POWER																	
AVE POWER MW		163	198	204	199	285	266	323	342	311	199	193	191	149	212	187	158
PEAK POW MW		646	648	650	656	657	668	662	653	645	644	643	643	644	643	650	660
ENERGY GWH	2082.0	58.8	33.3	44.1	143.4	211.8	191.4	240.1	254.5	223.7	147.8	69.5	32.0	28.5	158.0	139.1	106.1
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	14012	402	227	300	971	1431	1284	1603	1702	1501	988	465	214	190	1070	949	716
RELEASE	14012	402	227	300	971	1431	1284	1603	1702	1501	988	465	214	190	1070	949	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	15.9	13.5	16.4	16.8	16.3	23.3	21.6	26.1	27.7	25.2	16.1	15.6	15.4	12.0	17.4	15.4	12.9
POWER																	
AVE POWER MW		64	77	79	76	109	101	122	130	120	79	79	78	60	86	75	62
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	808.1	23.1	12.9	17.0	55.0	81.1	72.7	90.8	96.4	86.1	58.7	28.3	13.1	11.6	64.0	55.9	41.6
--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	118							8	25	31	25	10	4	4	10		
REG INFLOW	14716	523	283	373	1083	1562	1457	1651	1718	1504	965	456	211	186	1067	946	732
RELEASE	14715	232	149	373	1083	1562	1457	1651	1718	1648	1600	761	356	209	701	689	528
STOR CHANGE	1	291	134					0	0	-144	-635	-305	-145	-23	366	257	204
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3405	2770	2465	2320	2297	2663	2920	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.1	1340.4	1337.9	1337.5	1343.5	1347.2	1350.0
DISCH KCFS	9.5	7.8	10.8	20.9	18.2	25.4	24.5	26.8	27.9	27.7	26.0	25.6	25.6	13.2	11.4	11.2	9.5
POWER																	
AVE POWER MW		65	91	177	154	214	207	226	236	232	209	194	188	96	86	88	77
PEAK POW MW		351	356	356	356	356	356	356	356	350	320	298	287	285	313	330	339
ENERGY GWH	1463.1	23.3	15.3	38.2	111.0	159.5	148.9	168.4	175.2	167.0	155.5	69.9	31.6	18.5	63.7	65.4	51.6
--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	-14	2	-5	-2	0	3	1	0	23	3	0	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	16015	328	187	409	1232	1703	1601	1691	1802	1722	1716	803	375	254	767	767	658
RELEASE	16015	328	187	409	1232	1703	1601	1691	1789	1696	1716	803	375	254	767	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	27.7	26.9	27.5	29.1	28.5	27.9	27.0	27.0	16.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	47	79	71	94	92	94	99	99	98	95	95	57	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	670.2	13.9	7.9	17.0	51.4	70.2	66.1	69.7	73.8	71.1	72.7	34.0	15.9	10.9	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	263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	17302	491	263	507	1409	1978	1794	1782	1849	1732	1748	813	380	259	775	758	765
KCFS		16.5	18.9	28.4	23.7	32.2	30.1	29.0	30.1	29.1	28.4	27.3	27.3	16.3	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	0	0	0	118	648	1634	1102	199	-228	-93	-142	-66	-75	-206	-198	-103
CHAN STOR	-17	61	5	-19	-19	-62	2	-5	-2	27	29	1	0	23	-41	-25	8
EVAPORATION	1564							97	304	379	327	146	68	77	168		
STORAGE	46538	47542	47953	48287	49049	49854	52501	52862	51702	50959	50038	49673	49502	49506	49379	49376	49665
SYSTEM POWER																	
AVE POWER MW		569	639	765	776	1070	1039	1145	1187	1086	857	833	824	634	770	793	730
PEAK POW MW		2201	2202	2207	2217	2225	2257	2259	2244	2239	2224	2202	2190	2189	2172	2190	2193
ENERGY GWH	7950.1	205.0	107.4	165.3	559.0	796.0	748.4	852.2	883.4	782.1	637.9	299.8	138.4	121.8	572.9	589.9	490.7
DAILY GWH		13.7	15.3	18.4	18.6	25.7	24.9	27.5	28.5	26.1	20.6	20.0	19.8	15.2	18.5	19.0	17.5

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 455	-23	-11	-14	49	339	593	245	-46	-147	-79	-40	-19	-21	-129	-141	-101
EVAPORATION 436							26	83	104	91	41	19	22	48		
MOD INFLOW 6509	287	134	172	579	871	1258	558	287	362	386	186	87	99	391	402	450
RELEASE 5154	179	69	89	357	492	476	492	492	392	307	149	69	87	492	523	489
STOR CHANGE 1355	109	65	83	222	379	782	66	-205	-30	78	37	17	12	-101	-121	-39
STORAGE 12868	12977	13042	13125	13347	13726	14508	14574	14368	14338	14417	14454	14471	14483	14382	14262	14223
ELEV FTMSL 2223.2	2223.8	2224.1	2224.6	2225.8	2227.7	2231.7	2232.0	2231.0	2230.8	2231.2	2231.4	2231.5	2231.5	2231.0	2230.5	2230.3
DISCH KCFS 9.5	6.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	6.6	5.0	5.0	5.0	5.5	8.0	8.5	8.5
POWER																
AVE POWER MW	79	66	66	80	107	108	108	108	89	68	68	68	75	108	115	115
PEAK POW MW	154	155	155	156	158	160	161	160	160	160	160	160	160	160	160	159
ENERGY GWH 839.0	28.5	11.1	14.3	57.3	79.3	77.5	80.6	80.5	64.1	50.3	24.4	11.4	14.3	80.5	85.3	79.7
--GARRISON--																
NAT INFLOW 11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION 1042	-9	-4	-5	-7	178	848	616	82	-137	-18	-118	-55	-63	-114	-90	-62
CHAN STOR 10	36	10		-10	-20				14	16			-5	-25	-5	0
EVAPORATION 478							29	93	115	100	45	21	24	51		
REG INFLOW 14646	693	303	376	1207	1717	2586	1912	898	925	696	414	193	224	782	845	877
RELEASE 14830	446	208	268	893	1537	1428	1445	1445	1199	1045	506	236	270	1107	1445	1352
STOR CHANGE -184	247	94	108	314	179	1158	467	-547	-275	-349	-92	-43	-46	-324	-600	-475
STORAGE 15518	15765	15859	15967	16281	16461	17619	18086	17539	17264	16915	16822	16780	16733	16409	15809	15334
ELEV FTMSL 1828.6	1829.5	1829.8	1830.2	1831.3	1831.9	1835.9	1837.4	1835.6	1834.7	1833.5	1833.2	1833.0	1832.9	1831.7	1829.6	1827.9
DISCH KCFS 22.5	15.0	15.0	15.0	15.0	25.0	24.0	23.5	23.5	20.2	17.0	17.0	17.0	17.0	18.0	23.5	23.5
POWER																
AVE POWER MW	177	178	178	179	298	291	290	290	247	207	206	206	206	217	279	275
PEAK POW MW	439	440	441	445	448	462	468	461	458	453	452	452	451	447	439	433
ENERGY GWH 2163.3	63.7	29.9	38.5	128.9	221.9	209.3	215.6	215.4	177.6	154.0	74.2	34.6	39.5	161.1	207.5	191.7
--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 -4	33		0	0	-43	4	2		14	14	0			-4	-24	
EVAPORATION 448							28	88	108	93	42	19	22	48		
REG INFLOW 15998	772	345	443	1208	1660	1976	1408	1275	1196	990	468	219	250	1022	1403	1364
RELEASE 15313	402	244	334	1077	1599	1426	1756	1869	1668	1157	546	252	211	1082	949	740
STOR CHANGE 685	370	101	110	130	61	550	-349	-594	-473	-167	-78	-34	38	-59	454	624
STORAGE 16176	16546	16647	16757	16887	16948	17498	17150	16556	16083	15916	15838	15804	15843	15783	16237	16861
ELEV FTMSL 1598.4	1599.7	1600.1	1600.5	1600.9	1601.2	1603.1	1601.9	1599.8	1598.1	1597.4	1597.2	1597.0	1597.2	1597.0	1598.6	1600.9
DISCH KCFS 12.9	13.5	17.5	18.7	18.1	26.0	24.0	28.6	30.4	28.0	18.8	18.4	18.2	13.3	17.6	15.4	12.9
POWER																
AVE POWER MW	167	218	232	226	324	300	358	377	345	231	224	222	163	215	189	160
PEAK POW MW	667	669	671	673	674	685	678	667	658	655	654	653	654	653	661	673
ENERGY GWH 2294.2	60.1	36.6	50.2	162.4	240.8	216.2	266.4	280.7	248.1	171.6	80.8	37.3	31.3	159.8	140.8	111.2
--BIG BEND--																
EVAPORATION 103							6	20	25	22	10	5	5	11		
REG INFLOW 15210	402	244	334	1077	1599	1426	1750	1849	1644	1136	537	248	206	1070	949	740
RELEASE 15210	402	244	334	1077	1599	1426	1750	1849	1644	1136	537	248	206	1070	949	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	13.5	17.5	18.7	18.1	26.0	24.0	28.5	30.1	27.6	18.5	18.0	17.8	13.0	17.4	15.4	12.9
POWER																
AVE POWER MW	64	82	88	85	122	112	133	141	131	91	91	90	66	86	75	62
PEAK POW MW	517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH 876.8	23.1	13.8	18.9	61.0	90.6	80.8	99.1	104.7	94.3	67.4	32.6	15.1	12.6	64.0	55.9	43.0
--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 118							8	25	31	25	10	4	4	10		
REG INFLOW 15914	523	300	406	1189	1730	1599	1798	1866	1647	1112	528	244	202	1067	946	756
RELEASE 15914	232	166	406	1189	1730	1599	1798	1866	1791	1747	833	389	225	701	689	552
STOR CHANGE 0	291	134			0	0	0	0	-144	-635	-305	-145	-23	366	257	204
STORAGE 3124	3415	3549	3549	3549	3549	3549	3549	3549	3405	2770	2465	2320	2297	2663	2920	3124
ELEV FTMSL 1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.1	1340.4	1337.9	1337.5	1343.5	1347.2	1350.0
DISCH KCFS 9.5	7.8	12.0	22.8	20.0	28.1	26.9	29.2	30.3	30.1	28.4	28.0	28.0	14.2	11.4	11.2	9.6
POWER																
AVE POWER MW	65	101	192	169	237	227	246	255	252	228	212	205	104	86	88	78
PEAK POW MW	351	356	356	356	356	356	356	356	350	320	298	287	285	313	330	339
ENERGY GWH 1581.2	23.3	17.0	41.5	121.9	176.4	163.2	183.2	190.0	181.2	169.6	76.3	34.5	19.9	63.7	65.4	54.0
--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	-8	-21	5	-16	2	-5	-2	0	3	1	0	26	5	0	3
EVAPORATION 38							2	7	9	8	4	2	2	4		
REG INFLOW 17212	328	201	441	1339	1869	1744	1839	1950	1865	1863	875	408	273	769	767	682
RELEASE 17212	328	201	441	1339	1869	1744	1839	1937	1839	1863	875	408	273	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	14.5	24.7	22.5	30.4	29.3	29.9	31.5	30.9	30.3	29.4	29.4	17.2	12.5	12.5	12.5
POWER																
AVE POWER MW	39	51	85	77	102	99	101	105	105	104	102	102	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 712.0	13.9	8.5	18.3	55.7	75.8	71.4	74.9	78.0	75.5	77.6	36.8	17.2	11.7	33.1	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 263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																
KAF 18499	491	277	539	1516	2144	1937	1930	1997	1875	1895	885	413	278	777	758	789
KCFS	16.5	20.0	30.2	25.5	34.9	32.5	31.4	32.5	31.5	30.8	29.7	29.7	17.5	12.6	12.3	13.7
--TOTAL--																
NAT INFLOW 24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION 2631	0	0	0	120	651	1653	1129	212	-230	-95	-145	-68	-77	-205	-195	-118
CHAN STOR 5	72	2	-21	-5	-79	7	-2	-2	29	33	1	0	21	-25	-29	3
EVAPORATION 1621							101	316	393	338	151	70	80	173		
STORAGE 49665	50681	51076	51377	52043	52663	55153	55337	54004	53109	52036	51597	51393	51374	51256	51245	51520
SYSTEM POWER																
AVE POWER MW	591	695	841	816	1189	1137	1236	1276	1168	928	903	893	673	756	790	733
PEAK POW MW	2242	2243	2247	2254	2259	2287	2286	2269	2261	2244	2220	2207	2206	2189	2206	2209
ENERGY GWH 8466.5	212.7	116.8	181.7	587.2	884.7	818.4	919.8	949.3	840.7	690.6	325.0	150.0	129.2	562.1	587.9	510.4
DAILY GWH	14.2	16.7	20.2	19.6	28.5	27.3	29.7	30.6	28.0	22.3	21.7	21.4	16.2	18.1	19.0	17.6

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	465	-23	-11	-14	48	340	597	252	-42	-148	-83	-42	-19	-22	-132	-144	-92
EVAPORATION	445							28	86	107	93	42	19	22	47		
MOD INFLOW	6490	287	134	172	580	870	1254	549	280	360	388	187	87	100	395	405	441
RELEASE	7060	179	83	107	357	553	762	676	676	597	553	268	125	159	676	676	611
STOR CHANGE	-569	109	51	65	223	317	492	-127	-397	-238	-165	-80	-37	-59	-282	-271	-170
STORAGE	14223	14332	14383	14448	14671	14987	15480	15353	14956	14718	14553	14472	14435	14376	14095	13823	13653
ELEV FTMSL	2230.3	2230.8	2231.0	2231.4	2232.4	2234.0	2236.3	2235.7	2233.8	2232.7	2231.9	2231.5	2231.3	2231.0	2229.6	2228.2	2227.4
DISCH KCFS	8.5	6.0	6.0	6.0	6.0	9.0	12.8	11.0	11.0	10.0	9.0	9.0	9.0	10.0	11.0	11.0	11.0
POWER																	
AVE POWER MW		81	81	81	81	122	163	149	148	136	122	122	122	135	145	145	144
PEAK POW MW		160	160	160	161	162	164	163	162	161	161	160	160	160	159	158	157
ENERGY GWH	1139.3	29.2	13.6	17.5	58.6	91.0	117.3	110.6	110.1	98.0	90.7	43.8	20.4	25.9	108.2	107.6	96.8
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1062	-8	-4	-5	-6	179	859	633	87	-140	-24	-122	-57	-65	-117	-92	-57
CHAN STOR	-26	26				-31	-39	18		9	10			-10	-10		0
EVAPORATION	501							30	96	120	105	47	22	25	55		
REG INFLOW	16472	682	306	394	1216	1767	2822	2097	1074	1123	937	533	249	290	982	1005	994
RELEASE	14421	417	194	250	952	1660	1309	1322	1322	1140	1045	506	236	270	1107	1414	1277
STOR CHANGE	2051	266	112	144	264	107	1513	775	-248	-16	-109	28	13	21	-125	-409	-283
STORAGE	15334	15599	15711	15855	16119	16225	17738	18513	18266	18250	18141	18168	18181	18202	18077	17668	17384
ELEV FTMSL	1827.9	1828.9	1829.3	1829.8	1830.7	1831.1	1836.3	1838.8	1838.0	1838.0	1837.6	1837.7	1837.7	1837.8	1837.4	1836.0	1835.1
DISCH KCFS	23.5	14.0	14.0	14.0	16.0	27.0	22.0	21.5	21.5	19.2	17.0	17.0	17.0	17.0	18.0	23.0	23.0
POWER																	
AVE POWER MW		165	165	166	190	320	266	267	268	239	212	212	212	212	224	284	282
PEAK POW MW		436	438	440	443	445	464	473	470	470	469	469	469	469	468	463	459
ENERGY GWH	2137.0	59.3	27.8	35.8	136.9	238.3	191.8	198.5	199.6	171.8	157.6	76.2	35.6	40.7	166.6	211.2	189.3
--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	2	40			-8	-46	21	2		10	9	0			-4	-22	
EVAPORATION	444							29	88	107	92	41	19	22	47		
REG INFLOW	15582	749	331	425	1258	1778	1871	1279	1148	1131	988	469	219	250	1022	1374	1289
RELEASE	16097	402	265	372	1202	1677	1503	1836	1949	1746	1237	585	270	234	1106	973	738
STOR CHANGE	-514	347	66	53	56	101	367	-557	-801	-614	-249	-116	-51	16	-84	400	552
STORAGE	16861	17208	17274	17327	17382	17483	17851	17294	16493	15879	15630	15513	15462	15478	15394	15795	16346
ELEV FTMSL	1600.9	1602.1	1602.3	1602.5	1602.7	1603.0	1604.3	1602.4	1599.5	1597.3	1596.4	1595.9	1595.7	1595.8	1595.5	1597.0	1599.0
DISCH KCFS	12.9	13.5	19.1	20.9	20.2	27.3	25.3	29.9	31.7	29.3	20.1	19.7	19.5	14.7	18.0	15.8	13.3
POWER																	
AVE POWER MW		169	239	262	254	343	319	376	393	359	245	239	236	179	218	192	163
PEAK POW MW		679	680	681	682	684	691	681	666	655	650	648	647	647	646	653	663
ENERGY GWH	2414.1	61.0	40.2	56.6	182.9	255.0	229.7	279.7	292.7	258.8	182.4	85.9	39.6	34.3	162.1	143.2	109.8
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	15994	402	265	372	1202	1677	1503	1830	1929	1721	1216	575	266	229	1095	973	738
RELEASE	15994	402	265	372	1202	1677	1503	1830	1929	1721	1216	575	266	229	1095	973	738
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	13.5	19.1	20.9	20.2	27.3	25.3	29.8	31.4	28.9	19.8	19.3	19.1	14.4	17.8	15.8	13.3
POWER																	
AVE POWER MW		64	89	98	95	128	118	139	147	137	97	97	96	73	88	77	64
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	921.8	23.1	15.0	21.1	68.1	95.0	85.2	103.6	109.2	98.7	72.1	34.9	16.2	13.9	65.5	57.4	42.9
--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	118							8	25	31	25	10	4	4	10		
REG INFLOW	16698	523	321	445	1314	1808	1676	1878	1946	1725	1192	566	262	225	1092	970	754
RELEASE	16698	232	187	445	1314	1808	1676	1878	1946	1869	1827	871	407	248	726	713	550
STOR CHANGE	0	291	134					0	0	-144	-635	-305	-145	-23	366	257	204
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3405	2770	2465	2320	2297	2663	2920	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.1	1340.4	1337.9	1337.5	1343.5	1347.2	1350.0
DISCH KCFS	9.6	7.8	13.5	24.9	22.1	29.4	28.2	30.5	31.6	31.4	29.7	29.3	29.3	15.6	11.8	11.6	9.9
POWER																	
AVE POWER MW		65	114	210	187	248	237	257	266	262	238	222	215	114	89	91	80
PEAK POW MW		351	356	356	356	356	356	356	356	350	320	298	287	285	313	330	339
ENERGY GWH	1658.1	23.3	19.1	45.5	134.5	184.2	170.9	191.2	198.0	188.9	177.2	79.8	36.1	21.9	65.9	67.7	53.7
--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	-11	-22	5	-14	2	-5	-2	0	3	1	0	25	7	0	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	17996	328	220	479	1464	1949	1821	1918	2030	1942	1943	913	426	295	795	792	680
RELEASE	17996	328	220	479	1464	1949	1821	1918	2017	1916	1943	913	426	295	795	792	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	15.8	26.8	24.6	31.7	30.6	31.2	32.8	32.2	31.6	30.7	30.7	18.6	12.9	12.9	12.9
POWER																	
AVE POWER MW		39	55	91	84	105	102	104	108	108	107	105	105	66	46	46	46
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	737.2	13.9	9.2	19.8	60.6	78.0	73.7	77.1	80.2	77.7	79.9	37.9	17.7	12.6	34.2	34.0	30.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1550	169	79	102	199	310	224	129	96	60	42	16	7	9	21	5	82
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	19278	491	296	576	1641	2223	2014	2008	2076	1952	1974	923	431	301	803	783	786
KCFS		16.5	21.3	32.3	27.6	36.2	33.8	32.7	33.8	32.8	32.1	31.0	31.0	18.9	13.1	12.7	14.2
--TOTAL--																	
NAT INFLOW	24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION	2682	0	0	0	121	655	1671	1159	226	-233	-105	-150	-70	-80	-210	-200	-103
CHAN STOR	-26	70	-11	-22	-3	-91	-16	15	-2	20	23	1	0	16	-7	-22	3
EVAPORATION	1649							102	322	400	344	153	71	81	175		
STORAGE	51520	52533	52895	53157	53700	54224	56596	56688	55256	54269	53111	52637	52416	52371	52247	52224	52487
SYSTEM POWER																	
AVE POWER MW		583	744	909	891	1266	1207	1291	1330	1241	1021	996	986	778	810	835	778
PEAK POW MW		2258	2258	2261	2266	2271	2298	2297	2278	2270	2254	2230	2218	2217	2201	2220	2224
ENERGY GWH	9007.6	209.7	125.0	196.3	641.7	941.6	868.7	960.8	989.9	893.8	760.0	358.6	165.6	149.3	602.5	621.1	523.1
DAILY GWH		14.0	17.9	21.8	21.4	30.4	29.0	31.0	31.9	29.8	24.5	23.9	23.7	18.7	19.4	20.0	18.7

28FEB13		2013											2014			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	7400	264	123	158	628	1210	1851	829	324	319	398	188	88	100	310	261	349
DEPLETION	476	-24	-11	-14	48	341	601	259	-37	-148	-85	-42	-20	-22	-133	-145	-92
EVAPORATION	422							27	82	102	88	39	18	21	45		
MOD INFLOW	6502	288	134	173	580	869	1250	543	279	365	395	190	89	101	398	406	441
RELEASE	7137	179	83	107	357	461	1083	676	676	567	492	238	111	143	676	676	611
STOR CHANGE	-635	109	51	66	223	408	167	-133	-398	-201	-97	-48	-22	-41	-278	-270	-170
STORAGE	13653	13763	13814	13879	14102	14510	14677	14544	14147	13945	13849	13801	13778	13737	13459	13188	13018
ELEV FTMSL	2227.4	2227.9	2228.2	2228.5	2229.7	2231.7	2232.5	2231.8	2229.9	2228.9	2228.4	2228.1	2228.0	2227.8	2226.4	2224.9	2224.0
DISCH KCFS	11.0	6.0	6.0	6.0	6.0	7.5	18.2	11.0	11.0	9.5	8.0	8.0	8.0	9.0	11.0	11.0	11.0
POWER																	
AVE POWER MW		80	80	80	81	101	160	146	146	128	107	107	107	120	144	143	142
PEAK POW MW		158	158	158	159	161	161	161	159	158	158	158	158	158	157	155	154
ENERGY GWH	1085.8	28.9	13.5	17.4	58.1	75.3	115.4	109.0	108.4	92.1	79.8	38.6	18.0	23.1	106.8	106.2	95.4
--GARRISON--																	
NAT INFLOW	11001	469	219	282	853	1423	2958	2066	581	497	454	192	89	102	253	237	326
DEPLETION	1075	-8	-4	-5	-6	179	868	649	92	-143	-28	-126	-59	-67	-119	-92	-58
CHAN STOR	-1	50				-15	-106	70		14	15			-10	-20		0
EVAPORATION	512							32	101	124	106	47	22	25	54		
REG INFLOW	16550	706	306	393	1216	1690	3067	2132	1064	1097	883	508	237	277	975	1005	995
RELEASE	17344	476	222	286	1101	1722	1666	1722	1722	1500	1353	655	305	349	1230	1537	1500
STOR CHANGE	-794	230	84	108	115	-31	1400	410	-657	-403	-470	-147	-68	-72	-255	-532	-505
STORAGE	17384	17614	17698	17806	17921	17889	19290	19700	19042	18639	18169	18022	17954	17882	17627	17095	16590
ELEV FTMSL	1835.1	1835.9	1836.1	1836.5	1836.9	1836.8	1841.2	1842.5	1840.5	1839.2	1837.7	1837.2	1837.0	1836.8	1835.9	1834.1	1832.4
DISCH KCFS	23.0	16.0	16.0	16.0	18.5	28.0	28.0	28.0	28.0	25.2	22.0	22.0	22.0	22.0	20.0	25.0	27.0
POWER																	
AVE POWER MW		197	197	198	229	345	350	354	354	317	275	273	272	272	247	305	325
PEAK POW MW		462	463	464	466	466	482	491	479	474	469	467	466	465	462	456	449
ENERGY GWH	2603.8	70.8	33.2	42.7	164.7	256.6	251.7	263.5	263.4	228.0	204.3	98.2	45.7	52.2	183.4	226.8	218.6
--OAHE--																	
NAT INFLOW	2300	317	148	190	364	236	689	162	33	118	14	5	2	3	-20		40
DEPLETION	708	24	11	15	50	73	151	182	122	29	-11	1	0	1	13	18	29
CHAN STOR	-16	30			-11	-40				12	14		0	0	8	-21	-8
EVAPORATION	469							29	90	112	98	44	21	24	51		
REG INFLOW	18451	799	359	461	1404	1844	2204	1673	1542	1488	1294	614	287	328	1154	1498	1502
RELEASE	16544	402	276	391	1262	1701	1527	1861	1973	1770	1262	597	276	233	1174	1041	799
STOR CHANGE	1907	397	82	70	143	144	677	-188	-431	-281	32	17	11	95	-20	457	703
STORAGE	16346	16743	16825	16895	17038	17182	17859	17671	17240	16958	16990	17007	17018	17113	17093	17550	18253
ELEV FTMSL	1599.0	1600.4	1600.7	1601.0	1601.5	1602.0	1604.3	1603.7	1602.2	1601.2	1601.3	1601.4	1601.4	1601.7	1601.7	1603.2	1605.6
DISCH KCFS	13.3	13.5	19.9	21.9	21.2	27.7	25.7	30.3	32.1	29.7	20.5	20.1	19.9	14.7	19.1	16.9	14.4
POWER																	
AVE POWER MW		168	248	273	265	345	323	382	403	371	256	251	248	184	239	213	183
PEAK POW MW		671	672	673	676	679	691	688	680	675	675	675	676	677	677	685	698
ENERGY GWH	2509.5	60.4	41.6	58.9	190.5	256.9	232.7	284.4	299.6	267.1	190.6	90.2	41.7	35.3	177.9	158.5	123.1
--BIG BEND--																	
EVAPORATION	103							6	20	25	22	10	5	5	11		
REG INFLOW	16441	402	276	391	1262	1701	1527	1855	1954	1745	1240	587	271	228	1163	1041	799
RELEASE	16441	402	276	391	1262	1701	1527	1855	1954	1745	1240	587	271	228	1163	1041	799
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	13.3	13.5	19.9	21.9	21.2	27.7	25.7	30.2	31.8	29.3	20.2	19.7	19.5	14.3	18.9	16.9	14.4
POWER																	
AVE POWER MW		64	93	102	99	129	120	141	149	139	99	99	98	72	93	82	69
PEAK POW MW		517	509	509	509	509	509	509	509	517	538	538	538	538	538	538	529
ENERGY GWH	947.6	23.1	15.7	22.1	71.5	96.3	86.5	105.0	110.6	100.0	73.6	35.6	16.5	13.9	69.5	61.3	46.4
--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	118							8	25	31	25	10	4	4	10		
REG INFLOW	17145	523	333	463	1374	1832	1700	1903	1970	1748	1217	578	268	224	1159	1038	815
RELEASE	17145	232	199	463	1374	1832	1700	1903	1970	1892	1852	883	413	247	793	781	611
STOR CHANGE	0	291	134					0	0	-144	-635	-305	-145	-23	366	257	204
STORAGE	3124	3415	3549	3549	3549	3549	3549	3549	3549	3405	2770	2465	2320	2297	2663	2920	3124
ELEV FTMSL	1350.0	1353.6	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1353.5	1345.1	1340.4	1337.9	1337.5	1343.5	1347.2	1350.0
DISCH KCFS	9.9	7.8	14.3	26.0	23.1	29.8	28.6	30.9	32.0	31.8	30.1	29.7	29.7	15.6	12.9	12.7	11.0
POWER																	
AVE POWER MW		65	121	219	195	251	241	260	269	266	241	225	218	114	97	100	89
PEAK POW MW		351	356	356	356	356	356	356	356	350	320	298	287	285	313	330	339
ENERGY GWH	1701.3	23.3	20.3	47.3	140.5	186.6	173.3	193.7	200.5	191.2	179.5	80.9	36.6	21.8	72.0	74.1	59.7
--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	-3	4	-12	-22	6	-13	2	-5	-2	0	3	1	0	26	5	0	3
EVAPORATION	38							2	7	9	8	4	2	2	4		
REG INFLOW	18441	329	230	497	1523	1974	1845	1943	2054	1966	1968	925	432	295	861	859	741
RELEASE	18441	329	230	497	1523	1974	1845	1943	2041	1940	1968	925	432	295	861	859	780
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	12.9	11.1	16.5	27.8	25.6	32.1	31.0	31.6	33.2	32.6	32.0	31.1	31.1	18.6	14.0	14.0	14.0
POWER																	
AVE POWER MW		39	57	95	87	106	103	105	109	109	108	106	106	66	50	50	49
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	753.4	14.0	9.7	20.5	63.0	78.7	74.3	77.8	80.8	78.3	80.6	38.2	17.8	12.6	37.0	36.9	33.2
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1550	169	79	102	199	310	224	129	96	60	42	16	7	9	21	5	82
DEPLETION	269	7	3	4	23	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	19722	492	305	594	1699	2248	2038	2033	2100	1976	1999	935	436	301	869	850	847
KCFS		16.5	22.0	33.3	28.6	36.6	34.2	33.1	34.2	33.2	32.5	31.4	31.4	18.9	14.1	13.8	15.3
--TOTAL--																	
NAT INFLOW	24601	1435	669	860	2307	3493	6073	3346	1194	1113	1032	452	211	241	651	582	943
DEPLETION	2719	0	0	0	122	657	1687	1186	239	-236	-111	-155	-72	-82	-213	-201	-103
CHAN STOR	-21	85	-12	-22	-5	-68	-104	66	-2	27	32	1	0	17	-7	-21	-5
EVAPORATION	1661							104	325	404	346	154	71	81	176		
STORAGE	52487	53514	53865	54108	54589	55109	57354	57442	55969	54966	53796	53313	53088	53047	52859	52771	52965
SYSTEM POWER																	
AVE POWER MW		612	797	967	956	1277	1297	1389	1429	1329	1087	1060	1050	828	869	892	858
PEAK POW MW		2273	2273	2276	2280	2284	2313	2319	2298	2292	2277	2254	2242	2241	2225	2242	2246
ENERGY GWH	9601.4	220.5	133.9	208.9	688.2	950.4	933.9	1033.5	1063.4	956.7	808.4	381.8	176.4	158.9	646.5	663.8	576.3
DAILY GWH		14.7	19.1	23.2	22.9	30.7	31.1	33.3	34.3	31.9	26.1	25.5	25.2	19.9	20.9	21.4	20.6

	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	6556	264	123	158	574	1011	1589	692	287	275	354	183	85	98	322	231	309
DEPLETION	578	3	1	2	84	317	582	218	-43	-141	-70	-33	-15	-17	-108	-122	-80
EVAPORATION	415							25	79	99	87	39	18	21	46		
MOD INFLOW	5563	261	122	157	490	694	1007	449	251	317	337	176	82	94	384	353	389
RELEASE	5089	149	69	89	357	492	476	492	492	382	307	149	69	79	492	523	472
STOR CHANGE	473	113	52	67	133	202	531	-43	-241	-65	30	27	13	15	-107	-170	-83
STORAGE	8782	8894	8947	9014	9147	9349	9880	9837	9596	9531	9561	9588	9601	9615	9508	9338	9255
ELEV FTMSL	2198.6	2199.3	2199.7	2200.1	2201.0	2202.3	2205.8	2205.5	2203.9	2203.5	2203.7	2203.9	2204.0	2204.1	2203.4	2202.3	2201.7
DISCH KCFS	8.5	5.0	5.0	5.0	6.0	8.0	8.0	8.0	8.0	6.4	5.0	5.0	5.0	5.0	8.0	8.5	8.5
POWER																	
AVE POWER MW		59	59	59	71	95	96	97	96	77	60	60	60	60	96	101	101
PEAK POW MW		127	127	128	129	130	134	134	132	132	132	132	132	132	132	130	130
ENERGY GWH	735.6	21.1	9.9	12.7	51.0	70.5	69.1	72.0	71.6	55.4	44.7	21.6	10.1	11.5	71.3	75.3	67.8
--GARRISON--																	
NAT INFLOW	10069	475	221	285	763	1282	2701	1891	532	446	428	175	82	93	238	177	280
DEPLETION	1069	16	8	10	34	153	784	588	87	-125	-7	-108	-50	-58	-114	-89	-60
CHAN STOR	0	39			-11	-22				17	15			0	-33	-5	0
EVAPORATION	489							30	94	118	102	46	22	25	53		
REG INFLOW	13601	646	283	364	1075	1599	2393	1765	843	852	655	386	180	206	758	783	812
RELEASE	13025	387	180	232	1071	1476	1220	1230	1230	982	799	387	180	206	1045	1261	1139
STOR CHANGE	575	260	103	132	4	123	1173	535	-387	-130	-144	-1	-1	-1	-287	-477	-326
STORAGE	10545	10804	10907	11039	11043	11166	12339	12874	12487	12357	12213	12212	12211	12211	11924	11447	11120
ELEV FTMSL	1808.3	1809.5	1809.9	1810.5	1810.5	1811.1	1816.2	1818.4	1816.8	1816.2	1815.6	1815.6	1815.6	1815.6	1814.4	1812.3	1810.9
DISCH KCFS	21.0	13.0	13.0	13.0	18.0	24.0	20.5	20.0	20.0	16.5	13.0	13.0	13.0	13.0	17.0	20.5	20.5
POWER																	
AVE POWER MW		133	134	135	186	248	217	217	218	179	141	140	140	140	182	216	214
PEAK POW MW		366	367	369	370	372	390	398	392	390	388	388	388	388	384	376	371
ENERGY GWH	1671.9	48.0	22.5	29.1	134.1	184.4	156.1	161.6	161.9	128.7	104.5	50.5	23.6	26.9	135.4	161.0	143.5
--OAHE--																	
NAT INFLOW	1761	187	87	112	278	158	701	124	29	79	11				-42	-7	44
DEPLETION	652	23	11	14	48	69	138	164	109	27	-9	1	0	1	12	17	27
CHAN STOR	3	43			-26	-32	18	3		19	19				-21	-19	
EVAPORATION	415							26	79	99	87	39	18	21	46		
REG INFLOW	13722	593	257	330	1275	1533	1801	1166	1071	954	751	346	162	185	924	1218	1156
RELEASE	13133	411	250	352	1209	1431	1385	1701	1491	848	774	233	118	134	890	1004	902
STOR CHANGE	589	182	7	-21	66	102	416	-534	-420	106	-23	113	43	51	34	214	253
STORAGE	11079	11260	11267	11246	11312	11414	11830	11295	10875	10982	10959	11072	11115	11166	11201	11415	11668
ELEV FTMSL	1577.0	1577.8	1577.9	1577.8	1578.1	1578.6	1580.5	1578.0	1575.9	1576.5	1576.4	1576.9	1577.1	1577.4	1577.5	1578.6	1579.8
DISCH KCFS	16.4	13.8	18.0	19.7	20.3	23.3	23.3	27.7	24.2	14.3	12.6	7.8	8.5	8.4	14.5	16.3	16.2
POWER																	
AVE POWER MW		151	196	215	222	254	256	304	263	154	137	85	93	92	158	179	179
PEAK POW MW		555	555	555	556	559	570	556	545	548	547	550	551	553	554	559	565
ENERGY GWH	1735.7	54.3	33.0	46.4	159.7	189.2	184.6	225.8	195.4	111.1	101.6	30.7	15.6	17.7	117.5	132.9	120.3
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13004	411	250	352	1209	1431	1385	1693	1466	817	747	221	112	127	876	1004	902
RELEASE	13004	411	250	352	1209	1431	1385	1693	1466	817	747	221	112	127	876	1004	902
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	13.8	18.0	19.7	20.3	23.3	23.3	27.5	23.8	13.7	12.1	7.4	8.1	8.0	14.2	16.3	16.2
POWER																	
AVE POWER MW		65	84	92	95	109	109	129	113	69	61	38	41	41	72	80	78
PEAK POW MW		517	510	509	509	509	509	509	519	538	538	538	538	538	538	538	529
ENERGY GWH	754.3	23.6	14.2	19.9	68.5	81.0	78.5	95.9	83.9	49.4	45.7	13.6	6.9	7.8	53.4	59.7	52.4
--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	131							10	31	34	24	10	5	5	12		
REG INFLOW	13437	497	290	403	1288	1488	1540	1698	1483	806	724	211	107	121	866	995	918
RELEASE	13436	223	155	386	1288	1488	1540	1698	1667	1606	992	211	107	121	713	695	544
STOR CHANGE	1	274	135	17				0	-184	-800	-268	0	0	0	153	300	374
STORAGE	3123	3397	3532	3549	3549	3549	3549	3549	3365	2565	2297	2297	2297	2297	2450	2750	3124
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1353.0	1342.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	9.9	7.5	11.1	21.6	21.6	24.2	25.9	27.6	27.1	27.0	16.1	7.1	7.7	7.6	11.6	11.3	9.8
POWER																	
AVE POWER MW		62	94	183	183	204	218	233	227	213	120	52	57	56	86	86	78
PEAK POW MW		350	355	356	356	356	356	356	349	305	285	285	285	285	297	319	339
ENERGY GWH	1323.4	22.4	15.8	39.5	131.8	152.1	157.3	173.2	168.6	153.7	89.2	18.7	9.5	10.8	63.8	64.3	52.6
--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	20	17	-1	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	14611	326	193	425	1416	1611	1666	1740	1735	1662	1113	268	125	143	766	767	654
RELEASE	14611	326	193	425	1416	1611	1666	1740	1722	1636	1113	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	18.1	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	64	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	611.3	13.8	8.2	17.6	58.7	66.6	68.6	71.6	71.3	68.7	47.6	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	258	6	3	4	21	35	31	38	36	23	10	6	3	3	12	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	15488	465	258	508	1508	1795	1793	1797	1756	1657	1134	278	130	148	770	750	739
KCFS		15.6	18.6	28.5	25.3	29.2	30.1	29.2	28.6	27.9	18.4	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	2748	50	23	30	194	602	1571	1065	214	-214	-74	-128	-60	-68	-185	-176	-96
CHAN STOR	3	86	-7	-20	-38	-59	15	-1	1	36	54	17	-1	0	-61	-23	3
EVAPORATION	1627							101	317	392	337	152	71	81	176		
STORAGE	35506	36334	36632	36827	37029	37457	39577	39535	38315	37452	37047	37186	37242	37307	37100	36967	37146
SYSTEM POWER																	
AVE POWER MW		509	616	765	839	1000	992	1075	1012	787	582	407	423	421	638	707	694
PEAK POW MW		2030	2030	2032	2034	2041	2074	2068	2052	2030	2007	2011	2012	2013	1982	2000	2010
ENERGY GWH	6832.2	183.1	103.6	165.3	603.9	743.9	714.2	800.1	752.7	566.9	433.3	146.7	71.1	80.8	474.3	526.3	466.2
DAILY GWH		12.2	14.8	18.4	20.1	24.0	23.8	25.8	24.3	18.9	14.0	9.8	10.2	10.1	15.3	17.0	16.6

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	6613	267	124	160	579	1019	1603	698	289	278	357	185	86	98	325	233	312
DEPLETION	441	-21	-10	-12	37	303	572	221	-45	-147	-75	-34	-16	-18	-110	-124	-81
EVAPORATION	428							26	82	102	89	41	19	22	47		
MOD INFLOW	5744	287	134	172	542	716	1031	451	252	323	343	177	83	95	388	357	393
RELEASE	5310	149	69	89	357	523	506	523	523	419	307	149	69	79	523	553	472
STOR CHANGE	434	139	65	83	185	193	525	-72	-271	-96	35	29	13	15	-134	-196	-79
STORAGE	9255	9394	9458	9542	9727	9920	10445	10373	10103	10006	10042	10070	10084	10099	9965	9768	9689
ELEV FTMSL	2201.7	2202.6	2203.1	2203.6	2204.8	2206.0	2209.3	2208.8	2207.1	2206.5	2206.8	2206.9	2207.0	2207.1	2206.3	2205.0	2204.5
DISCH KCFS	8.5	5.0	5.0	5.0	6.0	8.5	8.5	8.5	8.5	7.0	5.0	5.0	5.0	5.0	8.5	9.0	8.5
POWER																	
AVE POWER MW		60	60	60	72	103	104	105	104	86	61	61	61	61	103	109	102
PEAK POW MW		131	131	132	133	135	138	138	136	135	135	136	136	136	135	133	133
ENERGY GWH	780.1	21.4	10.0	12.9	52.0	76.3	74.7	77.8	77.4	61.7	45.3	22.0	10.3	11.7	76.9	80.9	68.7
--GARRISON--																	
NAT INFLOW	10134	478	223	287	768	1290	2718	1903	535	449	431	176	82	94	240	178	282
DEPLETION	1027	-1	-1	-1	3	193	777	599	88	-133	2	-116	-54	-62	-116	-90	-61
CHAN STOR	0	39			-11	-27	0	0		16	22			0	-38	-5	5
EVAPORATION	504							31	97	121	105	47	22	25	54		
REG INFLOW	13914	667	293	377	1111	1592	2447	1796	873	895	653	393	184	210	786	816	821
RELEASE	13382	446	194	250	982	1476	1250	1291	1230	1008	861	417	194	222	1045	1322	1194
STOR CHANGE	532	221	99	127	129	116	1197	505	-357	-113	-208	-23	-11	-12	-259	-506	-374
STORAGE	11120	11341	11440	11567	11696	11812	13010	13514	13157	13045	12837	12814	12803	12791	12532	12026	11652
ELEV FTMSL	1810.9	1811.9	1812.3	1812.9	1813.4	1813.9	1818.9	1820.9	1819.5	1819.1	1818.2	1818.1	1818.1	1818.0	1817.0	1814.8	1813.2
DISCH KCFS	20.5	15.0	14.0	14.0	16.5	24.0	21.0	21.0	20.0	16.9	14.0	14.0	14.0	14.0	17.0	21.5	21.5
POWER																	
AVE POWER MW		157	147	148	174	253	227	232	222	187	154	154	154	153	185	231	228
PEAK POW MW		374	376	378	380	382	400	408	402	401	397	397	397	397	393	385	379
ENERGY GWH	1750.5	56.4	24.7	31.9	125.5	188.5	163.1	172.7	164.9	134.6	114.7	55.3	25.8	29.5	137.8	171.9	153.2
--OAHE--																	
NAT INFLOW	1794	190	89	114	283	161	714	127	30	80	11				-43	-7	45
DEPLETION	666	24	11	14	49	70	142	169	112	27	-10	1	0	1	12	17	27
CHAN STOR	-5	29	5		-13	-39	15		5	16	15			0	-16	-23	
EVAPORATION	430							27	83	102	89	40	19	22	48		
REG INFLOW	14075	641	277	350	1203	1528	1837	1222	1070	975	808	375	175	200	927	1275	1212
RELEASE	13529	409	269	391	1201	1429	1380	1700	1672	931	878	222	119	133	889	1005	901
STOR CHANGE	546	233	8	-41	1	99	457	-478	-602	44	-70	153	56	67	38	270	311
STORAGE	11668	11901	11909	11868	11869	11968	12425	11947	11345	11390	11319	11473	11529	11595	11633	11903	12214
ELEV FTMSL	1579.8	1580.9	1580.9	1580.7	1580.7	1581.2	1583.3	1581.1	1578.2	1578.5	1578.1	1578.9	1579.1	1579.4	1579.6	1580.9	1582.3
DISCH KCFS	16.2	13.7	19.4	21.9	20.2	23.2	23.2	27.6	27.2	15.6	14.3	7.5	8.6	8.4	14.5	16.3	16.2
POWER																	
AVE POWER MW		153	215	243	224	258	260	309	299	171	157	82	94	93	160	181	181
PEAK POW MW		571	571	570	570	573	584	572	557	558	557	560	562	564	565	571	579
ENERGY GWH	1815.3	54.9	36.2	52.5	161.4	192.1	186.9	229.8	222.6	123.4	116.5	29.6	15.9	17.8	118.8	134.8	121.9
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13400	409	269	391	1201	1429	1380	1692	1648	900	851	210	113	127	875	1005	901
RELEASE	13399	409	269	391	1201	1429	1380	1692	1648	900	851	209	113	127	875	1005	901
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1622	1622	1622	1622	1622	1622
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	16.2	13.7	19.4	21.9	20.2	23.2	23.2	27.5	26.8	15.1	13.8	7.0	8.1	8.0	14.2	16.3	16.2
POWER																	
AVE POWER MW		65	91	103	95	109	109	129	125	74	70	36	41	41	72	80	78
PEAK POW MW		517	510	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	775.5	23.4	15.3	22.2	68.1	80.9	78.2	95.8	93.3	53.3	52.0	12.8	6.9	7.8	53.4	59.8	52.3
--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	136							10	32	36	25	10	5	5	12		
REG INFLOW	13844	497	310	444	1282	1487	1539	1698	1666	887	826	198	108	121	866	995	918
RELEASE	13844	223	175	427	1282	1487	1539	1698	1666	1606	1360	198	108	121	713	695	544
STOR CHANGE	0	273	135	17	0	0		0	0	-719	-533	0	0	0	153	300	374
STORAGE	3124	3397	3532	3549	3549	3549	3549	3549	3549	2830	2297	2297	2296	2296	2449	2749	3123
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1346.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	9.8	7.5	12.6	23.9	21.6	24.2	25.9	27.6	27.1	27.0	22.1	6.7	7.8	7.6	11.6	11.3	9.8
POWER																	
AVE POWER MW		62	106	202	182	204	218	233	229	219	167	49	57	56	86	86	78
PEAK POW MW		350	355	356	356	356	356	356	356	324	284	285	285	285	297	319	339
ENERGY GWH	1368.0	22.4	17.9	43.6	131.3	152.0	157.2	173.2	170.0	157.8	124.0	17.6	9.6	10.7	63.8	64.3	52.6
--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	-10	-22	5	-5	-3	-3	1	0	9	29	-2	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	15026	326	211	464	1416	1611	1666	1740	1735	1662	1470	268	125	143	766	767	655
RELEASE	15026	326	211	464	1416	1611	1666	1740	1722	1636	1470	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	15.2	26.0	23.8	26.2	28.0	28.3	28.0	27.5	23.9	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		38	53	89	82	89	95	96	96	95	84	32	32	32	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	628.6	13.8	8.9	19.2	58.7	66.6	68.6	71.6	71.3	68.7	62.5	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	263	7	3	4	22	35	31	38	36	24	10	6	3	3	13	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	15923	468	277	550	1510	1800	1796	1799	1758	1657	1491	278	130	148	770	750	741
KCFS		15.7	20.0	30.8	25.4	29.3	30.2	29.3	28.6	27.9	24.2	9.3	9.3	9.3	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	2588	9	4	6	118	629	1558	1084	216	-227	-71	-137	-64	-73	-188	-179	-98
CHAN STOR	-5	72	-5	-22	-19	-71	12	-3	6	32	46	29	-2	0	-61	-28	8
EVAPORATION	1673							104	326	404	347	155	73	83	181		
STORAGE	37146	38012	38318	38504	38820	39229	41408	41363	40146	39289	38512	38672	38731	38800	38598	38466	38659
SYSTEM POWER																	
AVE POWER MW		535	673	844	829	1017	1012	1103	1075	833	692	413	439	436	650	732	712
PEAK POW MW		2058	2059	2060	2063	2069	2102	2097	2076	2073	2029	2033	2035	2036	2006	2025	2035
ENERGY GWH	7118.1	192.4	113.0	182.3	597.0	756.4	728.8	820.9	799.5	599.6	515.0	148.8	73.8	83.7	483.6	544.7	478.4
DAILY GWH		12.8	16.1	20.3	19.9	24.4	24.3	26.5	25.8	20.0	16.6	9.9	10.5	10.5	15.6	17.6	17.1

TIME OF STUDY 15:36:21 SHTN NAV SEAS 30 DAYS, SP MAR 0 MAY 9.11 STUDY NO 16

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	6720	271	126	163	588	1036	1629	709	294	282	363	188	88	100	330	237	317
DEPLETION	456	-21	-10	-13	38	305	577	229	-40	-147	-74	-34	-16	-18	-109	-122	-90
EVAPORATION	439							27	84	105	92	42	19	22	48		
MOD INFLOW	5825	292	136	175	550	731	1052	453	250	324	345	179	84	96	391	359	407
RELEASE	5326	149	69	89	357	523	506	523	523	402	307	149	69	95	523	553	489
STOR CHANGE	499	144	67	86	193	208	546	-69	-273	-78	38	31	14	0	-132	-194	-82
STORAGE	9689	9833	9900	9986	10179	10387	10933	10864	10591	10513	10551	10581	10595	10596	10464	10270	10188
ELEV FTMSL	2204.5	2205.5	2205.9	2206.4	2207.6	2208.9	2212.2	2211.8	2210.2	2209.7	2209.9	2210.1	2210.2	2210.2	2209.4	2208.2	2207.7
DISCH KCFS	8.5	5.0	5.0	5.0	6.0	8.5	8.5	8.5	8.5	6.8	5.0	5.0	5.0	6.0	8.5	9.0	8.5
POWER																	
AVE POWER MW		60	61	61	73	104	105	106	106	84	62	62	62	74	105	110	104
PEAK POW MW		134	134	135	136	138	142	141	139	139	139	139	139	139	138	137	136
ENERGY GWH	794.3	21.8	10.2	13.1	52.7	77.5	75.8	78.9	78.5	60.2	46.1	22.3	10.4	14.3	78.0	82.2	72.3
--GARRISON--																	
NAT INFLOW	10262	484	226	290	777	1306	2752	1927	542	455	437	179	83	95	243	180	286
DEPLETION	1041	-1	0	-1	4	193	787	616	94	-135	-2	-120	-56	-64	-117	-90	-67
CHAN STOR	0	38			-11	-27	0	0		19	19			-11	-27	-5	5
EVAPORATION	516							31	99	124	108	49	23	26	56		
REG INFLOW	14032	672	296	380	1119	1608	2471	1802	871	886	657	399	186	218	800	818	847
RELEASE	13424	446	194	250	1041	1537	1220	1261	1230	1006	861	417	194	222	1045	1291	1208
STOR CHANGE	608	226	101	130	78	71	1251	542	-358	-120	-204	-18	-8	-4	-245	-473	-361
STORAGE	11652	11878	11979	12109	12187	12258	13509	14051	13693	13573	13369	13351	13343	13339	13094	12620	12260
ELEV FTMSL	1813.2	1814.2	1814.6	1815.2	1815.5	1815.8	1820.9	1823.1	1821.7	1821.2	1820.4	1820.3	1820.3	1820.3	1819.3	1817.3	1815.8
DISCH KCFS	21.5	15.0	14.0	14.0	17.5	25.0	20.5	20.5	20.0	16.9	14.0	14.0	14.0	14.0	17.0	21.0	21.0
POWER																	
AVE POWER MW		159	150	150	188	268	224	230	225	189	156	156	156	156	188	230	227
PEAK POW MW		383	384	386	388	389	408	415	410	408	405	405	405	405	401	394	389
ENERGY GWH	1782.8	57.4	25.1	32.4	135.2	199.1	161.5	171.1	167.4	136.4	116.4	56.1	26.2	29.9	140.0	170.8	157.8
--OAHE--																	
NAT INFLOW	1860	197	92	118	294	167	740	131	31	83	12				-45	-7	46
DEPLETION	680	24	11	14	49	71	145	173	115	28	-10	1	0	1	12	18	28
CHAN STOR	3	33	5		-18	-38	22		2	16	15			0	-15	-20	
EVAPORATION	452							28	87	107	94	43	20	23	50		
REG INFLOW	14156	653	280	354	1269	1596	1837	1190	1062	970	804	373	174	199	923	1246	1226
RELEASE	13533	404	246	347	1200	1506	1369	1697	1668	929	876	220	119	133	889	1005	925
STOR CHANGE	623	249	35	7	69	89	469	-507	-607	41	-72	153	55	66	34	241	300
STORAGE	12214	12463	12497	12505	12573	12663	13131	12625	12018	12059	11987	12140	12195	12261	12295	12536	12837
ELEV FTMSL	1582.3	1583.4	1583.6	1583.6	1583.9	1584.3	1586.4	1584.2	1581.4	1581.6	1581.3	1582.0	1582.2	1582.5	1582.7	1583.8	1585.1
DISCH KCFS	16.2	13.6	17.7	19.4	20.2	24.5	23.0	27.6	27.1	15.6	14.3	7.4	8.5	8.4	14.5	16.3	16.1
POWER																	
AVE POWER MW		153	200	219	228	277	262	314	304	174	159	83	96	94	163	184	183
PEAK POW MW		585	585	586	587	589	600	588	574	575	573	577	578	580	581	586	593
ENERGY GWH	1849.6	55.2	33.6	47.4	164.2	206.3	188.9	233.6	226.4	125.6	118.5	29.9	16.1	18.1	121.1	137.3	127.3
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13404	404	246	347	1200	1506	1369	1689	1644	898	849	208	113	126	875	1005	925
RELEASE	13404	404	246	347	1200	1506	1369	1689	1644	898	849	208	113	126	875	1005	925
STORAGE	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622
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	16.2	13.6	17.7	19.4	20.2	24.5	23.0	27.5	26.7	15.1	13.8	7.0	8.1	8.0	14.2	16.3	16.1
POWER																	
AVE POWER MW		64	83	91	94	115	108	129	125	74	70	36	41	40	72	80	77
PEAK POW MW		518	511	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	775.9	23.2	14.0	19.6	68.0	85.3	77.5	95.7	93.1	53.2	51.9	12.8	6.9	7.8	53.4	59.8	53.7
--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	136							10	32	36	25	10	5	5	12		
REG INFLOW	13880	497	289	402	1285	1567	1536	1697	1665	886	824	198	107	121	866	995	943
RELEASE	13880	223	154	385	1285	1567	1536	1697	1665	1605	1358	198	108	121	713	695	569
STOR CHANGE	0	274	135	17		0	0	0	0	-719	-533	0	0	0	153	300	374
STORAGE	3123	3397	3532	3549	3549	3549	3549	3549	3549	2830	2297	2297	2296	2296	2449	2749	3123
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1346.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	9.8	7.5	11.1	21.6	21.6	25.5	25.8	27.6	27.1	27.0	22.1	6.6	7.8	7.6	11.6	11.3	9.9
POWER																	
AVE POWER MW		62	94	182	183	215	218	233	228	219	166	49	57	56	86	86	79
PEAK POW MW		350	355	356	356	356	356	356	356	324	284	285	285	285	297	319	339
ENERGY GWH	1371.5	22.4	15.8	39.4	131.5	160.1	156.8	173.1	169.9	157.7	123.8	17.6	9.6	10.7	63.8	64.3	55.1
--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	-7	-20	0	-7	-1	-3	1	0	9	29	-2	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	15078	328	194	425	1416	1691	1666	1740	1735	1662	1470	268	125	143	767	768	681
RELEASE	15078	328	194	425	1416	1691	1666	1740	1722	1636	1470	268	125	143	767	768	720
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	27.5	28.0	28.3	28.0	27.5	23.9	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	49	82	82	94	95	96	96	95	84	32	32	32	44	44	44
PEAK POW MW		114	114	114	114	114	114	114	115	117	117	117	117	117	78	78	76
ENERGY GWH	630.7	13.9	8.2	17.6	58.7	69.7	68.6	71.6	71.3	68.7	62.5	11.6	5.4	6.2	33.0	33.0	30.7
--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	16026	476	263	514	1515	1890	1803	1803	1761	1659	1493	279	130	149	771	751	770
KCFS		16.0	18.9	28.8	25.5	30.7	30.3	29.3	28.6	27.9	24.3	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	2631	9	4	6	120	632	1576	1113	230	-228	-74	-141	-66	-75	-188	-176	-112
CHAN STOR	2	76	-2	-20	-29	-72	22	-3	3	34	42	29	-2	-10	-49	-25	8
EVAPORATION	1718							107	334	415	356	160	75	86	186		
STORAGE	38659	39551	39888	40129	40468	40837	43103	43069	41844	40994	40222	40388	40449	40511	40321	40194	40387
SYSTEM POWER																	
AVE POWER MW		538	636	785	848	1073	1013	1108	1084	836	698	417	444	453	658	736	714
PEAK POW MW		2084	2085	2087	2091	2096	2129	2124	2104	2101	2057	2061	2062	2064	2034	2052	2063
ENERGY GWH	7204.8	193.8	106.8	169.6	610.4	798.0	729.1	824.1	806.5	601.8	519.1	150.3	74.6	87.0	489.3	547.4	497.1
DAILY GWH		12.9	15.3	18.8	20.3	25.7	24.3	26.6	26.0	20.1	16.7	10.0	10.7	10.9	15.8	17.7	17.1

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

VALUES IN 1000 AF EXCEPT AS INDICATED

	29FEB12	2012												2013		
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	6751	272	127	163	591	1041	1636	712	295	284	365	188	88	100	332	238	318
DEPLETION	466	-21	-10	-13	37	306	581	235	-36	-147	-77	-35	-16	-19	-112	-125	-82
EVAPORATION	449							27	86	108	94	43	20	23	49		
MOD INFLOW	5836	294	137	176	554	735	1055	450	245	323	348	180	84	96	395	363	400
RELEASE	5354	149	69	89	357	523	506	523	523	404	307	149	69	79	553	553	500
STOR CHANGE	482	145	68	87	197	212	549	-73	-278	-80	41	32	15	17	-159	-190	-100
STORAGE	10188	10333	10400	10487	10684	10897	11446	11373	11095	11015	11055	11087	11102	11118	10960	10769	10670
ELEV FTMSL	2207.7	2208.6	2209.0	2209.5	2210.7	2212.0	2215.2	2214.8	2213.2	2212.7	2212.9	2213.1	2213.2	2213.3	2212.4	2211.2	2210.6
DISCH KCFS	8.5	5.0	5.0	5.0	6.0	8.5	8.5	8.5	8.5	6.8	5.0	5.0	5.0	5.0	9.0	9.0	9.0
POWER																	
AVE POWER MW		61	62	62	74	106	107	108	107	85	63	63	63	63	113	112	112
PEAK POW MW		137	138	139	140	141	145	145	143	142	142	143	143	143	142	141	140
ENERGY GWH	810.4	22.1	10.3	13.3	53.5	78.7	77.0	80.1	79.7	61.3	46.7	22.6	10.6	12.1	83.9	83.4	75.0
--GARRISON--																	
NAT INFLOW	10290	485	226	291	779	1310	2760	1932	543	456	438	179	84	95	243	181	287
DEPLETION	1062	0	0	0	5	194	798	632	99	-138	-7	-124	-58	-66	-119	-92	-62
CHAN STOR	-5	38			-11	-27	0	0		18	19			0	-42		
EVAPORATION	528							32	102	127	110	50	23	26	57		
REG INFLOW	14048	673	296	381	1120	1612	2468	1791	865	889	661	402	187	214	816	826	849
RELEASE	13461	446	194	250	1012	1506	1220	1261	1230	1025	922	446	208	238	1045	1291	1166
STOR CHANGE	587	226	102	131	109	105	1248	530	-365	-136	-262	-45	-21	-24	-229	-465	-317
STORAGE	12260	12486	12588	12719	12827	12933	14180	14710	14345	14209	13948	13903	13882	13858	13629	13164	12847
ELEV FTMSL	1815.8	1816.8	1817.2	1817.7	1818.2	1818.6	1823.6	1825.6	1824.2	1823.7	1822.7	1822.5	1822.4	1822.3	1821.4	1819.6	1818.3
DISCH KCFS	21.0	15.0	14.0	14.0	17.0	24.5	20.5	20.5	20.0	17.2	15.0	15.0	15.0	15.0	17.0	21.0	21.0
POWER																	
AVE POWER MW		162	152	153	186	267	229	234	229	196	170	170	169	169	191	233	231
PEAK POW MW		392	394	396	397	399	417	425	419	417	414	413	413	412	409	402	398
ENERGY GWH	1819.0	58.4	25.6	33.0	133.8	199.0	164.5	174.1	170.3	141.2	126.6	61.0	28.5	32.5	142.1	173.4	154.9
--OAHE--																	
NAT INFLOW	1877	199	93	119	297	168	747	132	31	84	12				-45	-7	47
DEPLETION	696	24	11	15	50	72	148	178	119	29	-11	1	0	1	13	18	28
CHAN STOR	1	30	5		-15	-37	20		2	14	11				-10	-20	
EVAPORATION	467							29	89	111	97	44	21	24	52		
REG INFLOW	14176	651	281	355	1244	1566	1838	1185	1055	983	859	401	187	214	926	1246	1185
RELEASE	13574	403	266	387	1195	1512	1366	1697	1668	929	876	231	118	133	889	1005	900
STOR CHANGE	602	247	15	-32	49	54	473	-512	-613	54	-17	170	69	81	37	242	285
STORAGE	12837	13084	13099	13066	13116	13170	13643	13131	12518	12572	12555	12725	12794	12875	12912	13154	13439
ELEV FTMSL	1585.1	1586.2	1586.2	1586.1	1586.3	1586.5	1588.5	1586.4	1583.7	1583.9	1583.8	1584.6	1584.9	1585.2	1585.4	1586.5	1587.7
DISCH KCFS	16.1	13.6	19.2	21.7	20.1	24.6	22.9	27.6	27.1	15.6	14.3	7.8	8.5	8.4	14.5	16.3	16.2
POWER																	
AVE POWER MW		155	220	249	230	282	265	318	308	177	162	88	97	96	165	187	187
PEAK POW MW		599	599	598	600	601	611	600	586	587	587	591	592	594	595	600	607
ENERGY GWH	1881.7	56.0	36.9	53.7	165.8	209.8	190.8	236.7	229.4	127.3	120.3	31.9	16.3	18.4	123.0	139.5	125.8
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13445	403	266	387	1195	1512	1366	1689	1644	898	849	219	112	127	875	1005	900
RELEASE	13445	403	266	387	1195	1512	1366	1689	1644	898	849	219	112	127	875	1005	900
STORAGE	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622
ELEV FTMSL	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	16.1	13.6	19.2	21.7	20.1	24.6	22.9	27.5	26.7	15.1	13.8	7.4	8.1	8.0	14.2	16.3	16.2
POWER																	
AVE POWER MW		64	90	102	94	115	107	129	125	74	70	37	41	40	72	80	78
PEAK POW MW		518	511	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	778.2	23.1	15.1	21.9	67.7	85.7	77.4	95.7	93.1	53.2	51.9	13.4	6.9	7.8	53.4	59.8	52.3
--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	136							10	32	36	25	10	5	5	12		
REG INFLOW	13926	497	310	443	1281	1574	1535	1697	1665	886	824	208	107	121	866	995	918
RELEASE	13926	223	175	426	1281	1574	1535	1697	1665	1605	1358	208	107	121	713	695	544
STOR CHANGE	0	274	135	17			0	0	0	-719	-533	0	0	0	153	300	374
STORAGE	3123	3397	3532	3549	3549	3549	3549	3549	3549	2830	2297	2296	2296	2296	2449	2749	3123
ELEV FTMSL	1350.0	1353.4	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1346.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	9.9	7.5	12.6	23.9	21.5	25.6	25.8	27.6	27.1	27.0	22.1	7.0	7.7	7.6	11.6	11.3	9.8
POWER																	
AVE POWER MW		62	106	201	182	216	218	233	228	219	166	51	56	56	86	86	78
PEAK POW MW		350	355	356	356	356	356	356	356	324	284	285	285	285	297	319	339
ENERGY GWH	1376.2	22.4	17.8	43.5	131.1	160.7	156.7	173.1	169.9	157.7	123.8	18.5	9.5	10.7	63.8	64.3	52.6
--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	5	-10	-22	5	-8	0	-3	1	0	9	28	-1	0	-7	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	15128	328	212	464	1416	1697	1666	1740	1735	1662	1470	278	125	143	767	769	657
RELEASE	15128	328	212	464	1416	1697	1666	1740	1722	1636	1470	278	125	143	767	769	696
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	27.6	28.0	28.3	28.0	27.5	23.9	9.3	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	53	89	82	94	95	96	96	95	84	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	632.7	13.9	8.9	19.2	58.7	69.9	68.6	71.6	71.3	68.7	62.5	12.0	5.4	6.2	33.0	33.1	29.7
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	1223	157	73	94	122	236	170	102	75	47	33	17	8	9	18	-3	65
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	16083	478	282	554	1516	1897	1805	1803	1760	1659	1492	289	130	149	772	752	746
KCFS		16.1	20.3	31.1	25.5	30.9	30.3	29.3	28.6	27.9	24.3	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	2683	10	5	6	121	636	1594	1141	244	-230	-82	-146	-68	-78	-192	-181	-98
CHAN STOR	-5	72	-5	-22	-21	-72	19	-3	3	32	39	29	-1	0	-60	-19	3
EVAPORATION	1756							109	342	424	364	163	76	87	190		
STORAGE	40387	41280	41599	41801	42156	42528	44798	44743	43500	42645	41873	42031	42094	42167	41969	41855	42058
SYSTEM POWER																	
AVE POWER MW		544	683	855	848	1080	1021	1117	1094	847	715	443	459	457	671	744	730
PEAK POW MW		2111	2111	2113	2117	2121	2153	2149	2128	2125	2082	2086	2088	2089	2059	2078	2088
ENERGY GWH	7298.2	196.0	114.7	184.7	610.7	803.8	735.0	831.3	813.6	609.5	531.8	159.4	77.1	87.7	499.1	553.5	490.4
DAILY GWH		13.1	16.4	20.5	20.4	25.9	24.5	26.8	26.2	20.3	17.2	10.6	11.0	11.0	16.1	17.9	17.5

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

	28FEB13		2013										2014			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	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	467							28	89	112	98	44	21	24	51		
MOD INFLOW	6090	305	142	183	573	767	1125	474	254	332	359	189	88	101	408	373	418
RELEASE	5384	149	69	89	357	523	506	523	523	404	338	164	76	87	523	553	500
STOR CHANGE	706	156	73	94	216	244	619	-49	-269	-72	21	25	12	13	-115	-180	-82
STORAGE	10670	10826	10899	10992	11208	11453	12072	12023	11754	11682	11703	11728	11740	11753	11638	11458	11376
ELEV FTMSL	2210.6	2211.6	2212.0	2212.6	2213.8	2215.3	2218.8	2218.5	2217.0	2216.6	2216.7	2216.8	2216.9	2217.0	2216.3	2215.3	2214.8
DISCH KCFS	9.0	5.0	5.0	5.0	6.0	8.5	8.5	8.5	8.5	6.8	5.5	5.5	5.5	5.5	8.5	9.0	9.0
POWER																	
AVE POWER MW		62	63	63	75	107	109	109	109	87	70	70	70	70	108	114	114
PEAK POW MW		141	141	142	143	145	149	149	147	147	147	147	147	147	146	145	145
ENERGY GWH	829.4	22.4	10.5	13.5	54.3	79.9	78.2	81.5	81.1	62.5	52.3	25.3	11.8	13.5	80.7	85.1	76.6
--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	-27	0	0		18	13		0	0	-31	-5	
EVAPORATION	548							33	106	132	115	52	24	27	59		
REG INFLOW	14367	695	304	391	1105	1610	2577	1829	888	909	707	425	198	227	808	831	862
RELEASE	13507	446	194	250	1012	1537	1220	1261	1230	1040	922	446	208	238	1045	1291	1166
STOR CHANGE	860	249	110	141	94	73	1357	569	-342	-131	-215	-21	-10	-11	-237	-460	-304
STORAGE	12847	13096	13205	13347	13440	13513	14870	15439	15097	14966	14751	14730	14720	14709	14472	14011	13707
ELEV FTMSL	1818.3	1819.3	1819.7	1820.3	1820.7	1820.9	1826.2	1828.3	1827.0	1826.5	1825.7	1825.7	1825.6	1825.6	1824.7	1822.9	1821.7
DISCH KCFS	21.0	15.0	14.0	14.0	17.0	25.0	20.5	20.5	20.0	17.5	15.0	15.0	15.0	15.0	17.0	21.0	21.0
POWER																	
AVE POWER MW		165	155	156	189	277	232	238	233	203	174	173	173	173	195	238	236
PEAK POW MW		401	403	405	406	408	427	434	430	428	425	425	425	424	421	415	410
ENERGY GWH	1860.8	59.5	26.0	33.6	136.2	206.4	167.3	177.2	173.4	146.0	129.2	62.3	29.1	33.2	145.2	177.4	158.6
--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	1	29	5		-14	-38	21		2	12	12				-10	-19	
EVAPORATION	492							31	94	117	102	47	22	25	55		
REG INFLOW	14368	668	289	366	1271	1610	1908	1196	1053	998	856	399	186	212	919	1246	1189
RELEASE	13486	524	141	362	1180	1505	1339	1689	1658	923	911	218	118	132	888	1006	893
STOR CHANGE	881	144	148	4	92	105	569	-493	-605	75	-55	181	68	80	31	240	297
STORAGE	13439	13583	13731	13735	13826	13931	14500	14007	13402	13477	13422	13603	13671	13752	13783	14023	14320
ELEV FTMSL	1587.7	1588.3	1588.9	1588.9	1589.3	1589.7	1592.0	1590.0	1587.5	1587.8	1587.6	1588.4	1588.6	1589.0	1589.1	1590.1	1591.3
DISCH KCFS	16.2	17.6	10.2	20.3	19.8	24.5	22.5	27.5	27.0	15.5	14.8	7.3	8.5	8.3	14.4	16.4	16.1
POWER																	
AVE POWER MW		204	119	236	231	286	265	323	313	180	172	85	99	97	169	192	190
PEAK POW MW		610	613	613	615	617	629	619	606	608	606	610	612	614	614	619	625
ENERGY GWH	1907.0	73.6	20.0	51.0	166.5	212.7	190.8	240.4	233.1	129.4	127.9	30.7	16.7	18.7	125.6	142.6	127.4
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	13357	524	141	362	1180	1505	1339	1681	1634	892	884	205	112	126	874	1006	893
RELEASE	13357	524	141	362	1180	1505	1339	1681	1634	892	884	205	112	126	874	1006	893
STORAGE	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622
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	16.2	17.6	10.2	20.3	19.8	24.5	22.5	27.3	26.6	15.0	14.4	6.9	8.1	7.9	14.2	16.4	16.1
POWER																	
AVE POWER MW		83	48	95	93	115	105	128	124	73	73	35	41	40	72	80	77
PEAK POW MW		511	509	509	509	509	509	509	509	538	538	538	538	538	538	538	529
ENERGY GWH	773.1	29.8	8.0	20.5	66.8	85.3	75.9	95.2	92.6	52.9	54.0	12.6	6.9	7.7	53.3	59.9	51.8
--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	136							10	32	36	25	10	5	5	12		
REG INFLOW	13922	629	190	424	1277	1575	1530	1694	1663	884	859	195	107	120	866	995	913
RELEASE	13922	220	173	424	1277	1575	1530	1694	1663	1603	1393	195	107	120	713	695	539
STOR CHANGE	0	409	17					0	0	-719	-533	0	0	0	153	300	374
STORAGE	3123	3532	3549	3549	3549	3549	3549	3549	3549	2830	2297	2297	2296	2296	2449	2749	3123
ELEV FTMSL	1350.0	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1355.2	1346.0	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	9.8	7.4	12.5	23.8	21.5	25.6	25.7	27.6	27.0	26.9	22.6	6.6	7.7	7.5	11.6	11.3	9.7
POWER																	
AVE POWER MW		62	106	201	181	216	217	232	228	219	171	48	57	55	86	86	78
PEAK POW MW		355	356	356	356	356	356	356	356	324	284	285	285	285	297	319	339
ENERGY GWH	1375.9	22.3	17.8	43.4	130.7	160.9	156.3	172.8	169.7	157.5	126.9	17.3	9.5	10.6	63.8	64.3	52.1
--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	-8	0	-4	1	0	8	30	-2	0	-8	1	3
EVAPORATION	47							3	9	11	10	5	2	2	5		
REG INFLOW	15163	328	212	464	1416	1703	1666	1740	1735	1662	1506	268	125	143	768	771	655
RELEASE	15163	328	212	464	1416	1703	1666	1740	1722	1636	1506	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	27.7	28.0	28.3	28.0	27.5	24.5	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	53	89	82	94	95	96	96	95	86	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	634.1	13.9	8.9	19.2	58.7	70.2	68.6	71.6	71.3	68.7	64.0	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	16251	495	289	565	1529	1929	1823	1814	1769	1664	1532	281	131	150	775	753	751
KCFS		16.6	20.8	31.6	25.7	31.4	30.6	29.5	28.8	28.0	24.9	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	77	-5	-22	-21	-73	21	-4	3	30	33	31	-2	0	-48	-24	3
EVAPORATION	1818							112	353	439	377	169	79	91	197		
STORAGE	42058	43016	43364	43602	44004	44426	46971	46998	45795	44974	44192	44377	44446	44529	44361	44261	44506
SYSTEM POWER																	
AVE POWER MW		615	543	839	852	1096	1024	1127	1104	857	745	444	472	469	674	756	738
PEAK POW MW		2133	2137	2140	2145	2150	2184	2182	2163	2161	2118	2122	2123	2125	2095	2114	2124
ENERGY GWH	7380.3	221.4	91.3	181.2	613.3	815.3	737.2	838.8	821.2	617.0	554.3	159.9	79.3	90.0	501.7	562.4	496.1
DAILY GWH		14.8	13.0	20.1	20.4	26.3	24.6	27.1	26.5	20.6	17.9	10.7	11.3	11.2	16.2	18.1	17.7

	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	5435	250	116	150	549	834	1061	468	270	258	341	169	79	90	289	218	293
DEPLETION	346	-1	0	-1	59	195	354	239	20	-81	-57	-49	-23	-26	-141	-100	-43
EVAPORATION	368							23	71	88	76	35	16	19	40		
MOD INFLOW	4721	251	117	150	490	639	707	206	179	251	322	183	85	97	390	318	336
RELEASE	5138	149	69	89	387	492	476	492	492	400	307	149	69	79	492	523	472
STOR CHANGE	-417	102	48	61	103	147	231	-286	-313	-149	14	34	16	18	-102	-205	-136
STORAGE	7881	7983	8030	8091	8195	8342	8573	8287	7974	7825	7839	7873	7889	7907	7805	7600	7464
ELEV FTMSL	2192.3	2193.0	2193.3	2193.8	2194.5	2195.5	2197.1	2195.2	2192.9	2191.8	2192.0	2192.2	2192.3	2192.4	2191.7	2190.2	2189.2
DISCH KCFS	8.0	5.0	5.0	5.0	6.5	8.0	8.0	8.0	8.0	6.7	5.0	5.0	5.0	5.0	8.0	8.5	8.5
POWER																	
AVE POWER MW		56	56	57	74	91	92	92	90	75	56	56	56	56	89	94	93
PEAK POW MW		118	119	119	120	122	124	121	118	116	116	117	117	117	116	114	112
ENERGY GWH	699.0	20.2	9.5	12.2	53.0	67.7	66.2	68.3	67.3	54.1	41.6	20.1	9.4	10.8	66.3	69.8	62.5
--GARRISON--																	
NAT INFLOW	8026	297	138	178	770	993	2221	1404	397	305	429	177	83	94	119	176	245
DEPLETION	1168	27	13	16	51	109	744	579	117	-111	4	-100	-46	-53	-86	-60	-36
CHAN STOR	-6	34			-17	-17				14	20			0	-34	-6	0
EVAPORATION	420							26	81	101	88	40	18	21	45		
REG INFLOW	11570	453	195	251	1089	1359	1953	1291	691	730	664	386	180	206	618	753	753
RELEASE	12078	357	167	214	1131	1476	1339	1015	1015	854	738	357	167	190	953	1107	1000
STOR CHANGE	-508	96	29	37	-42	-117	614	277	-324	-125	-73	29	13	15	-336	-354	-247
STORAGE	9448	9543	9572	9609	9567	9450	10064	10341	10017	9892	9819	9847	9861	9876	9540	9187	8940
ELEV FTMSL	1802.9	1803.4	1803.6	1803.8	1803.5	1802.9	1806.0	1807.3	1805.8	1805.1	1804.8	1804.9	1805.0	1805.1	1803.4	1801.6	1800.3
DISCH KCFS	18.5	12.0	12.0	12.0	19.0	24.0	22.5	16.5	16.5	14.4	12.0	12.0	12.0	12.0	15.5	18.0	18.0
POWER																	
AVE POWER MW		117	118	118	186	233	221	166	165	143	119	119	119	119	153	174	172
PEAK POW MW		344	344	345	344	342	353	358	352	350	349	349	349	350	344	337	332
ENERGY GWH	1436.0	42.3	19.8	25.5	133.6	173.2	159.0	123.2	123.1	102.9	88.7	42.9	20.0	22.9	113.6	129.7	115.6
--OAHE--																	
NAT INFLOW	1184	223	104	134	206	113	242	92	24	72	6	-6	-3	-3	-54	-13	47
DEPLETION	652	23	11	14	48	69	138	164	109	27	-9	1	0	1	12	17	27
CHAN STOR	3	36			-39	-28	8	33		13	14				-20	-14	
EVAPORATION	357							22	67	84	75	34	16	18	40		
REG INFLOW	12256	593	260	334	1250	1492	1451	953	862	828	692	316	148	169	827	1062	1020
RELEASE	12778	431	277	369	1248	1468	1418	1727	1351	593	549	259	120	137	902	1011	917
STOR CHANGE	-522	161	-17	-35	2	24	33	-773	-489	235	143	57	27	31	-74	51	102
STORAGE	9954	10115	10098	10063	10065	10088	10121	9348	8859	9094	9237	9294	9321	9353	9278	9330	9432
ELEV FTMSL	1571.2	1572.0	1571.9	1571.7	1571.8	1571.9	1572.1	1567.8	1565.0	1566.4	1567.2	1567.5	1567.7	1567.9	1567.4	1567.7	1568.3
DISCH KCFS	16.6	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	14.7	16.4	16.5
POWER																	
AVE POWER MW		152	209	217	220	250	250	290	222	101	91	89	89	89	150	168	169
PEAK POW MW		525	524	523	523	524	525	503	489	496	500	501	502	503	501	502	505
ENERGY GWH	1598.8	54.9	35.2	46.9	158.4	186.3	180.1	216.0	165.5	72.7	67.8	32.1	14.9	17.1	111.8	125.1	113.9
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12649	431	277	369	1248	1468	1418	1719	1326	562	522	247	114	131	888	1011	917
RELEASE	12649	431	277	369	1248	1468	1418	1719	1326	562	522	247	114	131	888	1011	917
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	16.6	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	14.4	16.4	16.5
POWER																	
AVE POWER MW		69	93	97	98	112	112	131	103	48	43	42	42	42	73	81	79
PEAK POW MW		518	510	509	509	509	509	509	525	538	538	538	538	538	538	538	529
ENERGY GWH	733.5	24.7	15.7	20.9	70.7	83.2	80.3	97.3	76.5	34.5	32.0	15.1	7.0	8.0	54.1	60.2	53.3
--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	126							10	30	31	22	10	5	5	12		
REG INFLOW	12804	497	307	408	1297	1501	1552	1707	1325	506	437	233	108	123	872	1001	929
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	0	-349	-903	0	0	0	0	153	300	374
STORAGE	3122	3384	3532	3549	3549	3549	3549	3549	3200	2296	2296	2296	2296	2296	2449	2749	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	1340.1	1344.8	1350.0
DISCH KCFS	10.0	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	80
PEAK POW MW		350	355	356	356	356	356	356	342	284	285	285	285	285	297	319	339
ENERGY GWH	1260.6	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	64.4	64.9	53.7
--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	11.0	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	258	6	3	4	21	35	31	38	36	23	10	6	3	3	12	14	14
REGULATED FLOW AT SIOUX CITY																	
KAF	14278	366	212	448	1488	1749	1763	1759	1712	1435	571	274	128	146	766	748	715
KCFS		12.3	15.2	25.1	25.0	28.4	29.6	28.6	27.8	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	2615	57	26	34	186	436	1303	1077	307	-140	-50	-136	-63	-72	-190	-125	-35
CHAN STOR	-9	75	-7	-20	-56	-50	5	30	1	28	64	-1	0	0	-61	-19	3
EVAPORATION	1447							92	283	346	298	135	63	72	157		
STORAGE	32384	33004	33211	33290	33354	33408	34286	33503	32041	31125	31208	31328	31385	31449	31090	30883	30938
SYSTEM POWER																	
AVE POWER MW		499	623	755	843	982	990	1009	902	634	394	396	395	395	596	649	638
PEAK POW MW		1968	1967	1967	1967	1967	1982	1961	1941	1901	1905	1907	1908	1910	1874	1888	1894
ENERGY GWH	6308.4	179.6	104.6	163.2	607.3	730.3	712.7	750.6	671.4	456.3	293.2	142.5	66.4	75.9	443.1	482.7	428.7
DAILY GWH		12.0	14.9	18.1	20.2	23.6	23.8	24.2	21.7	15.2	9.5	9.5	9.5	9.5	14.3	15.6	15.3

TIME OF STUDY 09:28:59 SHTN NAV SEAS 61 DAYS, SP MAR 0 MAY 0 STUDY NO 20
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	5615	258	120	155	567	862	1097	483	279	266	352	175	81	93	298	226	303
DEPLETION	443	-2	-1	-1	84	320	544	190	-31	-136	-62	-67	-31	-35	-178	-104	-46
EVAPORATION	354							22	68	84	74	34	16	18	39		
MOD INFLOW	4818	260	121	156	483	542	553	271	242	318	340	207	97	111	437	330	349
RELEASE	5012	149	69	89	387	492	476	492	461	364	307	149	69	79	492	492	444
STOR CHANGE	-194	112	52	67	96	50	77	-221	-219	-46	33	59	27	31	-55	-162	-95
STORAGE	7464	7576	7628	7695	7791	7841	7918	7697	7478	7432	7465	7523	7551	7582	7527	7365	7270
ELEV FTMSL	2189.2	2190.0	2190.4	2190.9	2191.6	2192.0	2192.5	2190.9	2189.3	2188.9	2189.2	2189.6	2189.8	2190.0	2189.6	2188.4	2187.7
DISCH KCFS	8.5	5.0	5.0	5.0	6.5	8.0	8.0	8.0	7.5	6.1	5.0	5.0	5.0	5.0	8.0	8.0	8.0
POWER																	
AVE POWER MW		55	55	55	72	89	89	89	82	67	55	55	55	55	88	87	87
PEAK POW MW		114	114	115	116	117	117	115	113	112	112	113	113	114	113	111	110
ENERGY GWH	667.4	19.8	9.3	12.0	51.9	66.2	64.2	66.1	61.3	48.1	40.7	19.7	9.2	10.6	65.2	64.8	58.2
--GARRISON--																	
NAT INFLOW	8444	312	146	187	810	1045	2337	1477	418	320	451	187	87	99	125	185	258
DEPLETION	1063	11	5	6	24	196	758	566	93	-136	-16	-112	-52	-60	-99	-73	-48
CHAN STOR	6	40			-17	-17			6	16	13			0	-34		
EVAPORATION	421							26	82	101	87	39	18	21	45		
REG INFLOW	11978	491	210	270	1156	1324	2055	1377	710	735	700	408	190	217	637	750	750
RELEASE	12216	387	180	232	893	1199	1160	1199	1199	957	769	372	174	198	984	1230	1083
STOR CHANGE	-237	104	30	38	263	125	895	178	-489	-223	-69	36	17	19	-347	-480	-333
STORAGE	8940	9044	9073	9111	9374	9499	10394	10572	10082	9860	9791	9827	9843	9863	9515	9035	8703
ELEV FTMSL	1800.3	1800.9	1801.0	1801.2	1802.6	1803.2	1807.6	1808.4	1806.1	1805.0	1804.6	1804.8	1804.9	1805.0	1803.3	1800.8	1799.1
DISCH KCFS	18.0	13.0	13.0	13.0	15.0	19.5	19.5	19.5	19.5	16.1	12.5	12.5	12.5	12.5	16.0	20.0	19.5
POWER																	
AVE POWER MW		124	125	125	145	189	193	197	196	160	124	124	124	124	157	193	185
PEAK POW MW		334	335	336	341	343	359	362	353	349	348	349	349	349	343	334	328
ENERGY GWH	1450.9	44.8	21.0	27.0	104.3	140.8	139.1	146.9	146.0	115.2	92.2	44.6	20.8	23.8	117.1	143.3	124.0
--OAHE--																	
NAT INFLOW	1263	238	111	143	220	120	259	99	25	77	6	-6	-3	-3	-58	-14	50
DEPLETION	665	24	11	14	49	70	141	169	112	27	-10	1	0	1	12	17	27
CHAN STOR	-8	28			-11	-26				21	21				-20	-23	3
EVAPORATION	337							21	62	79	71	33	15	18	38		
REG INFLOW	12469	629	280	360	1052	1223	1278	1108	1050	949	735	332	155	177	855	1175	1109
RELEASE	12711	455	239	364	1241	1461	1401	1724	1346	593	545	259	120	138	902	1012	911
STOR CHANGE	-242	174	41	-4	-189	-238	-123	-615	-296	355	190	73	35	40	-47	163	198
STORAGE	9432	9606	9647	9644	9455	9217	9094	8479	8183	8538	8728	8801	8835	8875	8828	8992	9190
ELEV FTMSL	1568.3	1569.3	1569.5	1569.5	1568.4	1567.1	1566.4	1562.7	1560.8	1563.0	1564.2	1564.6	1564.9	1565.1	1564.8	1565.8	1566.9
DISCH KCFS	16.5	15.3	17.2	20.4	20.9	23.8	23.6	28.0	21.9	10.0	8.9	8.7	8.7	8.7	14.7	16.5	16.4
POWER																	
AVE POWER MW		158	178	211	215	243	239	279	214	98	88	88	87	87	147	166	166
PEAK POW MW		510	511	511	506	499	496	477	468	479	485	487	488	489	488	493	498
ENERGY GWH	1550.8	56.8	30.0	45.5	154.7	180.5	171.9	207.7	159.3	70.7	65.8	31.5	14.6	16.8	109.7	123.3	111.8
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12583	455	239	364	1241	1461	1401	1716	1322	562	518	247	114	131	888	1012	911
RELEASE	12583	455	239	364	1241	1461	1401	1716	1322	562	518	247	114	131	888	1012	911
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	16.5	15.3	17.2	20.4	20.9	23.8	23.6	27.9	21.5	9.5	8.4	8.3	8.2	8.3	14.4	16.5	16.4
POWER																	
AVE POWER MW		72	81	95	98	111	110	131	102	48	43	42	42	42	73	81	79
PEAK POW MW		517	510	509	509	509	509	509	525	538	538	538	538	538	538	538	529
ENERGY GWH	729.7	26.1	13.6	20.6	70.3	82.8	79.4	97.2	76.2	34.5	31.8	15.2	7.0	8.0	54.1	60.2	52.9
--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	126							10	30	31	22	10	5	5	12		
REG INFLOW	12775	527	273	407	1296	1499	1550	1706	1324	505	426	233	108	123	873	1001	924
RELEASE	12774	232	160	390	1296	1499	1550	1706	1673	1409	426	233	108	123	719	701	550
STOR CHANGE	1	295	114	17	0	0		0	-349	-903	0	0	0	0	153	300	374
STORAGE	3123	3418	3532	3549	3549	3549	3549	3549	3200	2297	2297	2297	2297	2297	2450	2750	3124
ELEV FTMSL	1350.0	1353.7	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1351.0	1337.5	1337.5	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	10.0	7.8	11.5	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		65	97	185	184	206	220	234	225	182	51	57	57	57	87	87	79
PEAK POW MW		351	355	356	356	356	356	356	342	284	285	285	285	285	297	319	339
ENERGY GWH	1258.0	23.3	16.3	39.9	132.7	153.2	158.3	174.0	167.8	131.2	37.8	20.6	9.6	10.9	64.4	64.9	53.2
--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	-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	13857	327	195	425	1416	1611	1666	1740	1735	1466	553	268	125	143	766	768	654
RELEASE	13857	327	195	425	1416	1611	1666	1740	1722	1440	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	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	579.8	13.9	8.2	17.6	58.8	66.6	68.6	71.6	71.3	60.8	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	14329	369	214	450	1497	1767	1776	1765	1715	1437	561	275	128	147	767	747	714
KCFS		12.4	15.4	25.2	25.2	28.7	29.8	28.7	27.9	24.1	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	2620	39	18	24	185	649	1510	1020	235	-220	-76	-166	-77	-89	-240	-142	-50
CHAN STOR	-8	73	-7	-20	-28	-48	-3	-3	7	37	65	-2	0	0	-62	-23	6
EVAPORATION	1414							89	275	338	292	133	62	71	154		
STORAGE	30938	31623	31859	31978	32148	32085	32934	32275	30935	30144	30298	30466	30544	30634	30339	30160	30265
SYSTEM POWER																	
AVE POWER MW		513	585	753	795	927	947	1026	916	640	393	398	397	397	596	658	639
PEAK POW MW		1940	1941	1941	1942	1938	1951	1933	1916	1880	1885	1889	1890	1892	1857	1873	1880
ENERGY GWH	6236.6	184.6	98.4	162.6	572.7	689.9	681.6	763.5	681.8	460.6	292.2	143.2	66.7	76.3	443.5	489.5	429.6
DAILY GWH		12.3	14.1	18.1	19.1	22.3	22.7	24.6	22.0	15.4	9.4	9.5	9.5	9.5	14.3	15.8	15.3

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	5748	264	123	158	580	882	1123	495	285	273	361	179	83	95	305	231	310
DEPLETION	445	-3	-2	-2	83	322	550	197	-27	-136	-64	-67	-31	-36	-179	-104	-56
EVAPORATION	352							22	67	84	73	33	16	18	39		
MOD INFLOW	4951	268	125	161	497	560	573	276	245	325	352	212	99	113	445	335	366
RELEASE	4990	119	56	71	357	492	476	492	492	387	307	149	69	79	492	492	460
STOR CHANGE	-40	149	69	89	140	68	97	-216	-247	-62	44	63	30	34	-47	-157	-94
STORAGE	7270	7418	7488	7577	7717	7785	7882	7666	7419	7357	7401	7465	7494	7528	7481	7324	7230
ELEV FTMSL	2187.7	2188.8	2189.3	2190.0	2191.0	2191.6	2192.3	2190.7	2188.8	2188.4	2188.7	2189.2	2189.4	2189.6	2189.3	2188.1	2187.4
DISCH KCFS	8.0	4.0	4.0	4.0	6.0	8.0	8.0	8.0	8.0	6.5	5.0	5.0	5.0	5.0	8.0	8.0	8.0
POWER																	
AVE POWER MW		44	44	44	66	89	89	89	88	71	54	55	55	55	87	87	86
PEAK POW MW		112	113	114	115	116	117	115	112	111	112	112	113	113	113	111	110
ENERGY GWH	662.2	15.7	7.4	9.5	47.7	65.9	64.1	66.0	65.2	50.9	40.5	19.7	9.2	10.5	65.1	64.7	60.1
--GARRISON--																	
NAT INFLOW	8762	324	151	194	840	1084	2425	1533	433	332	468	194	90	103	130	192	268
DEPLETION	1042	5	2	3	14	185	756	584	106	-137	-20	-116	-54	-62	-100	-73	-53
CHAN STOR	0	46			-23	-23				17	17			0	-34		
EVAPORATION	410							25	79	98	85	39	18	21	44		
REG INFLOW	12301	484	204	263	1160	1368	2145	1416	740	775	727	419	196	223	643	757	781
RELEASE	12349	417	167	214	1131	1476	1309	1045	1045	878	769	372	174	198	953	1138	1064
STOR CHANGE	-48	68	38	48	29	-108	836	371	-305	-103	-41	47	22	25	-310	-381	-283
STORAGE	8703	8771	8808	8857	8886	8778	9614	9985	9679	9576	9534	9582	9604	9629	9319	8938	8655
ELEV FTMSL	1799.1	1799.4	1799.6	1799.9	1800.0	1799.5	1803.8	1805.6	1804.1	1803.6	1803.4	1803.6	1803.7	1803.9	1802.3	1800.3	1798.8
DISCH KCFS	19.5	14.0	12.0	12.0	19.0	24.0	22.0	17.0	17.0	14.8	12.5	12.5	12.5	12.5	15.5	18.5	18.5
POWER																	
AVE POWER MW		132	114	114	180	226	211	168	168	145	123	123	123	123	151	177	175
PEAK POW MW		329	330	331	331	329	345	352	346	344	343	344	345	345	339	332	327
ENERGY GWH	1440.5	47.6	19.1	24.6	129.5	168.1	151.8	124.9	125.0	104.3	91.2	44.1	20.6	23.6	112.4	131.9	121.5
--OAHE--																	
NAT INFLOW	1323	249	116	149	231	126	271	103	26	81	7	-7	-3	-3	-61	-15	52
DEPLETION	680	24	11	14	49	71	145	173	115	28	-10	1	0	1	12	18	28
CHAN STOR	6	32	11		-40	-28	11	28		13	13				-17	-17	
EVAPORATION	343							21	64	81	72	33	15	18	38		
REG INFLOW	12655	674	283	349	1273	1502	1446	982	892	864	727	331	155	177	824	1087	1088
RELEASE	12703	415	268	361	1236	1458	1388	1723	1342	595	551	259	120	137	902	1013	935
STOR CHANGE	-49	259	15	-11	37	44	58	-741	-450	269	176	72	34	39	-78	74	153
STORAGE	9190	9449	9463	9452	9489	9534	9592	8851	8401	8670	8846	8918	8953	8992	8914	8988	9141
ELEV FTMSL	1566.9	1568.4	1568.5	1568.4	1568.6	1568.9	1569.2	1564.9	1562.2	1563.8	1564.9	1565.3	1565.5	1565.8	1565.3	1565.7	1566.6
DISCH KCFS	16.4	13.9	19.3	20.2	20.8	23.7	23.3	28.0	21.8	10.0	9.0	8.7	8.7	8.7	14.7	16.5	16.3
POWER																	
AVE POWER MW		143	199	208	213	244	240	284	216	99	90	88	88	88	148	166	165
PEAK POW MW		506	506	506	507	508	510	488	475	483	488	490	491	493	490	493	497
ENERGY GWH	1560.2	51.4	33.4	44.8	153.6	181.3	173.0	211.5	161.0	71.5	66.9	31.7	14.7	16.9	110.2	123.6	114.7
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	12574	415	268	361	1236	1458	1388	1715	1317	564	524	247	114	131	888	1013	935
RELEASE	12574	415	268	361	1236	1458	1388	1715	1317	564	524	247	114	131	888	1013	935
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	13.9	19.3	20.2	20.8	23.7	23.3	27.9	21.4	9.5	8.5	8.3	8.2	8.3	14.4	16.5	16.3
POWER																	
AVE POWER MW		66	91	95	97	111	109	131	102	48	43	42	42	42	73	81	78
PEAK POW MW		518	510	509	509	509	509	509	525	538	538	538	538	538	538	538	529
ENERGY GWH	729.3	23.8	15.2	20.4	70.0	82.6	78.6	97.1	75.9	34.6	32.1	15.2	7.0	8.0	54.1	60.3	54.3
--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	126							10	30	31	22	10	5	5	12		
REG INFLOW	12796	493	305	408	1295	1499	1550	1706	1324	505	425	232	108	123	872	1001	949
RELEASE	12797	232	158	391	1295	1499	1550	1706	1673	1409	426	233	108	123	719	701	575
STOR CHANGE	-1	261	147	17	0			0	-349	-903	0	0	0	0	153	300	374
STORAGE	3124	3385	3532	3549	3549	3549	3549	3549	3200	2296	2296	2296	2296	2296	2449	2749	3123
ELEV FTMSL	1350.0	1353.3	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1351.0	1337.5	1337.5	1337.5	1337.5	1337.5	1340.1	1344.8	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	10.0
POWER																	
AVE POWER MW		65	96	185	184	206	220	234	225	182	51	57	57	57	87	87	80
PEAK POW MW		350	355	356	356	356	356	356	342	284	285	285	285	285	297	319	339
ENERGY GWH	1260.1	23.3	16.2	39.9	132.5	153.2	158.3	174.0	167.8	131.2	37.8	20.6	9.6	10.9	64.4	64.9	55.6
--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	13883	327	194	425	1416	1611	1666	1740	1735	1466	553	268	125	143	767	769	679
RELEASE	13883	327	194	425	1416	1611	1666	1740	1722	1440	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	28.3	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	30.6
--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	14405	372	215	452	1504	1781	1786	1770	1717	1437	563	275	128	147	768	748	742
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	2621	33	16	20	175	641	1518	1049	255	-219	-82	-170	-79	-90	-241	-141	-64
CHAN STOR	0	82	4	-20	-63	-57	8	25	1	31	62	-2	0	0	-59	-17	3
EVAPORATION	1407							88	274	336	290	132	62	71	154		
STORAGE	30265	31002	31270	31414	31620	31624	32615	32030	30691	29917	30096	30279	30365	30463	30181	30018	30129
SYSTEM POWER																	
AVE POWER MW		488	592	727	822	965	964	1001	895	630	393	397	396	396	590	643	628
PEAK POW MW		1929	1929	1930	1933	1933	1951	1934	1915	1878	1883	1887	1889	1891	1856	1870	1878
ENERGY GWH	6233.4	175.7	99.4	157.0	592.2	717.7	694.4	745.1	666.2	453.3	292.5	142.8	66.5	76.1	439.2	478.4	436.9
DAILY GWH		11.7	14.2	17.4	19.7	23.2	23.1	24.0	21.5	15.1	9.4	9.5	9.5	9.5	14.2	15.4	15.1

TIME OF STUDY 09:28:59 NO NAVIGATION SEASON, SP MAR 0 MAY 0 STUDY NO 22
VALUES IN 1000 AF EXCEPT AS INDICATED

	28FEB12	2012												2013			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	5919	272	127	163	598	909	1156	509	294	281	371	184	86	98	314	238	319
DEPLETION	473	-3	-1	-2	85	325	557	204	-22	-136	-66	-68	-32	-36	-181	-105	-47
EVAPORATION	381							23	72	91	80	36	17	20	43		
MOD INFLOW	5065	275	128	165	513	584	599	282	244	326	357	215	100	115	452	343	366
RELEASE	3612	119	56	71	238	338	327	338	338	290	246	119	56	63	338	369	305
STOR CHANGE	1453	156	73	93	275	246	272	-56	-94	37	111	96	45	51	114	-26	61
STORAGE	7230	7386	7459	7552	7827	8073	8345	8289	8195	8231	8343	8439	8483	8535	8649	8623	8683
ELEV FTMSL	2187.4	2188.6	2189.1	2189.8	2191.9	2193.6	2195.6	2195.2	2194.5	2194.8	2195.5	2196.2	2196.5	2196.9	2197.7	2197.5	2197.9
DISCH KCFS	8.0	4.0	4.0	4.0	4.0	5.5	5.5	5.5	5.5	4.9	4.0	4.0	4.0	4.0	5.5	6.0	5.5
POWER																	
AVE POWER MW		43	44	44	44	62	63	63	63	56	46	46	46	46	64	70	64
PEAK POW MW		112	112	113	116	119	122	121	120	121	122	123	123	124	125	125	125
ENERGY GWH	498.6	15.7	7.4	9.5	32.0	46.0	45.1	46.8	46.7	40.0	34.1	16.6	7.8	8.9	47.5	51.9	43.0
--GARRISON--																	
NAT INFLOW	9185	340	158	204	881	1136	2542	1607	454	349	491	203	95	108	136	201	281
DEPLETION	1064	6	3	3	16	186	767	600	111	-139	-25	-119	-56	-63	-103	-74	-49
CHAN STOR	29	46				-17				7	10				-17	-6	6
EVAPORATION	453							27	87	108	95	43	20	23	50		
REG INFLOW	11309	499	211	272	1103	1271	2102	1318	594	676	677	397	185	212	511	638	641
RELEASE	9563	387	167	196	655	892	863	892	892	762	646	312	146	167	892	892	805
STOR CHANGE	1746	113	45	75	448	379	1239	426	-297	-86	31	85	40	45	-381	-253	-164
STORAGE	8655	8768	8813	8888	9336	9716	10955	11381	11084	10998	11029	11115	11154	11199	10819	10566	10401
ELEV FTMSL	1798.8	1799.4	1799.7	1800.1	1802.4	1804.3	1810.1	1812.1	1810.7	1810.3	1810.5	1810.9	1811.0	1811.2	1809.5	1808.4	1807.6
DISCH KCFS	18.5	13.0	12.0	11.0	11.0	14.5	14.5	14.5	14.5	12.8	10.5	10.5	10.5	10.5	14.5	14.5	14.5
POWER																	
AVE POWER MW		123	114	105	106	142	146	151	151	133	109	109	110	110	150	149	147
PEAK POW MW		329	330	331	340	347	368	375	370	369	369	371	371	372	366	362	359
ENERGY GWH	1175.8	44.2	19.1	22.6	76.3	105.5	105.5	112.5	112.7	95.8	81.2	39.4	18.4	21.1	111.8	110.5	99.0
--OAHE--																	
NAT INFLOW	1408	265	123	159	245	134	288	110	28	86	7	-7	-3	-3	-64	-16	56
DEPLETION	696	24	11	15	50	72	148	178	119	29	-11	1	0	1	13	18	28
CHAN STOR	24	32	6	6		-19				9	12				-21		
EVAPORATION	412							24	76	98	88	40	19	21	46		
REG INFLOW	9888	659	285	346	850	934	1003	800	725	731	588	265	124	141	747	858	833
RELEASE	8100	351	185	71	352	770	777	1087	522	364	363	176	121	138	902	1014	908
STOR CHANGE	1787	308	100	275	498	164	225	-287	203	366	225	89	3	4	-155	-156	-75
STORAGE	9141	9449	9549	9824	10322	10486	10711	10424	10627	10993	11219	11308	11311	11314	11160	11003	10929
ELEV FTMSL	1566.6	1568.4	1568.9	1570.5	1573.1	1574.0	1575.1	1573.6	1574.7	1576.5	1577.6	1578.1	1578.1	1578.1	1577.3	1576.6	1576.2
DISCH KCFS	16.3	11.8	13.3	4.0	5.9	12.5	13.1	17.7	8.5	6.1	5.9	5.9	8.7	8.7	14.7	16.5	16.3
POWER																	
AVE POWER MW		121	137	42	62	133	140	189	91	66	64	65	95	95	160	179	177
PEAK POW MW		506	509	517	530	535	541	533	539	548	554	556	556	556	553	549	547
ENERGY GWH	1053.7	43.5	23.1	9.0	44.9	99.3	100.8	140.5	67.6	47.7	48.0	23.4	16.0	18.3	119.2	133.3	118.9
--BIG BEND--																	
EVAPORATION	129							8	24	31	27	12	6	7	14		
REG INFLOW	7971	351	185	71	352	770	777	1079	497	333	336	164	115	131	888	1014	908
RELEASE	7971	351	185	71	352	770	777	1079	497	333	336	164	115	131	888	1014	908
STORAGE	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621	1621
ELEV FTMSL	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0	1420.0
DISCH KCFS	16.3	11.8	13.3	4.0	5.9	12.5	13.1	17.5	8.1	5.6	5.5	5.5	8.3	8.3	14.4	16.5	16.3
POWER																	
AVE POWER MW		56	62	19	28	59	61	82	39	28	28	28	42	42	73	81	78
PEAK POW MW		518	510	509	509	509	509	509	535	538	538	538	538	538	538	538	529
ENERGY GWH	465.7	20.1	10.5	4.0	19.9	43.6	44.0	61.1	29.2	20.2	20.7	10.1	7.0	8.0	54.1	60.3	52.7
--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	129							10	29	32	25	10	5	5	12		
REG INFLOW	8239	437	225	123	417	816	956	1072	510	278	228	148	107	123	873	1001	924
RELEASE	8238	173	81	106	417	816	956	1072	1059	678	448	231	107	123	719	701	550
STOR CHANGE	1	265	144	17				0	-549	-400	-220	-83	0	0	153	300	374
STORAGE	3123	3388	3532	3549	3549	3549	3549	3549	3000	2600	2380	2297	2297	2297	2450	2750	3124
ELEV FTMSL	1350.0	1353.3	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1348.3	1342.6	1339.0	1337.5	1337.5	1337.5	1340.2	1344.8	1350.0
DISCH KCFS	10.0	5.8	5.8	5.9	7.0	13.3	16.1	17.4	17.2	11.4	7.3	7.8	7.7	7.7	11.7	11.4	9.9
POWER																	
AVE POWER MW		48	49	51	60	113	136	148	142	89	55	57	57	57	87	87	79
PEAK POW MW		350	355	356	356	356	356	356	333	308	291	285	285	285	297	319	339
ENERGY GWH	806.8	17.4	8.3	11.0	43.1	84.0	98.3	110.0	105.7	64.4	41.0	20.7	9.5	10.9	64.4	64.9	53.2
--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	0	8	0	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	9330	272	123	161	536	922	1071	1107	1120	740	553	268	125	143	767	769	655
RELEASE	9330	272	123	161	536	922	1071	1107	1107	714	553	268	125	143	767	769	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	9.1	8.9	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	31	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	396.3	11.6	5.2	6.8	22.8	38.9	44.9	46.4	46.6	30.6	23.9	11.6	5.4	6.2	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	862	57	27	34	121	225	166	74	34	23	22	15	7	8	16	-8	41
DEPLETION	268	7	3	4	22	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	9924	322	147	191	635	1111	1206	1142	1104	713	564	277	129	148	770	747	720
KCFS		10.8	10.6	10.7	10.7	18.1	20.3	18.6	18.0	12.0	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	2692	35	16	21	180	647	1539	1078	270	-220	-89	-174	-81	-93	-245	-143	-50
CHAN STOR	53	86	6	5	-2	-48	-5	-3	0	27	30	-1	0	0	-45	-5	8
EVAPORATION	1551							95	297	371	324	147	69	78	170		
STORAGE	30129	30970	31331	31792	33013	33803	35539	35622	34898	34841	34989	35176	35263	35363	35095	34960	35117
SYSTEM POWER																	
AVE POWER MW		423	438	292	332	561	609	695	549	415	334	338	382	382	578	610	590
PEAK POW MW		1928	1931	1941	1966	1980	2010	2009	2013	2000	1992	1990	1991	1992	1957	1969	1974
ENERGY GWH	4396.8	152.4	73.5	63.0	239.0	417.3	438.6	517.4	408.5	298.7	248.8	121.6	64.2	73.3	430.0	453.9	396.5
DAILY GWH		10.2	10.5	7.0	8.0	13.5	14.6	16.7	13.2	10.0	8.0	8.1	9.2	9.2	13.9	14.6	14.2

	28FEB13		2013										2014			
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	31OCT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB
--FORT PECK--																	
NAT INFLOW	5961	274	128	164	602	915	1164	513	296	283	374	185	86	99	317	240	321
DEPLETION	477	-3	-2	-2	83	324	558	212	-18	-136	-68	-68	-32	-36	-182	-105	-48
EVAPORATION	371							24	76	95	83	24	11	13	44		
MOD INFLOW	5113	277	129	166	519	591	606	277	238	324	359	229	107	122	455	345	369
RELEASE	5076	119	56	71	298	523	506	492	492	398	307	149	69	79	523	523	472
STOR CHANGE	37	158	74	95	221	68	100	-215	-254	-74	51	80	37	43	-68	-178	-103
STORAGE	8683	8842	8915	9010	9232	9300	9400	9185	8931	8857	8908	8989	9026	9069	9001	8824	8721
ELEV FTMSL	2197.9	2199.0	2199.5	2200.1	2201.6	2202.0	2202.7	2201.3	2199.6	2199.1	2199.4	2200.0	2200.2	2200.5	2200.0	2198.9	2198.2
DISCH KCFS	5.5	4.0	4.0	4.0	5.0	8.5	8.5	8.0	8.0	6.7	5.0	5.0	5.0	5.0	8.5	8.5	8.5
POWER																	
AVE POWER MW		47	47	47	59	101	101	95	94	78	59	59	59	59	100	99	99
PEAK POW MW		127	127	128	130	130	131	129	127	127	127	128	128	128	128	126	126
ENERGY GWH	723.2	16.8	7.9	10.2	42.6	74.9	72.7	70.6	70.1	56.4	43.6	21.2	9.9	11.3	74.3	74.0	66.5
--GARRISON--																	
NAT INFLOW	9293	344	160	206	891	1150	2572	1626	460	353	496	205	96	109	137	204	284
DEPLETION	1127	6	3	3	15	185	776	620	95	-143	-29	-114	-53	-61	-86	-57	-33
CHAN STOR	-34	17			-11	-39	0	5		14	19			0	-39		0
EVAPORATION	435							29	90	112	98	28	13	15	51		
REG INFLOW	12773	474	213	274	1162	1448	2302	1475	767	796	753	440	205	235	656	784	789
RELEASE	12704	387	167	214	1131	1414	1309	1107	1107	971	799	387	180	206	984	1230	1111
STOR CHANGE	69	87	46	60	32	34	993	368	-340	-175	-46	53	25	28	-328	-446	-322
STORAGE	10401	10488	10535	10594	10626	10660	11653	12021	11681	11506	11460	11513	11538	11566	11238	10792	10471
ELEV FTMSL	1807.6	1808.0	1808.2	1808.5	1808.6	1808.8	1813.2	1814.8	1813.4	1812.6	1812.4	1812.6	1812.7	1812.9	1811.4	1809.4	1807.9
DISCH KCFS	14.5	13.0	12.0	12.0	19.0	23.0	22.0	18.0	18.0	16.3	13.0	13.0	13.0	13.0	16.0	20.0	20.0
POWER																	
AVE POWER MW		132	122	123	193	234	228	191	191	172	137	137	137	137	168	206	204
PEAK POW MW		360	361	362	363	363	379	385	380	377	376	377	377	378	373	365	360
ENERGY GWH	1596.5	47.6	20.6	26.5	139.2	173.9	164.1	142.3	142.3	124.1	102.0	49.4	23.1	26.4	124.9	153.6	136.8
--OAHE--																	
NAT INFLOW	1429	269	125	161	249	136	293	112	29	87	7	-7	-3	-4	-65	-16	56
DEPLETION	708	24	11	15	50	73	151	182	122	29	-11	1	0	1	13	18	29
CHAN STOR	-29	8	5		-37	-21	5	21		9	18				-16	-22	
EVAPORATION	370							25	75	94	83	24	11	13	44		
REG INFLOW	13025	639	286	361	1293	1456	1456	1033	938	944	752	355	166	189	845	1174	1138
RELEASE	12951	405	263	354	1228	1451	1366	1721	1335	797	717	244	116	132	902	1014	907
STOR CHANGE	74	234	23	7	65	5	90	-688	-397	147	35	111	50	57	-56	160	231
STORAGE	10929	11163	11186	11192	11257	11262	11352	10665	10268	10415	10450	10561	10611	10668	10612	10772	11003
ELEV FTMSL	1576.2	1577.4	1577.5	1577.5	1577.8	1577.8	1578.3	1574.9	1572.8	1573.6	1573.8	1574.4	1574.6	1574.9	1574.6	1575.4	1576.6
DISCH KCFS	16.3	13.6	18.9	19.8	20.6	23.6	23.0	28.0	21.7	13.4	11.7	8.2	8.3	8.3	14.7	16.5	16.3
POWER																	
AVE POWER MW		148	206	216	225	257	251	302	231	142	124	88	90	90	157	177	176
PEAK POW MW		553	553	553	555	555	558	540	529	533	534	537	538	540	538	543	549
ENERGY GWH	1690.6	53.3	34.6	46.7	161.9	191.3	180.4	224.7	171.7	102.5	92.5	31.6	15.1	17.2	117.0	131.7	118.5
--BIG BEND--																	
EVAPORATION	120							8	24	31	27	8	4	4	14		
REG INFLOW	12832	405	263	354	1228	1451	1366	1713	1310	766	690	236	112	128	888	1014	907
RELEASE	12832	405	263	354	1228	1451	1366	1713	1310	766	690	236	112	128	898	1014	907
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	16.3	13.6	18.9	19.8	20.6	23.6	23.0	27.9	21.3	12.9	11.2	7.9	8.1	8.1	14.4	16.5	16.3
POWER																	
AVE POWER MW		64	89	93	97	110	107	130	102	65	57	40	41	41	73	81	78
PEAK POW MW		518	510	509	509	509	509	509	525	538	538	538	538	538	538	538	529
ENERGY GWH	745.3	23.2	14.9	20.1	69.6	82.2	77.4	97.0	75.5	46.8	42.2	14.5	6.9	7.9	54.1	60.3	52.6
--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	119							10	30	31	22	6	3	3	12		
REG INFLOW	13119	494	304	407	1295	1498	1549	1706	1324	708	583	225	107	122	872	1001	924
RELEASE	13120	232	158	390	1295	1498	1549	1706	1673	1611	583	225	107	122	719	701	550
STOR CHANGE	-1	261	146	17				0	-349	-903	0	0	0	0	153	300	374
STORAGE	3124	3386	3532	3549	3549	3549	3549	3549	3200	2296	2296	2296	2296	2296	2449	2749	3123
ELEV FTMSL	1350.0	1353.3	1355.0	1355.2	1355.2	1355.2	1355.2	1355.2	1351.0	1337.5	1337.5	1337.5	1337.5	1337.5	1340.1	1344.8	1350.0
DISCH KCFS	9.9	7.8	11.4	21.9	21.8	24.4	26.0	27.7	27.2	27.1	9.5	7.6	7.7	7.7	11.7	11.4	9.9
POWER																	
AVE POWER MW		65	96	185	184	206	220	234	225	208	69	56	57	56	87	87	79
PEAK POW MW		350	355	356	356	356	356	356	342	284	285	285	285	285	297	319	339
ENERGY GWH	1289.0	23.3	16.2	39.9	132.5	153.1	158.2	174.0	167.8	149.7	51.6	20.0	9.5	10.8	64.4	64.9	53.2
--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	0	33	4	0	0	-7	1	3
EVAPORATION	44							3	9	11	10	3	1	2	5		
REG INFLOW	14216	328	194	425	1416	1611	1666	1740	1735	1662	713	268	125	143	767	769	655
RELEASE	14216	328	194	425	1416	1611	1666	1740	1722	1636	713	268	125	143	767	769	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	14.0	23.8	23.8	26.2	28.0	28.3	28.0	27.5	11.6	9.0	9.0	9.0	12.5	12.5	12.5
POWER																	
AVE POWER MW		39	49	82	82	89	95	96	96	95	41	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	594.7	13.9	8.2	17.6	58.7	66.6	68.6	71.6	71.3	68.7	30.7	11.6	5.4	6.2	33.0	33.0	29.6
--GAVINS POINT - SIOUX CITY--																	
NAT INFLOW	879	58	27	35	123	230	169	76	35	24	22	15	7	8	16	-8	42
DEPLETION	269	7	3	4	23	36	31	39	37	24	11	6	3	3	13	14	15
REGULATED FLOW AT SIOUX CITY																	
KAF	14826	379	218	456	1516	1805	1804	1777	1720	1636	724	277	129	148	770	747	721
KCFS		12.7	15.7	25.5	25.5	29.4	30.3	28.9	28.0	27.5	11.8	9.3	9.3	9.3	12.5	12.1	13.0
--TOTAL--																	
NAT INFLOW	19303	1125	525	675	2060	2624	4537	2427	958	788	924	441	206	235	475	478	825
DEPLETION	2772	34	16	21	178	646	1552	1110	261	-224	-95	-169	-79	-90	-229	-126	-34
CHAN STOR	-67	29	-2	-20	-48	-65	2	23	1	20	70	4	0	0	-62	-21	3
EVAPORATION	1459							98	305	375	323	93	43	50	171		
STORAGE	35117	35858	36147	36325	36643	36751	37934	37399	36072	35092	35133	35377	35489	35617	35318	35155	35296
SYSTEM POWER																	
AVE POWER MW		495	609	745	840	997	1002	1049	939	761	487	411	415	415	629	696	680
PEAK POW MW		2021	2022	2023	2027	2028	2047	2033	2018	1976	1977	1982	1984	1986	1952	1969	1978
ENERGY GWH	6639.3	178.0	102.4	160.9	604.5	741.9	721.4	780.2	698.7	548.3	362.7	148.1	69.8	79.7	467.8	517.5	457.2
DAILY GWH		11.9	14.6	17.9	20.2	23.9	24.0	25.2	22.5	18.3	11.7	9.9	10.0	10.0	15.1	16.7	16.3