MEMORANDUM
July 11, 2007

To: Estevan Lopez, Director, Interstate Stream Commission
From: John Whipple, Staff, Interstate Stream Commission
Subject: San Juan-Chama Project Water Supply

BACKGROUND AND SUMMARY

The Bureau of Reclamation's February 1989 Addendum to Hydrology Report, San Juan-Chama Project Yield Update (1989 Yield Update), concluded that the firm annual yield of the San Juan-Chama Project at Heron Dam is 96,200 acre-feet per year. Since then, Reclamation has been involved in hydrologic modeling of the San Juan River Basin for use in water planning studies in the basin, including studies relating to environmental compliance activities for federal water projects in the basin. Reclamation recently proposed revisions to its hydrology model for the basin that include, among other things, changes to the hydrology above the San Juan-Chama Project points of diversion that might be interpreted to suggest a reduced firm yield of the project at Heron Dam.

In light of the proposed model revisions, the Interstate Stream Commission staff evaluated the availability of water at the San Juan-Chama Project diversion sites and at Heron Dam. The Commission staff determined that no change is warranted to the Bureau of Reclamation's official firm annual yield estimate for the project of 96,200 acre-feet at Heron Dam. The Commission's hydrologic investigation also found that based on the hydrologic data available for the period 1936-2005, the long-term average annual diversion from the San Juan River Basin by the San Juan-Chama Project can be anticipated to average about 105,200 acre-feet per year in the future. Therefore, Reclamation's San Juan River Basin hydrology model should include a baseline depletion amount of about 105,200 acre-feet per year, on average, for the project. The baseline depletion amount for the San Juan-Chama Project suggested herein is for planning purposes only, and it should not be used for regulatory purposes because the project diversions in the future will be driven by actual future hydrology, not estimated or modeled hydrology for some defined past period of time.

REVIEW OF HYDROLOGIC MODEL

The Bureau of Reclamation has prepared a revision to its San Juan River Basin hydrology model that would extend through 2004 the hydrologic record used in the model and that would simulate with improved capabilities the hydrology of the San Juan River below Navajo Dam and the lower Animas River on a daily time step. The revised model would be used to explore possibilities for optimizing Navajo Reservoir daily and seasonal operating criteria to better provide for meeting water use demands and downstream endangered fish habitat needs, and also for the evaluation of possible revisions to the San Juan River Basin Recovery Implementation Program's 1999 Flow Recommendations for the San Juan River. The Interstate Stream Commission staff's review of the proposed model revisions, as they

relate to the water supply available for the San Juan-Chama Project, identified several concerns, including the following.

First, unlike Reclamation's 1989 Yield Update that relied on estimates of historic flows available at the points of diversion, the revised San Juan River Basin hydrology model as proposed relies on modeled flows at the points of diversion that are somewhat less than historic flows assuming that the upstream depletions are greater in the future than they have been historically. This assumption results from the Colorado Water Conservation Board using one methodology to compute historic irrigation depletions, and another methodology to compute baseline irrigation depletions. For historic depletions, Colorado considers historic ditch diversions, and thus actual irrigation practices on the high-altitude, native pasture lands in question, that reflect reduced diversions during the spring when crop consumptive use is met from soil moisture, during the fall when the irrigation season is terminated early because of insufficient growing season remaining to get another cutting of hay, and during the summer at times for various factors related to farm and ditch operations. For baseline depletions, however, Colorado assumes no shortage to the computed crop consumptive use regardless of local irrigation practices, and also assumes that the full amount of crop consumptive use is met from irrigation, not soil moisture. In addition, historic irrigation depletions include the occurrence of fallowed acreage within at least some of the developed agricultural lands, but baseline conditions assume none of the developed lands are fallowed.

Thus, Colorado through its use of a different methodology for baseline irrigation depletions administratively reserves the rights of irrigators to meet a full crop consumptive use demand even though they typically in practice do not need to meet the full demand through irrigation. While this might be appropriate for Colorado's water rights administration, it is not appropriate for estimating San Juan-Chama Project diversions that one might anticipate in the future. Irrigation conditions and uses on pasture lands above and near the project diversion sites have not materially changed since 1970, and conditions causing irrigators to not fully irrigate in accordance with the computed consumptive use demand likely will exist in the future as they have occurred for decades in the past. Although water users above and near the project diversion points retain their rights to fully divert water to deplete the entire computed consumptive use demand when needed, rights to beneficially use water are limited to actual irrigation needs.

Also, use of baseline condition flows, instead of historic flows, to determine flow availability at each project diversion site introduces significant error into the analysis when historic and baseline depletions are estimated using different methodologies. There is considerable uncertainty in estimating historic depletions above each project diversions site, particularly irrigation depletions prior to 1975 for which very limited data are actually available. Further, the process of disaggregating monthly flows to daily flows using gaged flow records implicitly assumes that irrigation depletions above the project diversion sites are temporally distributed in the same pattern as stream flow (that is, that irrigation depletions on a daily basis increase and decrease with stream flow). However, the opposite relationship between flow and irrigation depletions typically exists during June and July as stream flow from snowmelt recedes and crop consumptive use and irrigation demands increase, and irrigation demands during the summer may be reduced due to rainfall on fields when stream flow is concurrently increasing due to local rains. For these reasons, the flows historically available at the project diversion sites should for planning purposes be considered available for diversion in the future.

Second, in the revised San Juan River Basin hydrology model, historic daily flows at each project diversion site beginning October 1971 were estimated based on the historic gaged flows and diversions measured at the site, without the adjustments to the three project diversions to match measured Azotea Tunnel outflow that were made for Reclamation's 1989 Yield Update. For water years 1971-2005, the outflow from the Azotea Tunnel measured at the tunnel outlet every year has exceeded the sum of the diversions measured at the three San Juan-Chama Project diversion sites. The annual difference between the data sets is consistently in the range of 4 percent to 7 percent, volumetrically averaging about 5 percent over the period, of the sum of the three diversions measured in the San Juan River Basin, and does not appreciably vary with flow or over time. Reclamation for its 1989 Yield Update considered the flow measurements made at the Azotea Tunnel outlet to be more accurate than those made at each of the project diversion sites because the measurement flumes at the diversion sites are subject to operational problems related to small debris, sediment and small gravel gathering in the approach section of the flumes, and because the flume at the tunnel outlet is not subjected to as many of these problems. The Rio Grande Compact Commission for its official records uses the measured outflow from the Azotea Tunnel to account and administer Rio Grande and San Juan River water under the compact.

Reclamation has agreed to revise the hydrology model to incorporate monthly adjustments to post-1970 historic flows at the project diversion sites that reflect the measured Azotea Tunnel outflow. The consequent increase in estimated historic project diversion amounts will result in increased computed historic and natural flows at the project diversion sites since 1971, and also will be reflected in revised correlations of the flows at each diversion site to either gaged or natural flows at key gaging stations used to determine by regression the monthly flows available at the diversion sites prior to 1971. Therefore, computed flows at the project diversion sites and estimated project diversions will be increased over the hydrologic period of record once Reclamation makes the appropriate adjustments.

Third, monthly natural flows at the project diversion sites prior to 1971 were estimated in the proposed revised hydrology model using monthly log-log correlations of natural flows at each site to historic flows at key pattern gages that were developed by the Colorado Water Conservation Board from the post-1971 data. The log-log regressions tend to represent well the relationships of flow between gages under low and moderate flow ranges, but occasionally do not match the data at high flow ranges. Again, while this might be appropriate for Colorado's water rights administration, it is not appropriate for estimating San Juan-Chama Project diversions that one might anticipate in the future because diversions during times of high flows constitute a significant portion of the water supply available to the project. Reclamation's 1989 Yield Update used linear flow regressions to extend the hydrologic record at the project diversion sites prior to 1971. Linear flow regressions tend to better represent the flow data at high flow ranges, but tend also to not perform as well as log-log regressions at representing data at low flow ranges.

Fourth, Reclamation's monthly water budget operation for Heron Reservoir to determine when project diversions from the San Juan River Basin would be curtailed to prevent a spill used monthly reservoir loss rates each year that are equivalent to the long-term average monthly net evaporation rates for Navajo Reservoir obtained from Reclamation's HydroMet database. Reclamation has agreed to revise the hydrology model to incorporate estimates of actual monthly evaporation rates for Heron Reservoir to determine losses at this reservoir as it did for the 1989 Yield Update. Also, Reclamation for the hydrology model used the area-capacity table for Heron Reservoir developed from a resurvey of

the reservoir area in 1984, as compared to Reclamation's 1989 Yield Update which adjusted the reservoir capacity for sediment deposition anticipated to occur through 2070. In addition, for the monthly demands of contractors on Heron Reservoir, it was assumed for the hydrology model that the demands followed the average monthly demand pattern exhibited historically from 1971-2000; however, the demand pattern after 1995 better reflects current and anticipated future demands.

NEW MEXICO SAN JUAN-CHAMA PROJECT WATER SUPPLY ANALYSIS

The Interstate Stream Commission staff evaluated the San Juan-Chama Project water supply for water years 1936-2005, which is the period for which the available data are reasonably reliable. Data to generate daily or monthly flows at the project diversion sites prior to water year 1936 are not available with the same degree of reliability as post-1935 data.

A. Potential Project Diversions

The following general procedure was used to estimate daily historic flows available for diversion by the San Juan-Chama Project for the period of analysis. First, the monthly gaged diversion records for the three project diversions from the San Juan River Basin for October 1970-September 2005 were adjusted proportionately so that the sum of the adjusted diversions each month matched the measured flow of the Azotea Tunnel at Outlet. The adjusted monthly diversions were distributed daily using the historic daily gaged diversion pattern for each month. Daily average flows in the Azotea Tunnel in excess of 950 cfs are common for short periods during the peak of the snowmelt runoff season due to flow diurnals. The Bureau of Reclamation attempts to operate the tunnel at or below a safe operating limit of 950 cfs maximum flow, but overnight surges in flow with the diurnals may cause flows at the tunnel outlet to exceed 950 cfs for short durations during the early morning hours. In these instances, the project diversion gates at the start of the work day are adjusted to cut the total flow in the Azotea Tunnel back to 950 cfs at that time. Monthly and daily flows at the diversion sites beginning March 1971 were then computed for the Rio Blanco diversion as the gaged flow of the Rio Blanco below Blanco Diversion Dam plus the adjusted historic diversion at the Blanco Diversion Dam, for the Navajo River diversion as the gaged flow of the Navajo River below Oso Diversion Dam plus the adjusted historic diversion at the Oso Diversion Dam, and for the Little Navajo River diversion as the gaged flow of the Little Navajo River below Little Oso Diversion Dam plus the adjusted historic diversion at Little Oso Diversion Dam.

Second, the monthly historic flows available at the project diversion sites prior to March 1971 were determined based on gaged flows at other stream flow gaging stations that were available prior to March 1971 and on monthly correlations of flows at the diversion sites to flows at these other stations regressed using data available beginning March 1971. For the Rio Blanco diversion, monthly historic flows at the diversion dam prior to March 1971 were estimated by correlation with monthly flows of the San Juan River at Pagosa Springs for water years 1936-1956 and of the East Fork San Juan River above Sand Creek for the period October 1956-February 1971. No adjustments were made to the historic flows of the East Fork San Juan River above Sand Creek or to the San Juan River at Pagosa Springs. No change in physical conditions significantly affecting runoff has been documented in the East Fork San Juan River drainage above Sand Creek, and data are not available to reliably determine that the net of irrigation plus non-irrigation average depletions above Pagosa Springs has significantly changed relative

to 1936 conditions. For both the Navajo River and the Little Navajo River diversions, monthly historic flows at the diversion dams prior to March 1971 were estimated by correlation with monthly flows of the Navajo River at Edith for water year 1936 and of the Navajo River at Banded Peak Ranch for the period October 1936-February 1971. In estimating the pre-1971 historic flows at the Little Navajo River diversion, minimum monthly flow amounts in acre-feet were used for the Little Navajo River at the Little Oso Diversion Dam based on the post-1970 historic flow records. Based on the regression analyses, the linear flow correlation equations generally were used to best represent all ranges of flows, with modifications to some monthly correlations at low flows as needed to more accurately reflect the data. The daily historic flows at each of the three project diversion sites for each month were then computed by distributing the estimated monthly historic flow at each site using the same daily flow pattern or distribution for the month that was exhibited by the gaged flows at the key station used in the associated correlation analysis for that month.

Third, the daily flows theoretically available for diversion at each project diversion site for the 1936-2005 period of analysis were then determined based on the estimated historic daily flows at the diversion dams less the following daily diversion bypass requirements in cfs adopted by Reclamation pursuant to section 8(f) of Public Law 87-483 and the Upper Colorado Regional Director's January 7, 1977, memorandum:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rio Blanco	15	15	20	20	40	20	20	20	20	20	20	15
Navajo River	30	34	37	37	88	55	55	55	55	37	37	37
Little Navajo River	4	4	4	4	27	27	27	27	27	4	4	4

Although section 8(f) of Public Law 87-483 requires only that Reclamation bypass the monthly diversion bypass quantities in acre-feet for the Rio Blanco and the Navajo River set forth at page D2-7 of Appendix D of the Bureau of Reclamation's November 1955 report, the US District Court for the District of Colorado in *Schutz v. Stamm, et al.*, in 1977 ruled that Reclamation's construction which was adopted to establish daily flow bypasses for the Rio Blanco and the Navajo River diversion sites is a reasonable application of the operation requirements for the San Juan-Chama Project set forth in section 8(f). Section 8(f) of Public Law 87-483 does not require a specific bypass at the Little Navajo River diversion site; nonetheless, Reclamation has set daily bypass flows for the Little Navajo River of 27 cfs for the irrigation season based on the information at page D2-7 of Reclamation's 1955 report. Reclamation also has set daily bypass flows for the Little Navajo River of 4 cfs for the non-irrigation season until further notice. The bypass requirements at each of the diversion sites were met from only the flows originating above the diversion sites. Daily theoretical diversions by the project from each of the three streams were limited based on the following San Juan-Chama Project diversion feeder capacities, and the sum of the project diversions were further limited by the following tunnel operational criteria:

Diversion Feeder Capacities:		Conduit Capacities:	
Rio Blanco Diversion	520 cfs	Blanco Tunnel	520 cfs
Little Navajo River Diversion	150 cfs	Oso Tunnel	550 cfs
Navajo River Diversion	650 cfs	Azotea Tunnel	950 cfs

Fourth, the computed monthly theoretical diversions for the project through the Azotea Tunnel were then refined to reflect actual historic San Juan-Chama Project operations, including allowance for gage error in real-time measurement of the bypass flows below the project diversion dams, additional bypasses needed to meet the monthly bypass volumes required by section 8(f) of Public Law 87-483, short-duration flow surges in the Azotea Tunnel resulting in daily average diversions exceeding 950 cfs, delays in making gate adjustments at the diversion dams in response to changes in hydrologic conditions, sediment sluicing requirements, and other factors. The refinements consisted of adjusting the monthly theoretical project diversions based on monthly relationships of historic flows of the Azotea Tunnel at Outlet to the computed theoretical diversions for water years 1971-2005, excluding periods when the historic diversions were impacted by storage conditions in Heron Reservoir. To evaluate the relationship between theoretical project diversions and actual potential project diversions, envelope curves were applied to the data to effectively disqualify data for periods when diversions were limited due to full or near-full storage conditions in the reservoir, and data for the few months in which actual project diversions exceeded theoretical diversions also were not considered. Daily project diversions averaging more than 950 cfs might occur during May or June in years of above-average runoff as they have since 1970, but in most such years do not cause the monthly diversions to exceed theoretical diversions. Project diversions in excess of 950 cfs that might occur under estimated hydrology prior to 1970 might lend support to the anticipated yield of the project at Heron Dam, but would not be expected to materially increase the long-term average annual project diversion because offsetting diversion curtailments would occur later to prevent physical spills from Heron Reservoir. For the months of March-November, the envelope curves indicate that the monthly potential diversions can be expressed as the following percentages of theoretical diversions:

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Potential Div. as Percent of Theoretical	96.0	98.0	99.0	99.5	97.0	93.0	91.0	90.0	90.0

The higher diversion efficiencies in the springtime and early summer reflect the relative magnitudes of runoff available for diversion over and above the bypass requirements during that time of year as compared to later in the year, and the lower diversion efficiencies during the monsoon season and fall also reflect difficulty in operating diversion gates in a timely manner during thunderstorm runoff events. For the winter months of December-February during which actual diversion capabilities are often limited due to ice in the stream channels and on the diversion structures, equations indicating potential diversions only when monthly theoretical diversions exceed 300 acre-feet were used to better reflect historic wintertime operations (notwithstanding occasional wintertime project diversions of up to about 80 acre-feet per month during months with theoretical diversions of less than 300 acre-feet).

The assumptions used in this investigation regarding potential project diversion efficiencies are for purposes of this water supply investigation only, and are not an assessment of the range of Reclamation's options for improving the efficiencies of project operations to maintain the yield of the project. The monthly relationships of actual project diversions to computed theoretical diversions derived from the historic data using envelope curves generally reflect the maximum diversion efficiency achieved at times in the past under historic project operations criteria and practices (considering also the range of data and computational error). The potential diversions were also adjusted to reflect those months after 1970 in which historic diversions actually exceeded the estimated potential diversions. While the monthly adjusted potential project diversions range from about 90 percent to 99.5 percent of theoretical project diversions during non-winter months, the adjusted potential project diversions

estimated for this study overall amount to about 98 percent of the computed theoretical project diversions on an average-annual volumetric basis. The potential project diversions were further refined as a result of the Heron Reservoir operations studies described in the following section of this memorandum so as to avoid physical spills from the reservoir and to reflect, as necessary, the San Juan-Chama Project diversion amount limitations imposed by section 8(a) of Public Law 87-483.

B. Heron Reservoir Operations Study

Monthly operations studies were prepared for Heron Reservoir for the 1936-2005 period of record using the following criteria. First, gross lake evaporation rates for April-October were estimated as pan evaporation times a pan coefficient of 0.7 and for November-March were estimated as monthly functions of mean air temperature developed by Reclamation and used by Reclamation to account San Juan-Chama water in the Rio Grande Basin. Net lake evaporation rates were estimated as gross lake evaporation minus US Bureau of Reclamation effective precipitation to reflect the difference between post-reservoir and pre-reservoir losses within the reservoir pool area. Monthly pan evaporation, temperature and precipitation measurements available at Heron Dam beginning 1975 were used to compute monthly lake evaporation for 1975-2005, and correlations of Heron Dam weather data to data collected at nearby weather stations, principally at El Vado Dam and Chama, were used to derive weather data at Heron Dam prior to 1975 and to fill missing data. Data used in the analyses are primarily from National Oceanic and Atmospheric Administration (US Weather Bureau) climate data reports, Rio Grande Compact Commission reports, or Bureau of Reclamation San Juan-Chama accounting reports. Upper Rio Grande Water Operations Model weather data for Heron Reservoir for 1975-2000 were used to fill missing data not available from published records. The monthly net evaporation loss rates were not reduced for wintertime lake ice cover, which may significantly affect evaporation rates particularly at low storage.

A comparative analysis was then made for the period 1971-2005 of resultant Heron Reservoir net evaporation losses and total San Juan-Chama water losses estimated using current Rio Grande Compact water accounting and project operations criteria and monthly water budget calculations that reflect lake evaporation, dam seepage and other factors. Because the San Juan-Chama accounting procedures currently used were not employed in years prior to 1988 in which year the current accounting procedures were adopted, and because this investigation uses published US Geological Survey flow data and weather data that may differ from the data used in the actual accounting made each year in the past, the results do not precisely match each year's historic San Juan-Chama water accounting. The net San Juan-Chama losses at Heron Reservoir computed for water accounting purposes using current procedures generally ranges from about 40 percent less to 50 percent more than the estimated Heron Reservoir net evaporation losses, depending on the year. The methods used to compute net reservoir evaporation losses are empirical methodologies, and actual net reservoir evaporation may vary from estimated net evaporation each year due to spatial and temporal variations in lake heat content and other physical factors at the lake surface that affect evaporation losses, including air humidity, wind speed, solar radiation and precipitation. The pan coefficient value of 0.7 used to compute gross lake evaporation rates from pan evaporation data is an average value calibrated to regional lake water budget data for several years. On the one hand, the computed net reservoir evaporation losses might tend over the long-term to overstate San Juan-Chama losses because they are not reduced for the use of Rio Grande water rights to offset a portion of the evaporation losses or for reductions in evaporation caused by ice cover. On the other hand, the computed net reservoir evaporation losses might tend to understate

San Juan-Chama losses because they do not include reservoir seepage losses that are considered lost to the extent that continuous seepage is not fully credited as part of the San Juan-Chama Project contract deliveries. The results of the comparative analysis indicate no definitive correlation of reservoir losses to inflows, and only weak correlations of reservoir losses to evaporation rates and amounts and to storage changes that might affect possible movement of water to and from bank storage.

Although the total computed San Juan-Chama losses at Heron Reservoir, reduced to reflect 350 acre-feet of credit for pre-reservoir Rio Grande water rights used to offset Heron Reservoir evaporation, vary annually in relation to the net evaporation losses from Heron Reservoir, the total volume of San Juan-Chama losses overall for the 1971-2005 period, particularly beginning 1976 when published Heron Dam weather station data became available and after much of the initial filling of Heron Reservoir, is about equal to the total volume of net evaporation losses over the period of analysis if the net evaporation losses are not reduced for ice cover. Ice cover may vary each year based on water storage and heat content, and no attempt is made in this Heron Reservoir operations study to predict ice cover each year. Therefore, based on the comparative analysis, the net lake evaporation loss rates for Heron Reservoir derived for water years 1936-2005 were used directly in the reservoir operations study and were neither increased to reflect any additional San Juan-Chama losses nor decreased to reflect any wintertime ice cover or credit for offsetting use of Rio Grande rights. For purposes of this investigation, the monthly and annual net evaporation losses also were not adjusted for weak correlations of San Juan-Chama losses to net evaporation rates or to storage changes at Heron Reservoir that might indicate movement of water into or out of bank storage. Current accounting procedures for the movement, storage and delivery of San Juan-Chama water at Heron Reservoir that were adopted in 1988 were assumed, for purposes of the Interstate Stream Commission staff's evaluation, to be carried forward into the future without speculating as to whether procedures might be improved further to more reliably reflect actual Rio Grande inflows. While the San Juan-Chama losses used in the Heron Reservoir water budget may not be precise for any given year, the losses over extended periods of time are believed to reasonably represent average actual losses that can be anticipated.

Second, the area-capacity table for Heron Reservoir derived from the 1984 resurvey, and effective 1986, was used in the reservoir operations studies to determine the average monthly reservoir surface area as a function of the average of the beginning-of-month and end-of-month reservoir storage contents. One Heron Reservoir operations study used the total reservoir capacity at spillway crest of 401,330 acre-feet, of which 399,990 acre-feet is active capacity, to determine San Juan-Chama Project estimated diversions from the San Juan River Basin and evaluate the project yield under 1984 storage capacity conditions. A second reservoir operations study used an estimated active reservoir capacity of 390,730 acre-feet to determine San Juan-Chama Project estimated diversions and evaluate the project yield under future reservoir sedimentation conditions that might be anticipated to occur about 2070. The Bureau of Reclamation's 1964 Definite Plan Report for the project previously estimated that the sediment accumulation rate within Heron Reservoir would amount to 10,600 acre-feet by about 2070, and reducing the total reservoir capacity of 401,330 acre-feet by 10,600 acre-feet for sediment accumulation, including about 1,340 acre-feet of sediment accumulation assumed to completely fill dead storage space and about 9,260 acre-feet of sediment accumulation assumed to occur within the active capacity of the reservoir, gives a future active Heron Reservoir capacity of about 390,730 acre-feet. Rather than attempt to distribute the sediment accumulation with depth to estimate future reductions in water surface area within the reservoir pool, it was assumed that the relationship between surface or loss area and storage contents would not materially change over time. The beginning Heron Reservoir

content for the operation studies was set equal to 140,000 acre-feet, or about 35 percent of active capacity, which essentially provides for both filling the reservoir prior to the critical period to evaluate project yield and maximizing the amount of project diversion that could be made from the San Juan River Basin without spill from Heron Reservoir prior to the critical period.

Third, the monthly distribution of demands of San Juan-Chama Project contractors for releases from Heron Reservoir was based on historic releases of San Juan-Chama water from the reservoir beginning 1996. The monthly San Juan-Chama water demands at Heron Dam starting in 1996 reflect all relevant operational factors, including scheduling Heron Reservoir releases to provide secondary recreational fishery and rafting benefits in the Rio Chama, storage and re-regulation of Heron Reservoir releases at El Vado and Abiquiu reservoirs to meet downstream San Juan-Chama water diversion or exchange demands of contractors, regulation of San Juan-Chama releases from all three reservoirs to provide benefits for conserving populations of endangered Rio Grande silvery minnow in the middle Rio Grande valley, releases to the Middle Rio Grande Conservancy District either during the irrigation season in years of low runoff and low available storage in the Rio Grande Basin if needed then or during the non-irrigation season for storage in El Vado Reservoir in years of adequate irrigation water supply, and approvals of waivers for contractors to take delivery of annual calendar-year contract allocations in succeeding years if in the interest of the United States. The City of Albuquerque's surface water diversion project recently constructed to provide for direct diversion of its San Juan-Chama water from the Rio Grande is not expected to affect how releases are scheduled from Heron Reservoir to meet the City's contract delivery demands. Annual variations in amount and monthly timing of demands could influence the amounts of any monthly shortages computed in an operation study for Heron Reservoir; nevertheless, hydrological and water use factors and operational considerations in the Rio Grande Basin were not analyzed yearly to derive variations in annual and monthly demands for the 1936-2005 period under current operating practices, and average monthly demands for San Juan-Chama water at Heron Dam were used each year for the reservoir operations studies. The reservoir operations studies also did not consider use of operations rules to implement shortage criteria as reservoir storage reaches critically low levels. Such shortage criteria have not been institutionalized, and could have the effect of redistributing shortages and causing additional shortage in anticipation of otherwise running out of water in storage.

Fourth, inflow to Heron Reservoir from imported San Juan River water was estimated by deducting from the Azotea Tunnel outflow an average channel conveyance loss of 0.2 percent between the tunnel outlet gage and the head of the reservoir on Willow Creek. All native Rio Grande inflow to the reservoir was assumed to be bypassed through the reservoir without regulation, and therefore, was not estimated for the operations studies.

C. Project Yield

Annual summaries of both Heron Reservoir operations studies are provided in tables 1 and 2 attached hereto, respectively. The monthly operations studies are also transmitted herewith as attachments 1 and 2, respectively. The results of the reservoir operations studies indicate that with a demand at Heron Dam of 96,200 acre-feet annually and assuming 1936-2005 period hydrology, there would be no water supply shortages to project uses in the Rio Grande Basin under either historic 1984 or projected 2070 storage sedimentation conditions in Heron Reservoir. The results of the operations studies are similar. The effect on the project yield at Heron Dam of relatively small reductions in

storage capacity due to future sedimentation would be largely offset by reductions in water surface area and associated reservoir evaporation caused by delta deposits in the reservoir. Although the reservoir operations studies suggest that the firm yield at Heron Dam might slightly exceed 96,200 acre-feet per year if the small amount of storage remaining at the end of the critical period were utilized to meet demands, the remaining storage amount is within the computational accuracy of this hydrologic investigation. Thus, the hydrologic investigation presented herein indicates that no change is warranted to the Bureau of Reclamation's previous determination in the 1989 Yield Update that the firm yield of the San Juan-Chama Project at Heron Dam is 96,200 acre-feet based on historic hydrology.

D. Baseline and Anticipated Depletions

The average annual San Juan-Chama Project diversion from the San Juan River Basin for the period 1936-2005 is estimated from the Heron Reservoir operations studies to be as much as about 105,500 acre-feet per year under 1984 conditions and about 105,200 acre-feet per year under 2070 sedimentation conditions in Heron Reservoir, the difference reflecting the fact that less diversion will be required to fill the reservoir as its capacity is reduced in the future due to sedimentation. The results of the Heron Reservoir operations studies assume no reduction in San Juan-Chama Project diversions due to implementation of section 11 of Public Law 87-483. Section 11 of Public Law 87-483 provides for the allocation of shortage to the normal diversion requirement of the San Juan-Chama Project in any year that the water supply in the San Juan River Basin is insufficient to meet the diversion demands of the project in that basin and the contract water demands of Navajo Reservoir contractors. Based on the Bureau of Reclamation's hydrologic modeling analyses for the San Juan River Basin that incorporate operation of Navajo Reservoir to meet the San Juan River Basin Recovery Implementation Program's flow recommendations for the San Juan River and the depletions associated with the proposed Navajo-Gallup Water Supply Project in addition to completion of the Navajo Indian Irrigation Project, no such shortages would occur during the 1929-1993 period of record in its current hydrologic model and an overall basin shortage would occur only in 2003 based on the proposed revised hydrologic model for the basin. The occurrence of an overall shortage in any year would not necessarily translate to an actual administrative curtailment of San Juan-Chama Project diversions depending upon hydrology at the project diversion sites that year, the numerical definition of the project normal diversion requirement, the amount of the overall basin shortage that would be taken against the flow recommendations, and the shortage allocation measured against the normal diversion requirement. Based on the amount of potential San Juan-Chama Project diversion for 2003 shown in New Mexico's hydrologic analysis, as compared to the long-term average annual diversion for the project, it is unlikely that the project diversions under 2003 conditions would be administratively curtailed pursuant to section 11 of Public Law 87-483.

The Interstate Stream Commission staff's hydrologic investigation suggests that the maximum long-term average annual diversion from the San Juan River Basin by the San Juan-Chama Project will decline from about 105,500 acre-feet per year under 1984 conditions to about 105,200 acre-feet per year under 2070 conditions, assuming historic hydrology for the period 1936-2005. Interpolating between 1984 and 2070 conditions, the maximum long-term average annual diversion from the basin by the project under current conditions and historic hydrology is estimated to be as much as 105,400 acre-feet per year. These diversion amounts are maximum diversion rates that reflect: (1) a 98 percent overall (volumetric) level of diversion efficiency that might be attainable on a consistent basis assuming improvements over historic project operations to more fully take advantage of the diversion amounts

that are theoretically and currently available to the project under sections 8(a) and 8(f) of Public Law 87-483; (2) the occurrence at times of actual project diversions in excess of the 950 cfs operating criterion for sustained flow through the Azotea Tunnel, which excess diversions to some degree offset the inefficiencies in project diversion operations at other times of the year; and (3) the arbitrary selection of a beginning Heron Reservoir storage content for the reservoir operations studies that would purposefully result in a maximum amount of diversion by the project, with a minimum amount of reduction to avoid spill, during the years preceding the critical hydrologic period.

Although Reclamation until recently did not need to tighten its project diversion operations in the San Juan River Basin because there was less than a full demand on the project at Heron Dam until the late 1990s, Reclamation now has reason to do so. The Bureau of Reclamation might improve its historic diversion efficiency by: (1) operating the project diversions more closely in accordance with section 8(f) of Public Law 87-483 to meet only the minimum monthly bypass flow amounts that are required, without also bypassing additional amounts of water to cover presumed daily gage error or to maintain the adopted daily-average bypass flow rates on an instantaneous basis; (2) beginning operation of the diversion works earlier in the spring than it has historically, and filling Heron Reservoir as early in the year as possible, once divertible flows become available; and (3) keeping closer tabs on flows and manipulating the diversion gates, trash racks and other operational factors to more fully take advantage of divertible flows. However, while Reclamation can improve its San Juan-Chama Project operations, it is not realistic to assume that Reclamation can and will operate each of the three project diversions in the San Juan River Basin in the future with 100 percent efficiency in capturing all water that New Mexico believes is legally available to the San Juan-Chama Project under historic hydrology because of icing, debris on trash racks, sluicing requirements, flow diurnals, rapid changes in flows and other physical or administrative factors that affect actual operations. In addition, the term diversion efficiency as used herein, along with the associated monthly potential diversion envelope curves derived by relating historic project diversion data to computed theoretical project diversions, reflect also computational error in the computed theoretical diversions such that the monthly relationships between historic or potential diversions and computed theoretical diversions provide also, to some extent, a measure of calibration for estimating actual project diversions that might be anticipated to occur in the future. Even if computed theoretical project diversions are considered for a Heron Reservoir operations study, the long-term average annual estimated San Juan-Chama Project diversion would not increase by more than a few hundred acre-feet because most of the corresponding increase in project diversions in any given year would result in offsetting diversion curtailments in later years to avoid physical spills from the reservoir, all other study assumptions being equal. Also, regardless of the minimum bypass flow amounts for the Blanco and Oso diversion dams required by section 8(f) of Public Law 87-483, the Bureau of Reclamation is constrained by section 8(b) of Public Law 87-483 to operate the project diversions so that there shall be no injury, impairment, or depletion of existing or future beneficial consumptive uses of water within the State of Colorado consistent with Article IX of the Upper Colorado River Basin Compact.

Given actual project operations limitations, and given the data and computational uncertainties involved in this hydrologic investigation, it is reasonable for water planning purposes at this time to include in both New Mexico's schedule of anticipated depletions and the environmental baseline a future long-term average annual depletion from the San Juan River Basin of about 105,200 acre-feet per year for the San Juan-Chama Project. Therefore, no change is warranted to the State of New Mexico Schedule of Anticipated Upper Basin Depletions that is appended to the Bureau of Reclamation's 2007

Hydrologic Determination, which was signed by the Secretary of the Interior on May 23, 2007, and that included an annual average depletion for the project of 105,200 acre-feet per year under current and future conditions anticipated through 2060. The depletion amounts for the San Juan-Chama Project and other water uses shown in the New Mexico depletions schedule are anticipated average annual future depletions for planning purposes only. The New Mexico depletions schedule is not a tabulation of water rights or actual water uses. The proposed revised San Juan River Basin hydrology model should be revised accordingly to reflect a future long-term average annual depletion by the San Juan-Chama Project of about 105,200 acre-feet per year consistent with the 2007 Hydrologic Determination and New Mexico's hydrologic evaluation of the project water supply discussed herein.

The baseline depletion amount for the San Juan-Chama Project suggested herein should not be used, however, for regulatory purposes because the project diversions in the future will be driven by actual future hydrology, not estimated or modeled hydrology for some defined past period of time. The Bureau of Reclamation's hydrology model, including all model data, should not be used to establish depletion limits on the San Juan-Chama Project or other water uses in the basin. The Fish and Wildlife Service's Draft Biological Opinion for the Navajo-Gallup Water Supply Project, dated January 23, 2007, would require of the Navajo Nation a depletion guarantee whereby the Navajo Nation must reduce its uses in New Mexico as necessary to keep the long-term average modeled baseline depletion for the entire San Juan River Basin from being exceeded during any future administrative period of five years. The flow recommendations are specifically based on modeled hydrology and depletions statistics for the 64-year period 1929-1993, and the baseline condition modeled for the Draft Biological Opinion itself includes five-year periods during which depletions were greater, on average, than the average depletions for the 64-year period 1929-1993. For the San Juan-Chama Project, the annual diversions averaged over five-year administrative periods would range from about 79,000 acre-feet per year to about 145,000 acre-feet per year based on the Heron Reservoir operations study shown in table 2 attached hereto (as compared to a long-term average annual diversion by the project of about 105,200 acre-feet per year). The occurrence in the future of depletions that for a five-year administrative period exceed the average of the modeled depletions in the basin over a past long-term period of record does not mean that the physical baseline condition in the basin has been exceeded either in reality or in the modeling, and should not be cause to require the Navajo Nation to reduce its water use in New Mexico.

Table 1. Heron Reservoir Operations Study, 1984 Reservoir Conditions - Annual Summary

Water Year	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Heron Reservoir Evap Loss (af)	SJCP Release from Heron Reservoir (af)	Shortage to Demand at Heron Dam (af)	Minimum EOM Reservoir Contents (af)	Maximum EOM Reservoir Contents (af)	Ten-Year Total SJCP Estimated Diversion (af)
1936	154,940	0	0	154,940	154,630	1.84	6,508	96,200	0	103,812	200,040	1,104,483
1937	140,441	0	0	140,441	140,160	1.84	7,780	96,200	0	156,013	245,427	1,139,419
1938	141,848	0	0	141,848	141,565	1.67	7,585	96,200	0	187,451	275,572	1,175,762
1939	83,224	0	0	83,224	83,058	2.55	11,644	96,200	0	230,376	266,823	1,153,482
1940	69,357	0	0	69,357	69,218	1.94	8,090	96,200	0	197,699	236,734	1,117,334
1941	180,229	0	0	180,229	179,869	1.10	5,069	96,200	0	159,853	287,726	1,192,058
1942	181,099	0	0	181,099	180,737	2.16	11,845	96,200	0	280,924	374,845	1,267,652
1943	97,379	0	0	97,379	97,184	2.47	13,426	96,200	0	314,273	366,981	1,259,526
1944	128,773	0	0	128,773	128,515	1.99	10,869	96,200	0	293,372	382,466	1,282,794
1945	128,500	0	4,551	123,949	123,701	1.96	11,182	96,200	0	323,709	401,330	1,301,238
1946	46,830	0	0	46,830	46,736	2.14	11,517	96,200	0	321,657	378,347	1,193,129
1947	82,294	0	0	82,294	82,130	2.15	10,725	96,200	0	271,937	318,692	1,134,983
1948	124,192	0	0	124,192	123,944	1.93	9,787	96,200	0	257,433	334,402	1,117,326
1949	139,620	0	0	139,620	139,341	1.45	7,778	96,200	0	273,046	363,800	1,173,721
1950	66,848	0	0	66,848	66,714	2.36	12,297	96,200	0	307,354	345,912	1,171,213
1951	48,195	0	0	48,195	48,098	2.39	11,232	96,200	0	249,065	303,790	1,039,178
1952	158,500	0	0	158,500	158,183	1.93	9,299	96,200	0	206,199	313,038	1,016,579
1953	71,592	0	0	71,592	71,449	2.33	11,115	96,200	0	254,232	296,723	990,792
1954	58,358	0	0	58,358	58,241	2.03	8,842	96,200	0	219,082	261,707	920,377
1955	58,325	0	0	58,325	58,208	2.18	8,167	96,200	0	162,500	215,208	854,753
1956	73,226	0	0	73,226	73,079	2.64	8,656	96,200	0	127,648	168,784	881,149
1957	152,822	0	0	152,822	152,516	1.40	4,624	96,200	0	91,060	197,321	951,677
1958	127,600	0	0	127,600	127,345	1.70	7,085	96,200	0	156,798	237,361	955,085
1959	44,423	0	0	44,423	44,334	2.44	8,843	96,200	0	156,189	212,933	859,888
1960	131,920	0	0	131,920	131,656	2.15	8,001	96,200	0	125,514	206,494	924,960
1961	81,522	0	0	81,522	81,359	1.37	4,799	96,200	0	138,780	182,488	958,287
1962	121,431	0	0	121,431	121,188	1.64	6,010	96,200	0	126,875	202,329	921,218
1963	58,480	0	0	58,480	58,363	1.88	6,243	96,200	0	138,904	179,388	908,107
1964	61,578	0	0	61,578	61,455	1.92	4,874	96,200	0	82,440	134,838	911,327
1965	152,788	0	0	152,788	152,482	1.26	3,255	96,200	0	54,887	156,383	1,005,790
1966	119,198	0	0	119,198	118,960	1.82	6,263	96,200	0	123,413	190,295	1,051,762
1967	84,912	0	0	84,912	84,743	1.56	4,861	96,200	0	119,819	164,406	983,853
1968	97,892	0	0	97,892	97,696	1.72	5,202	96,200	0	99,122	155,641	954,145
1969	119,956	0	0	119,956	119,716	1.15	3,714	96,200	0	106,295	175,245	1,029,678
1970	97,131	0	0	97,131	96,937	1.86	6,040	96,200	0	118,929	169,120	994,889
1971	64,730	0	0	64,730	64,601	2.13	6,405	96,200	0	121,007	162,006	978,098
1972	42,420	0	0	42,420	42,335	2.37	4,952	96,200	0	66,462	124,341	899,086
1973	181,354	0	0	181,354	180,991	1.37	3,986	96,200	0	43,721	157,140	1,021,960
1974	50,969	0	0	50,969	50,867	2.33	6,059	96,200	0	95,874	143,888	1,011,350
1975	150,439	0	0	150,439	150,138	1.71	4,379	96,200	0	45,224	155,086	1,009,001
1976	88,097	0	0	88,097	87,921	2.62	7,656	96,200	0	98,475	150,110	977,901
1977	21,782	0	0	21,782	21,738	2.38	4,363	96,200	0	50,676	126,036	914,770
1978	107,589	0	0	107,589	107,373	2.49	3,515	96,200	0	10,302	78,278	924,467
1979	165,938	0	0	165,938	165,606	1.68	4,201	96,200	0	16,823	134,295	970,449
1980	145,972	0	0	145,972	145,680	2.05	6,542	96,200	0	78,992	177,592	1,019,289
1981	56,198	0	0	56,198	56,086	2.31	6,876	96,200	0	113,930	162,517	1,010,757
1982	174,745	0	0	174,745	174,395	1.35	4,000	96,200	0	85,318	193,682	1,143,082
1983	153,648	0	0	153,648	153,341	1.37	5,554	96,200	0	156,837	252,775	1,115,377
1984	136,919	0	0	136,919	136,646	1.66	7,665	96,200	0	211,991	288,826	1,201,327
1985	203,394	0	0	203,394	202,987	1.06	5,964	96,200	0	258,208	384,098	1,254,282
1986	183,701	0	63,951	119,750	119,510	0.88	5,093	96,200	0	361,853	401,330	1,285,934
1987	159,225	3,024	70,353	85,848	85,676	1.38	8,057	96,200	0	378,509	401,330	1,350,000
1988	76,663	0	0	76,663	76,509	1.34	7,382	96,200	0	336,012	374,661	1,319,074
1989	76,178	0	0	76,178	76,025	2.48	13,117	96,200	0	318,145	346,705	1,229,314
1990	74,027	0	0	74,027	73,879	1.69	8,336	96,200	0	266,449	316,038	1,157,369
1991	138,846	0	0	138,846	138,568	1.56	7,895	96,200	0	257,946	334,901	1,240,017
1992	129,664	0	0	129,664	129,405	1.25	6,681	96,200	0	283,194	360,612	1,194,936
1993	158,433	0	3,606	154,827	154,517	1.55	8,851	96,200	0	311,626	401,330	1,196,115
1994	131,774	0	46,590	85,184	85,013	1.24	7,243	96,200	0	362,558	401,330	1,144,379
1995	173,384	0	53,642	119,742	119,503	1.20	6,998	96,200	0	348,593	401,330	1,060,727
1996	61,110	0	0	61,110	60,988	2.17	12,159	96,200	0	348,455	391,689	1,002,088
1997	146,898	0	0	146,898	146,604	1.16	6,526	96,200	0	311,391	392,948	1,063,138
1998	108,561	0	10,305	98,256	98,060	1.82	10,493	96,200	0	353,993	401,330	1,084,731
1999	129,493	0	10,008	119,485	119,246	1.52	8,660	96,200	0	345,361	401,330	1,128,038
2000	44,435	0	0	44,435	44,346	3.13	17,266	96,200	0	328,966	393,447	1,098,446
2001	113,496	0	0	113,496	113,269	2.01	10,685	96,200	0	287,864	355,368	1,073,097
2002	7,176	0	0	7,176	7,162	2.96	13,993	96,200	0	232,319	330,373	950,609
2003	64,435	0	0	64,435	64,306	2.42	9,589	96,200	0	181,169	228,390	860,217
2004	85,947	0	0	85,947	85,775	2.78	10,164	96,200	0	154,821	192,821	860,981
2005	158,309	0	0	158,309	157,992	2.30	9,271	96,200	0	134,764	231,462	899,548
Average	109,305	43	3,757	105,505	105,294	1.89	7,911	96,200	0			

Note: Ten-year totals of San Juan-Chama Project estimated diversions for 1936-44 assume average diversions annually prior to 1936.

Table 2. Heron Reservoir Operations Study, 2070 Reservoir Conditions - Annual Summary

Water Year	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Heron Reservoir Evap Loss (af)	SJCP Release from Heron Reservoir (af)	Shortage to Demand at Heron Dam (af)	Minimum EOM Reservoir Contents (af)	Maximum EOM Reservoir Contents (af)	Ten-Year Total SJCP Estimated Diversion (af)
1936	154,940	0	0	154,940	154,630	1.84	6,508	96,200	0	103,812	200,040	1,101,971
1937	140,441	0	0	140,441	140,160	1.84	7,780	96,200	0	156,013	245,427	1,137,185
1938	141,848	0	0	141,848	141,565	1.67	7,585	96,200	0	187,451	275,572	1,173,808
1939	83,224	0	0	83,224	83,058	2.55	11,644	96,200	0	230,376	266,823	1,151,807
1940	69,357	0	0	69,357	69,218	1.94	8,090	96,200	0	197,699	236,734	1,115,938
1941	180,229	0	0	180,229	179,869	1.10	5,069	96,200	0	159,853	287,726	1,190,942
1942	181,099	0	0	181,099	180,737	2.16	11,845	96,200	0	280,924	374,845	1,266,815
1943	97,379	0	0	97,379	97,184	2.47	13,426	96,200	0	314,273	366,981	1,258,968
1944	128,773	0	0	128,773	128,515	1.99	10,869	96,200	0	293,372	382,466	1,282,515
1945	128,500	0	15,196	113,304	113,078	1.96	11,077	96,200	0	323,709	390,730	1,290,594
1946	46,830	0	0	46,830	46,736	2.14	11,310	96,200	0	311,345	367,839	1,182,484
1947	82,294	0	0	82,294	82,130	2.15	10,524	96,200	0	261,675	308,388	1,124,338
1948	124,192	0	0	124,192	123,944	1.93	9,602	96,200	0	247,336	324,388	1,106,681
1949	139,620	0	0	139,620	139,341	1.45	7,647	96,200	0	263,110	353,949	1,163,077
1950	66,848	0	0	66,848	66,714	2.36	12,085	96,200	0	297,582	336,127	1,160,568
1951	48,195	0	0	48,195	48,098	2.39	11,005	96,200	0	239,707	294,222	1,028,533
1952	158,500	0	0	158,500	158,183	1.93	9,125	96,200	0	196,844	303,807	1,005,934
1953	71,592	0	0	71,592	71,449	2.33	10,909	96,200	0	245,096	287,562	980,148
1954	58,358	0	0	58,358	58,241	2.03	8,642	96,200	0	210,305	252,743	909,733
1955	58,325	0	0	58,325	58,208	2.18	7,910	96,200	0	153,787	206,447	854,753
1956	73,226	0	0	73,226	73,079	2.64	8,311	96,200	0	119,200	160,454	881,149
1957	152,822	0	0	152,822	152,516	1.40	4,447	96,200	0	82,929	189,291	951,677
1958	127,600	0	0	127,600	127,345	1.70	6,926	96,200	0	148,790	229,437	955,085
1959	44,423	0	0	44,423	44,334	2.44	8,573	96,200	0	148,621	205,108	859,888
1960	131,920	0	0	131,920	131,656	2.15	7,786	96,200	0	117,943	199,030	924,960
1961	81,522	0	0	81,522	81,359	1.37	4,653	96,200	0	131,452	175,237	958,287
1962	121,431	0	0	121,431	121,188	1.64	5,850	96,200	0	119,653	195,222	921,218
1963	58,480	0	0	58,480	58,363	1.88	6,043	96,200	0	132,057	172,354	908,107
1964	61,578	0	0	61,578	61,455	1.92	4,613	96,200	0	75,658	128,004	911,327
1965	152,788	0	0	152,788	152,482	1.26	3,111	96,200	0	48,318	149,914	1,005,790
1966	119,198	0	0	119,198	118,960	1.82	6,091	96,200	0	116,986	183,963	1,051,762
1967	84,912	0	0	84,912	84,743	1.56	4,704	96,200	0	113,608	158,156	983,853
1968	97,892	0	0	97,892	97,696	1.72	5,025	96,200	0	93,054	149,685	954,145
1969	119,956	0	0	119,956	119,716	1.15	3,603	96,200	0	100,363	169,413	1,029,678
1970	97,131	0	0	97,131	96,937	1.86	5,870	96,200	0	113,135	163,293	994,889
1971	64,730	0	0	64,730	64,601	2.13	6,212	96,200	0	115,397	156,357	978,098
1972	42,420	0	0	42,420	42,335	2.37	4,669	96,200	0	61,283	118,882	899,086
1973	181,354	0	0	181,354	180,991	1.37	3,871	96,200	0	38,520	152,030	1,021,960
1974	50,969	0	0	50,969	50,867	2.33	5,832	96,200	0	91,037	138,838	1,011,350
1975	150,439	0	0	150,439	150,138	1.71	4,228	96,200	0	40,393	150,361	1,009,001
1976	88,097	0	0	88,097	87,921	2.62	7,449	96,200	0	93,863	145,569	977,901
1977	21,782	0	0	21,782	21,738	2.38	4,156	96,200	0	46,402	121,571	914,770
1978	107,589	0	0	107,589	107,373	2.49	3,267	96,200	0	6,099	74,140	924,467
1979	165,938	0	0	165,938	165,606	1.68	4,079	96,200	0	12,784	130,351	970,449
1980	145,972	0	0	145,972	145,680	2.05	6,412	96,200	0	75,103	173,790	1,019,289
1981	56,198	0	0	56,198	56,086	2.31	6,733	96,200	0	110,204	158,751	1,010,757
1982	174,745	0	0	174,745	174,395	1.35	3,916	96,200	0	81,691	190,135	1,143,082
1983	153,648	0	0	153,648	153,341	1.37	5,496	96,200	0	153,298	249,278	1,115,377
1984	136,919	0	0	136,919	136,646	1.66	7,607	96,200	0	208,506	285,370	1,201,327
1985	203,394	0	0	203,394	202,987	1.06	5,931	96,200	0	254,771	380,689	1,254,282
1986	183,701	0	71,221	112,480	112,255	0.88	5,029	96,200	0	358,458	390,730	1,278,665
1987	159,225	0	70,409	88,816	88,638	1.38	7,943	96,200	0	368,549	390,730	1,345,698
1988	76,663	0	0	76,663	76,509	1.34	7,291	96,200	0	328,514	367,157	1,314,772
1989	76,178	0	0	76,178	76,025	2.48	12,946	96,200	0	310,893	339,295	1,225,012
1990	74,027	0	0	74,027	73,879	1.69	8,223	96,200	0	259,231	308,794	1,153,067
1991	138,846	0	0	138,846	138,568	1.56	7,789	96,200	0	250,805	327,822	1,235,715
1992	129,664	0	0	129,664	129,405	1.25	6,601	96,200	0	276,162	353,621	1,190,634
1993	158,433	0	7,364	151,069	150,767	1.55	8,729	96,200	0	304,667	390,730	1,188,055
1994	131,774	0	46,661	85,113	84,943	1.24	7,130	96,200	0	351,980	390,730	1,136,249
1995	173,384	0	53,800	119,584	119,345	1.20	6,890	96,200	0	338,049	390,730	1,052,439
1996	61,110	0	0	61,110	60,988	2.17	11,956	96,200	0	338,069	381,118	1,001,068
1997	146,898	0	0	146,898	146,604	1.16	6,422	96,200	0	301,011	382,656	1,059,151
1998	108,561	0	10,726	97,835	97,640	1.82	10,329	96,200	0	343,734	390,730	1,080,323
1999	129,493	0	10,197	119,295	119,057	1.52	8,520	96,200	0	334,856	390,730	1,123,441
2000	44,435	0	0	44,435	44,346	3.13	16,970	96,200	0	318,674	382,882	1,093,849
2001	113,496	0	0	113,496	113,269	2.01	10,494	96,200	0	277,591	345,179	1,068,500
2002	7,176	0	0	7,176	7,162	2.96	13,699	96,200	0	222,512	320,293	946,012
2003	64,435	0	0	64,435	64,306	2.42	9,300	96,200	0	171,428	218,590	859,378
2004	85,947	0	0	85,947	85,775	2.78	9,795	96,200	0	145,374	183,519	860,212
2005	158,309	0	0	158,309	157,992	2.30	9,016	96,200	0	125,626	222,505	898,937
Average	109,305	0	4,080	105,226	105,015	1.89	7,760	96,200	0			

Note: Ten-year totals of San Juan-Chama Project estimated diversions for 1936-44 assume average diversions annually prior to 1936.

ATTACHMENTS

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1936	Oct	2,438	0	2,433	0.11	3,083	352	3,848	0	3,848	0	138,233	0	2,438
	Nov	339	0	339	0.05	3,001	142	8,658	0	8,658	0	129,772	0	339
	Dec	0	0	0	0.03	2,860	81	8,658	0	8,658	0	121,033	0	0
	Jan	29	0	29	-0.02	2,746	-48	4,810	0	4,810	0	116,299	0	29
	Feb	0	0	0	-0.07	2,652	-197	5,772	0	5,772	0	110,724	0	0
	Mar	5,042	0	5,032	0.16	2,531	401	11,544	0	11,544	0	103,812	0	5,042
	Apr	39,972	0	39,892	0.13	2,652	332	19,240	0	19,240	0	124,132	0	39,972
	May	56,339	0	56,227	0.33	3,244	1,068	2,886	0	2,886	0	176,405	0	56,339
	Jun	31,223	0	31,160	0.46	3,800	1,753	5,772	0	5,772	0	200,040	0	31,223
	Jul	7,534	0	7,519	0.34	3,925	1,333	10,582	0	10,582	0	195,644	0	7,534
	Aug	7,462	0	7,447	0.25	3,890	990	7,696	0	7,696	0	194,405	0	7,462
	Sep	4,561	0	4,552	0.08	3,867	302	6,734	0	6,734	0	191,921	0	4,561
	Annual	154,940	0	154,630	1.84		6,508	96,200	0	96,200	0		0	154,940
1937	Oct	2,060	0	2,056	0.07	3,839	277	3,848	0	3,848	0	189,852	0	2,060
	Nov	2,811	0	2,805	0.08	3,787	295	8,658	0	8,658	0	183,704	0	2,811
	Dec	619	0	617	-0.07	3,695	-249	8,658	0	8,658	0	175,912	0	619
	Jan	111	0	111	-0.14	3,612	-514	4,810	0	4,810	0	171,728	0	111
	Feb	116	0	116	-0.13	3,545	-473	5,772	0	5,772	0	166,545	0	116
	Mar	999	0	997	0.00	3,427	-15	11,544	0	11,544	0	156,013	0	999
	Apr	30,582	0	30,521	0.28	3,426	948	19,240	0	19,240	0	166,346	0	30,582
	May	52,023	0	51,918	0.34	3,811	1,285	2,886	0	2,886	0	214,094	0	52,023
	Jun	39,087	0	39,009	0.44	4,293	1,904	5,772	0	5,772	0	245,427	0	39,087
	Jul	9,996	0	9,976	0.39	4,455	1,734	10,582	0	10,582	0	243,086	0	9,996
	Aug	1,518	0	1,515	0.40	4,399	1,760	7,696	0	7,696	0	235,145	0	1,518
	Sep	518	0	517	0.19	4,316	827	6,734	0	6,734	0	228,101	0	518
	Annual	140,441	0	140,160	1.84		7,780	96,200	0	96,200	0		0	140,441
1938	Oct	465	0	464	0.16	4,254	701	3,848	0	3,848	0	224,016	0	465
	Nov	46	0	46	0.09	4,180	392	8,658	0	8,658	0	215,011	0	46
	Dec	0	0	0	-0.08	4,080	-334	8,658	0	8,658	0	206,687	0	0
	Jan	0	0	0	-0.08	4,005	-333	4,810	0	4,810	0	202,210	0	0
	Feb	0	0	0	-0.13	3,946	-504	5,772	0	5,772	0	196,942	0	0
	Mar	2,109	0	2,105	0.01	3,855	52	11,544	0	11,544	0	187,451	0	2,109
	Apr	26,499	0	26,446	0.17	3,836	668	19,240	0	19,240	0	193,989	0	26,499
	May	40,280	0	40,199	0.27	4,089	1,101	2,886	0	2,886	0	230,201	0	40,280
	Jun	52,815	0	52,709	0.35	4,535	1,566	5,772	0	5,772	0	275,572	0	52,815
	Jul	12,021	0	11,997	0.38	4,768	1,811	10,582	0	10,582	0	275,177	0	12,021
	Aug	2,498	0	2,493	0.38	4,734	1,822	7,696	0	7,696	0	268,152	0	2,498
	Sep	5,115	0	5,105	0.14	4,689	643	6,734	0	6,734	0	265,880	0	5,115
	Annual	141,848	0	141,565	1.67		7,585	96,200	0	96,200	0		0	141,848
1939	Oct	3,148	0	3,142	0.19	4,671	864	3,848	0	3,848	0	264,310	0	3,148
	Nov	495	0	494	0.05	4,620	229	8,658	0	8,658	0	255,918	0	495
	Dec	0	0	0	0.00	4,531	21	8,658	0	8,658	0	247,239	0	0
	Jan	0	0	0	-0.13	4,463	-560	4,810	0	4,810	0	242,989	0	0
	Feb	0	0	0	-0.06	4,411	-267	5,772	0	5,772	0	237,484	0	0
	Mar	4,784	0	4,774	0.08	4,342	338	11,544	0	11,544	0	230,376	0	4,784
	Apr	20,601	0	20,560	0.24	4,304	1,048	19,240	0	19,240	0	230,648	0	20,601
	May	36,278	0	36,206	0.49	4,471	2,177	2,886	0	2,886	0	261,790	0	36,278
	Jun	14,399	0	14,370	0.76	4,663	3,565	5,772	0	5,772	0	266,823	0	14,399
	Jul	743	0	742	0.44	4,627	2,039	10,582	0	10,582	0	254,944	0	743
	Aug	374	0	373	0.31	4,521	1,406	7,696	0	7,696	0	246,216	0	374
	Sep	2,402	0	2,398	0.18	4,447	785	6,734	0	6,734	0	241,094	0	2,402
	Annual	83,224	0	83,058	2.55		11,644	96,200	0	96,200	0		0	83,224
1940	Oct	151	0	151	0.15	4,396	664	3,848	0	3,848	0	236,734	0	151
	Nov	79	0	79	0.02	4,324	93	8,658	0	8,658	0	228,061	0	79
	Dec	0	0	0	-0.01	4,228	-50	8,658	0	8,658	0	219,453	0	0
	Jan	0	0	0	-0.15	4,155	-625	4,810	0	4,810	0	215,268	0	0
	Feb	0	0	0	-0.09	4,099	-361	5,772	0	5,772	0	209,857	0	0
	Mar	3,514	0	3,507	0.07	4,018	300	11,544	0	11,544	0	201,519	0	3,514
	Apr	16,412	0	16,379	0.24	3,946	959	19,240	0	19,240	0	197,699	0	16,412
	May	32,702	0	32,636	0.33	4,089	1,352	2,886	0	2,886	0	226,098	0	32,702
	Jun	13,046	0	13,020	0.40	4,286	1,703	5,772	0	5,772	0	231,642	0	13,046
	Jul	1,097	0	1,095	0.44	4,253	1,853	10,582	0	10,582	0	220,302	0	1,097
	Aug	1,046	0	1,044	0.33	4,143	1,383	7,696	0	7,696	0	212,267	0	1,046
	Sep	1,310	0	1,307	0.20	4,060	818	6,734	0	6,734	0	206,023	0	1,310
	Annual	69,357	0	69,218	1.94		8,090	96,200	0	96,200	0		0	69,357

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1941	Oct	2,929	0	2,923	0.17	4,014	667	3,848	0	3,848	0	204,431	0	2,929
	Nov	358	0	357	-0.09	3,956	-365	8,658	0	8,658	0	196,495	0	358
	Dec	328	0	328	-0.17	3,860	-643	8,658	0	8,658	0	188,808	0	328
	Jan	94	0	94	-0.11	3,786	-412	4,810	0	4,810	0	184,504	0	94
	Feb	57	0	57	0.01	3,721	24	5,772	0	5,772	0	178,766	0	57
	Mar	1,501	0	1,498	0.01	3,611	27	11,544	0	11,544	0	168,692	0	1,501
	Apr	10,581	0	10,560	0.05	3,472	160	19,240	0	19,240	0	159,853	0	10,581
	May	54,190	0	54,081	0.27	3,738	1,006	2,886	0	2,886	0	210,041	0	54,190
	Jun	55,965	0	55,853	0.17	4,342	724	5,772	0	5,772	0	259,398	0	55,965
	Jul	40,854	0	40,773	0.39	4,749	1,863	10,582	0	10,582	0	287,726	0	40,854
	Aug	8,527	0	8,510	0.32	4,880	1,551	7,696	0	7,696	0	286,989	0	8,527
	Sep	4,844	0	4,834	0.10	4,866	467	6,734	0	6,734	0	284,622	0	4,844
	Annual	180,229	0	179,869	1.10		5,069	96,200	0	96,200	0		0	180,229
1942	Oct	23,335	0	23,288	-0.05	4,945	-264	3,848	0	3,848	0	304,327	0	23,335
	Nov	7,425	0	7,410	0.07	5,027	335	8,658	0	8,658	0	302,744	0	7,425
	Dec	3,107	0	3,101	-0.09	4,997	-471	8,658	0	8,658	0	297,659	0	3,107
	Jan	1,656	0	1,653	0.03	4,959	154	4,810	0	4,810	0	294,348	0	1,656
	Feb	886	0	884	-0.01	4,922	-53	5,772	0	5,772	0	289,513	0	886
	Mar	3,022	0	3,016	0.01	4,861	61	11,544	0	11,544	0	280,924	0	3,022
	Apr	36,787	0	36,713	0.07	4,900	366	19,240	0	19,240	0	298,031	0	36,787
	May	41,562	0	41,479	0.45	5,146	2,337	2,886	0	2,886	0	334,287	0	41,562
	Jun	49,328	0	49,230	0.53	5,496	2,899	5,772	0	5,772	0	374,845	0	49,328
	Jul	11,167	0	11,144	0.45	5,670	2,549	10,582	0	10,582	0	372,859	0	11,167
	Aug	2,018	0	2,014	0.36	5,628	2,016	7,696	0	7,696	0	365,161	0	2,018
	Sep	806	0	804	0.35	5,559	1,918	6,734	0	6,734	0	357,314	0	806
	Annual	181,099	0	180,737	2.16		11,845	96,200	0	96,200	0		0	181,099
1943	Oct	228	0	228	0.22	5,502	1,234	3,848	0	3,848	0	352,459	0	228
	Nov	29	0	29	0.10	5,439	563	8,658	0	8,658	0	343,267	0	29
	Dec	0	0	0	-0.02	5,357	-114	8,658	0	8,658	0	334,723	0	0
	Jan	0	0	0	-0.01	5,295	-66	4,810	0	4,810	0	329,979	0	0
	Feb	0	0	0	0.04	5,245	206	5,772	0	5,772	0	324,002	0	0
	Mar	2,175	0	2,171	0.07	5,171	356	11,544	0	11,544	0	314,273	0	2,175
	Apr	32,011	0	31,947	0.29	5,178	1,479	19,240	0	19,240	0	325,501	0	32,011
	May	30,301	0	30,241	0.37	5,349	1,966	2,886	0	2,886	0	350,890	0	30,301
	Jun	24,207	0	24,159	0.41	5,538	2,296	5,772	0	5,772	0	366,981	0	24,207
	Jul	5,645	0	5,634	0.46	5,577	2,586	10,582	0	10,582	0	359,447	0	5,645
	Aug	2,298	0	2,293	0.23	5,513	1,245	7,696	0	7,696	0	352,799	0	2,298
	Sep	484	0	483	0.31	5,447	1,676	6,734	0	6,734	0	344,872	0	484
	Annual	97,379	0	97,184	2.47		13,426	96,200	0	96,200	0		0	97,379
1944	Oct	197	0	197	0.14	5,391	764	3,848	0	3,848	0	340,457	0	197
	Nov	65	0	65	0.04	5,330	228	8,658	0	8,658	0	331,636	0	65
	Dec	0	0	0	-0.19	5,253	-1,013	8,658	0	8,658	0	323,991	0	0
	Jan	0	0	0	-0.06	5,196	-293	4,810	0	4,810	0	319,473	0	0
	Feb	0	0	0	0.02	5,145	108	5,772	0	5,772	0	313,593	0	0
	Mar	143	0	143	0.05	5,065	259	11,544	0	11,544	0	301,933	0	143
	Apr	11,798	0	11,774	0.22	4,974	1,095	19,240	0	19,240	0	293,372	0	11,798
	May	45,284	0	45,193	0.36	5,122	1,850	2,886	0	2,886	0	333,830	0	45,284
	Jun	53,312	0	53,205	0.49	5,510	2,676	5,772	0	5,772	0	378,587	0	53,312
	Jul	16,151	0	16,118	0.29	5,728	1,657	10,582	0	10,582	0	382,466	0	16,151
	Aug	1,663	0	1,659	0.34	5,710	1,919	7,696	0	7,696	0	374,511	0	1,663
	Sep	162	0	161	0.29	5,640	1,619	6,734	0	6,734	0	366,319	0	162
	Annual	128,773	0	128,515	1.99		10,869	96,200	0	96,200	0		0	128,773
1945	Oct	778	0	777	0.11	5,587	596	3,848	0	3,848	0	362,651	0	778
	Nov	238	0	237	0.00	5,534	-20	8,658	0	8,658	0	354,251	0	238
	Dec	0	0	0	-0.13	5,460	-728	8,658	0	8,658	0	346,321	0	0
	Jan	30	0	30	-0.02	5,403	-107	4,810	0	4,810	0	341,648	0	30
	Feb	97	0	97	0.04	5,355	229	5,772	0	5,772	0	335,744	0	97
	Mar	1,019	0	1,017	-0.02	5,278	-99	11,544	0	11,544	0	325,317	0	1,019
	Apr	18,494	0	18,457	0.16	5,221	824	19,240	0	19,240	0	323,709	0	18,494
	May	52,312	0	52,207	0.41	5,429	2,220	2,886	0	2,886	0	370,810	0	52,312
	Jun	43,964	0	43,876	0.53	5,775	3,043	5,772	0	5,772	4,542	401,330	4,551	39,413
	Jul	9,213	0	9,195	0.32	5,892	1,860	10,582	0	10,582	0	398,083	0	9,213
	Aug	2,278	0	2,273	0.22	5,850	1,272	7,696	0	7,696	0	391,388	0	2,278
	Sep	78	0	77	0.36	5,784	2,093	6,734	0	6,734	0	382,638	0	78
	Annual	128,500	0	128,243	1.96		11,182	96,200	0	96,200	4,542		4,551	123,949

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1946	Oct	247	0	247	0.12	5,728	690	3,848	0	3,848	0	378,347	0	247
	Nov	0	0	0	0.09	5,670	504	8,658	0	8,658	0	369,185	0	0
	Dec	0	0	0	-0.08	5,593	-439	8,658	0	8,658	0	360,966	0	0
	Jan	0	0	0	-0.01	5,536	-52	4,810	0	4,810	0	356,208	0	0
	Feb	0	0	0	0.05	5,487	264	5,772	0	5,772	0	350,172	0	0
	Mar	1,026	0	1,023	0.07	5,410	376	11,544	0	11,544	0	339,276	0	1,026
	Apr	14,955	0	14,925	0.18	5,336	944	19,240	0	19,240	0	334,017	0	14,955
	May	12,222	0	12,197	0.36	5,345	1,933	2,886	0	2,886	0	341,395	0	12,222
	Jun	14,738	0	14,709	0.62	5,404	3,377	5,772	0	5,772	0	346,955	0	14,738
	Jul	1,159	0	1,157	0.38	5,377	2,054	10,582	0	10,582	0	335,475	0	1,159
	Aug	1,277	0	1,275	0.12	5,292	611	7,696	0	7,696	0	328,443	0	1,277
	Sep	1,207	0	1,204	0.24	5,227	1,256	6,734	0	6,734	0	321,657	0	1,207
	Annual	46,830	0	46,736	2.14		11,517	96,200	0	96,200	0		0	46,830
1947	Oct	1,291	0	1,288	0.08	5,181	405	3,848	0	3,848	0	318,692	0	1,291
	Nov	875	0	873	0.03	5,128	156	8,658	0	8,658	0	310,752	0	875
	Dec	261	0	260	0.05	5,052	276	8,658	0	8,658	0	302,079	0	261
	Jan	0	0	0	-0.02	4,993	-118	4,810	0	4,810	0	297,387	0	0
	Feb	61	0	60	0.03	4,946	130	5,772	0	5,772	0	291,545	0	61
	Mar	2,306	0	2,301	0.10	4,874	464	11,544	0	11,544	0	281,839	0	2,306
	Apr	10,606	0	10,585	0.26	4,783	1,247	19,240	0	19,240	0	271,937	0	10,606
	May	31,623	0	31,560	0.25	4,863	1,230	2,886	0	2,886	0	299,382	0	31,623
	Jun	23,815	0	23,768	0.63	5,057	3,203	5,772	0	5,772	0	314,175	0	23,815
	Jul	4,260	0	4,252	0.40	5,086	2,012	10,582	0	10,582	0	305,833	0	4,260
	Aug	4,433	0	4,424	0.16	5,030	792	7,696	0	7,696	0	301,769	0	4,433
	Sep	2,764	0	2,759	0.19	4,989	932	6,734	0	6,734	0	296,862	0	2,764
	Annual	82,294	0	82,130	2.15		10,725	96,200	0	96,200	0		0	82,294
1948	Oct	3,198	0	3,191	0.16	4,961	770	3,848	0	3,848	0	295,435	0	3,198
	Nov	756	0	755	0.03	4,918	142	8,658	0	8,658	0	287,390	0	756
	Dec	102	0	102	-0.05	4,842	-228	8,658	0	8,658	0	279,062	0	102
	Jan	0	0	0	0.01	4,781	42	4,810	0	4,810	0	274,210	0	0
	Feb	0	0	0	-0.01	4,731	-55	5,772	0	5,772	0	268,492	0	0
	Mar	565	0	564	0.02	4,649	79	11,544	0	11,544	0	257,433	0	565
	Apr	22,787	0	22,742	0.21	4,606	973	19,240	0	19,240	0	259,962	0	22,787
	May	45,070	0	44,980	0.30	4,810	1,419	2,886	0	2,886	0	300,637	0	45,070
	Jun	41,393	0	41,310	0.34	5,158	1,773	5,772	0	5,772	0	334,402	0	41,393
	Jul	8,010	0	7,994	0.39	5,293	2,043	10,582	0	10,582	0	329,771	0	8,010
	Aug	2,123	0	2,119	0.30	5,237	1,594	7,696	0	7,696	0	322,600	0	2,123
	Sep	187	0	187	0.24	5,166	1,234	6,734	0	6,734	0	314,819	0	187
	Annual	124,192	0	123,944	1.93		9,787	96,200	0	96,200	0		0	124,192
1949	Oct	97	0	97	0.13	5,109	655	3,848	0	3,848	0	310,412	0	97
	Nov	82	0	82	0.05	5,049	230	8,658	0	8,658	0	301,606	0	82
	Dec	0	0	0	-0.11	4,973	-528	8,658	0	8,658	0	293,477	0	0
	Jan	0	0	0	-0.17	4,918	-840	4,810	0	4,810	0	289,507	0	0
	Feb	0	0	0	-0.07	4,875	-319	5,772	0	5,772	0	284,055	0	0
	Mar	858	0	856	0.07	4,798	321	11,544	0	11,544	0	273,046	0	858
	Apr	20,282	0	20,242	0.12	4,749	588	19,240	0	19,240	0	273,460	0	20,282
	May	40,873	0	40,791	0.30	4,917	1,456	2,886	0	2,886	0	309,909	0	40,873
	Jun	50,619	0	50,517	0.22	5,287	1,145	5,772	0	5,772	0	353,509	0	50,619
	Jul	22,545	0	22,500	0.29	5,536	1,627	10,582	0	10,582	0	363,800	0	22,545
	Aug	3,600	0	3,593	0.36	5,555	1,978	7,696	0	7,696	0	357,719	0	3,600
	Sep	665	0	663	0.27	5,494	1,467	6,734	0	6,734	0	350,182	0	665
	Annual	139,620	0	139,341	1.45		7,778	96,200	0	96,200	0		0	139,620
1950	Oct	255	0	254	0.12	5,440	676	3,848	0	3,848	0	345,912	0	255
	Nov	237	0	237	0.06	5,380	347	8,658	0	8,658	0	337,144	0	237
	Dec	0	0	0	0.02	5,299	125	8,658	0	8,658	0	328,361	0	0
	Jan	0	0	0	-0.06	5,237	-296	4,810	0	4,810	0	323,846	0	0
	Feb	0	0	0	0.03	5,186	170	5,772	0	5,772	0	317,905	0	0
	Mar	1,433	0	1,431	0.09	5,110	437	11,544	0	11,544	0	307,354	0	1,433
	Apr	22,447	0	22,402	0.23	5,070	1,154	19,240	0	19,240	0	309,362	0	22,447
	May	21,610	0	21,566	0.38	5,158	1,946	2,886	0	2,886	0	326,097	0	21,610
	Jun	17,252	0	17,217	0.54	5,277	2,847	5,772	0	5,772	0	334,695	0	17,252
	Jul	2,829	0	2,823	0.35	5,272	1,833	10,582	0	10,582	0	325,103	0	2,829
	Aug	438	0	437	0.40	5,183	2,050	7,696	0	7,696	0	315,794	0	438
	Sep	347	0	346	0.20	5,105	1,007	6,734	0	6,734	0	308,399	0	347
	Annual	66,848	0	66,714	2.36		12,297	96,200	0	96,200	0		0	66,848

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1951	Oct	213	0	213	0.19	5,050	974	3,848	0	3,848	0	303,790	0	213
	Nov	0	0	0	0.07	4,988	364	8,658	0	8,658	0	294,768	0	0
	Dec	0	0	0	-0.05	4,909	-232	8,658	0	8,658	0	286,342	0	0
	Jan	0	0	0	-0.08	4,851	-396	4,810	0	4,810	0	281,928	0	0
	Feb	0	0	0	0.00	4,803	15	5,772	0	5,772	0	276,142	0	0
	Mar	383	0	382	0.11	4,721	500	11,544	0	11,544	0	264,480	0	383
	Apr	6,484	0	6,471	0.14	4,596	632	19,240	0	19,240	0	251,080	0	6,484
	May	20,752	0	20,711	0.36	4,610	1,651	2,886	0	2,886	0	267,253	0	20,752
	Jun	17,686	0	17,651	0.60	4,735	2,850	5,772	0	5,772	0	276,282	0	17,686
	Jul	960	0	958	0.54	4,719	2,531	10,582	0	10,582	0	264,128	0	960
	Aug	1,355	0	1,352	0.22	4,624	1,001	7,696	0	7,696	0	256,782	0	1,355
	Sep	361	0	360	0.30	4,545	1,343	6,734	0	6,734	0	249,065	0	361
	Annual	48,195	0	48,098	2.39		11,232	96,200	0	96,200	0		0	48,195
1952	Oct	117	0	117	0.15	4,482	685	3,848	0	3,848	0	244,649	0	117
	Nov	5	0	5	0.03	4,411	119	8,658	0	8,658	0	235,877	0	5
	Dec	0	0	0	-0.18	4,319	-784	8,658	0	8,658	0	228,003	0	0
	Jan	0	0	0	-0.09	4,252	-393	4,810	0	4,810	0	223,586	0	0
	Feb	0	0	0	0.02	4,194	93	5,772	0	5,772	0	217,721	0	0
	Mar	421	0	420	0.10	4,093	398	11,544	0	11,544	0	206,199	0	421
	Apr	27,532	0	27,477	0.15	4,070	617	19,240	0	19,240	0	213,819	0	27,532
	May	52,331	0	52,226	0.33	4,376	1,453	2,886	0	2,886	0	261,706	0	52,331
	Jun	53,698	0	53,591	0.45	4,850	2,200	5,772	0	5,772	0	307,325	0	53,698
	Jul	18,300	0	18,264	0.39	5,087	1,969	10,582	0	10,582	0	313,038	0	18,300
	Aug	5,171	0	5,161	0.32	5,094	1,640	7,696	0	7,696	0	308,863	0	5,171
	Sep	925	0	923	0.26	5,043	1,302	6,734	0	6,734	0	301,749	0	925
	Annual	158,500	0	158,183	1.93		9,299	96,200	0	96,200	0		0	158,500
1953	Oct	151	0	151	0.27	4,988	1,329	3,848	0	3,848	0	296,723	0	151
	Nov	27	0	27	-0.12	4,929	-569	8,658	0	8,658	0	288,661	0	27
	Dec	0	0	0	-0.03	4,853	-148	8,658	0	8,658	0	280,151	0	0
	Jan	0	0	0	0.02	4,791	81	4,810	0	4,810	0	275,261	0	0
	Feb	0	0	0	0.04	4,739	184	5,772	0	5,772	0	269,304	0	0
	Mar	2,550	0	2,545	0.12	4,664	556	11,544	0	11,544	0	259,750	0	2,550
	Apr	14,800	0	14,770	0.23	4,588	1,049	19,240	0	19,240	0	254,232	0	14,800
	May	19,424	0	19,385	0.34	4,635	1,560	2,886	0	2,886	0	269,171	0	19,424
	Jun	30,189	0	30,129	0.48	4,813	2,294	5,772	0	5,772	0	291,234	0	30,189
	Jul	3,469	0	3,462	0.32	4,876	1,563	10,582	0	10,582	0	282,551	0	3,469
	Aug	981	0	979	0.29	4,798	1,412	7,696	0	7,696	0	274,422	0	981
	Sep	0	0	0	0.38	4,719	1,806	6,734	0	6,734	0	265,883	0	0
	Annual	71,592	0	71,449	2.33		11,115	96,200	0	96,200	0		0	71,592
1954	Oct	314	0	313	0.14	4,658	641	3,848	0	3,848	0	261,707	0	314
	Nov	118	0	118	0.03	4,593	124	8,658	0	8,658	0	253,043	0	118
	Dec	0	0	0	-0.03	4,502	-144	8,658	0	8,658	0	244,529	0	0
	Jan	0	0	0	0.02	4,430	75	4,810	0	4,810	0	239,644	0	0
	Feb	0	0	0	0.09	4,370	377	5,772	0	5,772	0	233,495	0	0
	Mar	254	0	253	-0.01	4,274	-49	11,544	0	11,544	0	222,253	0	254
	Apr	18,059	0	18,023	0.27	4,197	1,153	19,240	0	19,240	0	219,883	0	18,059
	May	25,262	0	25,211	0.22	4,303	960	2,886	0	2,886	0	241,249	0	25,262
	Jun	9,660	0	9,641	0.51	4,431	2,246	5,772	0	5,772	0	242,871	0	9,660
	Jul	2,222	0	2,217	0.33	4,385	1,466	10,582	0	10,582	0	233,041	0	2,222
	Aug	1,826	0	1,823	0.26	4,293	1,109	7,696	0	7,696	0	226,058	0	1,826
	Sep	643	0	642	0.21	4,215	885	6,734	0	6,734	0	219,082	0	643
	Annual	58,358	0	58,241	2.03		8,842	96,200	0	96,200	0		0	58,358
1955	Oct	600	0	599	0.15	4,153	624	3,848	0	3,848	0	215,208	0	600
	Nov	7	0	7	0.09	4,078	362	8,658	0	8,658	0	206,195	0	7
	Dec	0	0	0	0.02	3,973	96	8,658	0	8,658	0	197,441	0	0
	Jan	0	0	0	0.00	3,890	-6	4,810	0	4,810	0	192,637	0	0
	Feb	0	0	0	-0.07	3,826	-250	5,772	0	5,772	0	187,115	0	0
	Mar	256	0	256	0.12	3,713	439	11,544	0	11,544	0	175,389	0	256
	Apr	7,157	0	7,143	0.22	3,540	792	19,240	0	19,240	0	162,500	0	7,157
	May	21,648	0	21,604	0.30	3,574	1,071	2,886	0	2,886	0	180,148	0	21,648
	Jun	22,982	0	22,936	0.53	3,797	2,022	5,772	0	5,772	0	195,290	0	22,982
	Jul	2,370	0	2,365	0.28	3,835	1,089	10,582	0	10,582	0	185,985	0	2,370
	Aug	2,948	0	2,943	0.21	3,742	777	7,696	0	7,696	0	180,454	0	2,948
	Sep	356	0	355	0.32	3,653	1,153	6,734	0	6,734	0	172,923	0	356
	Annual	58,325	0	58,208	2.18		8,167	96,200	0	96,200	0		0	58,325

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1956	Oct	32	0	32	0.21	3,566	748	3,848	0	3,848	0	168,359	0	32
	Nov	2	0	2	0.02	3,468	75	8,658	0	8,658	0	159,628	0	2
	Dec	0	0	0	-0.05	3,337	-166	8,658	0	8,658	0	151,136	0	0
	Jan	0	0	0	-0.03	3,233	-104	4,810	0	4,810	0	146,430	0	0
	Feb	0	0	0	0.00	3,151	-8	5,772	0	5,772	0	140,666	0	0
	Mar	4,695	0	4,686	0.14	3,049	437	11,544	0	11,544	0	133,372	0	4,695
	Apr	14,242	0	14,214	0.24	2,945	697	19,240	0	19,240	0	127,648	0	14,242
	May	31,271	0	31,209	0.36	3,114	1,134	2,886	0	2,886	0	154,836	0	31,271
	Jun	21,580	0	21,536	0.53	3,434	1,817	5,772	0	5,772	0	168,784	0	21,580
	Jul	1,031	0	1,029	0.42	3,457	1,456	10,582	0	10,582	0	157,774	0	1,031
	Aug	373	0	372	0.36	3,308	1,184	7,696	0	7,696	0	149,266	0	373
	Sep	0	0	0	0.44	3,178	1,386	6,734	0	6,734	0	141,146	0	0
	Annual	73,226	0	73,079	2.64		8,656	96,200	0	96,200	0		0	73,226
1957	Oct	67	0	67	0.15	3,081	466	3,848	0	3,848	0	136,899	0	67
	Nov	0	0	0	0.07	2,977	215	8,658	0	8,658	0	128,026	0	0
	Dec	0	0	0	0.05	2,831	132	8,658	0	8,658	0	119,236	0	0
	Jan	0	0	0	-0.21	2,719	-582	4,810	0	4,810	0	115,008	0	0
	Feb	0	0	0	0.02	2,626	57	5,772	0	5,772	0	109,179	0	0
	Mar	804	0	803	0.07	2,459	176	11,544	0	11,544	0	98,261	0	804
	Apr	12,375	0	12,351	0.14	2,270	312	19,240	0	19,240	0	91,060	0	12,375
	May	24,397	0	24,348	0.08	2,411	194	2,886	0	2,886	0	112,328	0	24,397
	Jun	56,225	0	56,112	0.33	3,032	1,014	5,772	0	5,772	0	161,654	0	56,225
	Jul	40,230	0	40,150	0.22	3,634	809	10,582	0	10,582	0	190,412	0	40,230
	Aug	15,164	0	15,134	0.14	3,876	529	7,696	0	7,696	0	197,321	0	15,164
	Sep	3,560	0	3,553	0.33	3,891	1,301	6,734	0	6,734	0	192,839	0	3,560
	Annual	152,822	0	152,516	1.40		4,624	96,200	0	96,200	0		0	152,822
1958	Oct	2,314	0	2,310	0.04	3,853	138	3,848	0	3,848	0	191,162	0	2,314
	Nov	2,930	0	2,924	-0.07	3,808	-278	8,658	0	8,658	0	185,706	0	2,930
	Dec	1,057	0	1,055	0.02	3,723	64	8,658	0	8,658	0	178,039	0	1,057
	Jan	572	0	571	-0.11	3,645	-400	4,810	0	4,810	0	174,201	0	572
	Feb	324	0	323	-0.06	3,580	-214	5,772	0	5,772	0	168,966	0	324
	Mar	1,639	0	1,635	-0.01	3,468	-37	11,544	0	11,544	0	159,094	0	1,639
	Apr	17,306	0	17,272	0.10	3,378	328	19,240	0	19,240	0	156,798	0	17,306
	May	52,315	0	52,211	0.34	3,685	1,240	2,886	0	2,886	0	204,882	0	52,315
	Jun	40,475	0	40,395	0.51	4,195	2,143	5,772	0	5,772	0	237,361	0	40,475
	Jul	4,408	0	4,399	0.43	4,336	1,845	10,582	0	10,582	0	229,333	0	4,408
	Aug	1,712	0	1,709	0.30	4,250	1,269	7,696	0	7,696	0	222,076	0	1,712
	Sep	2,548	0	2,542	0.24	4,180	986	6,734	0	6,734	0	216,899	0	2,548
	Annual	127,600	0	127,345	1.70		7,085	96,200	0	96,200	0		0	127,600
1959	Oct	464	0	463	0.14	4,127	581	3,848	0	3,848	0	212,933	0	464
	Nov	8	0	8	0.08	4,052	314	8,658	0	8,658	0	203,970	0	8
	Dec	0	0	0	0.06	3,945	220	8,658	0	8,658	0	195,092	0	0
	Jan	0	0	0	0.05	3,860	186	4,810	0	4,810	0	190,096	0	0
	Feb	0	0	0	0.00	3,793	9	5,772	0	5,772	0	184,315	0	0
	Mar	215	0	215	0.09	3,675	340	11,544	0	11,544	0	172,646	0	215
	Apr	8,692	0	8,675	0.23	3,511	811	19,240	0	19,240	0	161,269	0	8,692
	May	15,714	0	15,683	0.39	3,512	1,357	2,886	0	2,886	0	172,709	0	15,714
	Jun	16,677	0	16,643	0.45	3,661	1,642	5,772	0	5,772	0	181,938	0	16,677
	Jul	414	0	413	0.43	3,643	1,555	10,582	0	10,582	0	170,214	0	414
	Aug	2,061	0	2,057	0.19	3,514	667	7,696	0	7,696	0	163,909	0	2,061
	Sep	178	0	177	0.34	3,409	1,162	6,734	0	6,734	0	156,189	0	178
	Annual	44,423	0	44,334	2.44		8,843	96,200	0	96,200	0		0	44,423
1960	Oct	5,119	0	5,109	0.01	3,360	49	3,848	0	3,848	0	157,401	0	5,119
	Nov	3,052	0	3,046	0.08	3,323	256	8,658	0	8,658	0	151,532	0	3,052
	Dec	119	0	119	-0.10	3,213	-325	8,658	0	8,658	0	143,318	0	119
	Jan	0	0	0	-0.05	3,112	-149	4,810	0	4,810	0	138,656	0	0
	Feb	40	0	40	-0.04	3,032	-119	5,772	0	5,772	0	133,044	0	40
	Mar	4,213	0	4,204	0.06	2,925	190	11,544	0	11,544	0	125,514	0	4,213
	Apr	37,347	0	37,272	0.22	3,002	657	19,240	0	19,240	0	142,889	0	37,347
	May	32,839	0	32,773	0.31	3,362	1,037	2,886	0	2,886	0	171,739	0	32,839
	Jun	42,375	0	42,290	0.46	3,805	1,764	5,772	0	5,772	0	206,494	0	42,375
	Jul	6,210	0	6,197	0.43	3,992	1,698	10,582	0	10,582	0	200,410	0	6,210
	Aug	513	0	512	0.45	3,901	1,763	7,696	0	7,696	0	191,463	0	513
	Sep	94	0	94	0.31	3,797	1,179	6,734	0	6,734	0	183,645	0	94
	Annual	131,920	0	131,656	2.15		8,001	96,200	0	96,200	0		0	131,920

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1961	Oct	37	0	37	0.06	3,721	224	3,848	0	3,848	0	179,610	0	37
	Nov	5	0	5	0.05	3,631	195	8,658	0	8,658	0	170,762	0	5
	Dec	0	0	0	-0.09	3,507	-320	8,658	0	8,658	0	162,424	0	0
	Jan	0	0	0	0.01	3,408	46	4,810	0	4,810	0	157,568	0	0
	Feb	0	0	0	0.00	3,326	16	5,772	0	5,772	0	151,780	0	0
	Mar	807	0	806	0.00	3,197	0	11,544	0	11,544	0	141,042	0	807
	Apr	17,554	0	17,518	0.17	3,095	540	19,240	0	19,240	0	138,780	0	17,554
	May	35,771	0	35,700	0.34	3,320	1,123	2,886	0	2,886	0	170,471	0	35,771
	Jun	19,251	0	19,212	0.39	3,648	1,423	5,772	0	5,772	0	182,488	0	19,251
	Jul	1,964	0	1,960	0.34	3,664	1,234	10,582	0	10,582	0	172,632	0	1,964
	Aug	3,002	0	2,996	0.07	3,559	261	7,696	0	7,696	0	167,670	0	3,002
	Sep	3,132	0	3,126	0.02	3,496	58	6,734	0	6,734	0	164,004	0	3,132
	Annual	81,522	0	81,359	1.37		4,799	96,200	0	96,200	0		0	81,522
1962	Oct	2,259	0	2,255	-0.04	3,458	-141	3,848	0	3,848	0	162,553	0	2,259
	Nov	1,121	0	1,119	-0.01	3,390	-43	8,658	0	8,658	0	155,056	0	1,121
	Dec	96	0	96	-0.07	3,267	-241	8,658	0	8,658	0	146,735	0	96
	Jan	116	0	116	-0.01	3,165	-37	4,810	0	4,810	0	142,078	0	116
	Feb	757	0	756	-0.06	3,092	-200	5,772	0	5,772	0	137,262	0	757
	Mar	1,341	0	1,338	0.06	2,970	181	11,544	0	11,544	0	126,875	0	1,341
	Apr	33,132	0	33,066	0.23	2,992	680	19,240	0	19,240	0	140,022	0	33,132
	May	38,856	0	38,778	0.39	3,361	1,299	2,886	0	2,886	0	174,615	0	38,856
	Jun	35,370	0	35,300	0.48	3,802	1,814	5,772	0	5,772	0	202,329	0	35,370
	Jul	7,230	0	7,215	0.32	3,951	1,263	10,582	0	10,582	0	197,700	0	7,230
	Aug	750	0	748	0.35	3,872	1,339	7,696	0	7,696	0	189,413	0	750
	Sep	401	0	400	0.03	3,780	97	6,734	0	6,734	0	182,983	0	401
	Annual	121,431	0	121,188	1.64		6,010	96,200	0	96,200	0		0	121,431
1963	Oct	755	0	753	0.13	3,715	500	3,848	0	3,848	0	179,388	0	755
	Nov	173	0	173	-0.10	3,633	-347	8,658	0	8,658	0	171,250	0	173
	Dec	0	0	0	0.04	3,511	151	8,658	0	8,658	0	162,442	0	0
	Jan	0	0	0	-0.02	3,410	-78	4,810	0	4,810	0	157,710	0	0
	Feb	0	0	0	-0.03	3,330	-86	5,772	0	5,772	0	152,024	0	0
	Mar	4,094	0	4,086	0.01	3,226	37	11,544	0	11,544	0	144,529	0	4,094
	Apr	16,509	0	16,476	0.26	3,139	821	19,240	0	19,240	0	140,945	0	16,509
	May	28,360	0	28,303	0.42	3,297	1,373	2,886	0	2,886	0	164,989	0	28,360
	Jun	6,595	0	6,582	0.45	3,478	1,549	5,772	0	5,772	0	164,250	0	6,595
	Jul	824	0	823	0.35	3,389	1,171	10,582	0	10,582	0	153,319	0	824
	Aug	550	0	549	0.16	3,244	525	7,696	0	7,696	0	145,647	0	550
	Sep	620	0	619	0.20	3,131	629	6,734	0	6,734	0	138,904	0	620
	Annual	58,480	0	58,363	1.88		6,243	96,200	0	96,200	0		0	58,480
1964	Oct	142	0	142	0.12	3,048	359	3,848	0	3,848	0	134,838	0	142
	Nov	18	0	18	0.07	2,944	217	8,658	0	8,658	0	125,982	0	18
	Dec	0	0	0	0.06	2,795	169	8,658	0	8,658	0	117,155	0	0
	Jan	0	0	0	0.00	2,675	-6	4,810	0	4,810	0	112,352	0	0
	Feb	0	0	0	0.00	2,575	-8	5,772	0	5,772	0	106,587	0	0
	Mar	95	0	95	0.05	2,398	120	11,544	0	11,544	0	95,018	0	95
	Apr	7,083	0	7,068	0.19	2,138	407	19,240	0	19,240	0	82,440	0	7,083
	May	31,611	0	31,548	0.37	2,294	847	2,886	0	2,886	0	110,255	0	31,611
	Jun	12,481	0	12,456	0.52	2,641	1,362	5,772	0	5,772	0	115,577	0	12,481
	Jul	2,580	0	2,575	0.28	2,608	737	10,582	0	10,582	0	106,833	0	2,580
	Aug	6,898	0	6,884	0.17	2,512	416	7,696	0	7,696	0	105,606	0	6,898
	Sep	671	0	669	0.11	2,435	257	6,734	0	6,734	0	99,284	0	671
	Annual	61,578	0	61,455	1.92		4,874	96,200	0	96,200	0		0	61,578
1965	Oct	157	0	157	0.21	2,325	496	3,848	0	3,848	0	95,098	0	157
	Nov	12	0	12	-0.01	2,186	-32	8,658	0	8,658	0	86,483	0	12
	Dec	0	0	0	-0.17	1,993	-342	8,658	0	8,658	0	78,167	0	0
	Jan	0	0	0	-0.11	1,836	-209	4,810	0	4,810	0	73,566	0	0
	Feb	0	0	0	-0.02	1,718	-27	5,772	0	5,772	0	67,822	0	0
	Mar	271	0	270	0.07	1,542	102	11,544	0	11,544	0	56,446	0	271
	Apr	18,000	0	17,964	0.20	1,410	284	19,240	0	19,240	0	54,887	0	18,000
	May	40,606	0	40,525	0.27	1,804	489	2,886	0	2,886	0	92,036	0	40,606
	Jun	51,940	0	51,836	0.32	2,633	830	5,772	0	5,772	0	137,270	0	51,940
	Jul	30,494	0	30,434	0.23	3,204	739	10,582	0	10,582	0	156,383	0	30,494
	Aug	5,857	0	5,845	0.22	3,333	731	7,696	0	7,696	0	153,801	0	5,857
	Sep	5,450	0	5,439	0.06	3,302	195	6,734	0	6,734	0	152,311	0	5,450
	Annual	152,788	0	152,482	1.26		3,255	96,200	0	96,200	0		0	152,788

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1966	Oct	5,399	0	5,388	0.09	3,299	311	3,848	0	3,848	0	153,541	0	5,399
	Nov	1,901	0	1,898	-0.05	3,257	-148	8,658	0	8,658	0	146,929	0	1,901
	Dec	1,047	0	1,045	-0.08	3,147	-251	8,658	0	8,658	0	139,567	0	1,047
	Jan	827	0	826	0.01	3,059	39	4,810	0	4,810	0	135,543	0	827
	Feb	255	0	254	0.02	2,982	62	5,772	0	5,772	0	129,963	0	255
	Mar	5,329	0	5,318	0.11	2,882	324	11,544	0	11,544	0	123,413	0	5,329
	Apr	26,944	0	26,890	0.28	2,885	796	19,240	0	19,240	0	130,267	0	26,944
	May	46,721	0	46,627	0.36	3,270	1,170	2,886	0	2,886	0	172,839	0	46,721
	Jun	24,588	0	24,539	0.35	3,715	1,310	5,772	0	5,772	0	190,295	0	24,588
	Jul	4,374	0	4,365	0.27	3,786	1,014	10,582	0	10,582	0	183,064	0	4,374
	Aug	1,625	0	1,622	0.23	3,693	838	7,696	0	7,696	0	176,152	0	1,625
	Sep	188	0	188	0.22	3,593	798	6,734	0	6,734	0	168,808	0	188
	Annual	119,198	0	118,960	1.82		6,263	96,200	0	96,200	0		0	119,198
1967	Oct	176	0	175	0.21	3,507	729	3,848	0	3,848	0	164,406	0	176
	Nov	4	0	4	0.08	3,407	272	8,658	0	8,658	0	155,481	0	4
	Dec	852	0	850	-0.19	3,282	-613	8,658	0	8,658	0	148,286	0	852
	Jan	0	0	0	-0.01	3,188	-24	4,810	0	4,810	0	143,500	0	0
	Feb	0	0	0	0.07	3,104	219	5,772	0	5,772	0	137,509	0	0
	Mar	3,183	0	3,176	0.13	2,987	398	11,544	0	11,544	0	128,744	0	3,183
	Apr	11,120	0	11,098	0.28	2,842	783	19,240	0	19,240	0	119,819	0	11,120
	May	23,085	0	23,039	0.37	2,923	1,086	2,886	0	2,886	0	138,886	0	23,085
	Jun	25,706	0	25,654	0.26	3,228	848	5,772	0	5,772	0	157,921	0	25,706
	Jul	7,728	0	7,712	0.22	3,349	722	10,582	0	10,582	0	154,330	0	7,728
	Aug	9,653	0	9,634	0.01	3,336	18	7,696	0	7,696	0	156,249	0	9,653
	Sep	3,407	0	3,400	0.13	3,322	425	6,734	0	6,734	0	152,491	0	3,407
	Annual	84,912	0	84,743	1.56		4,861	96,200	0	96,200	0		0	84,912
1968	Oct	601	0	600	0.16	3,262	522	3,848	0	3,848	0	148,720	0	601
	Nov	112	0	112	0.10	3,164	314	8,658	0	8,658	0	139,860	0	112
	Dec	0	0	0	-0.08	3,027	-252	8,658	0	8,658	0	131,454	0	0
	Jan	0	0	0	0.00	2,922	6	4,810	0	4,810	0	126,638	0	0
	Feb	0	0	0	-0.04	2,835	-121	5,772	0	5,772	0	120,987	0	0
	Mar	1,610	0	1,606	0.08	2,694	224	11,544	0	11,544	0	110,825	0	1,610
	Apr	8,004	0	7,988	0.18	2,484	451	19,240	0	19,240	0	99,122	0	8,004
	May	27,078	0	27,024	0.27	2,590	700	2,886	0	2,886	0	122,560	0	27,078
	Jun	39,763	0	39,684	0.41	3,074	1,246	5,772	0	5,772	0	155,226	0	39,763
	Jul	7,963	0	7,947	0.27	3,308	906	10,582	0	10,582	0	151,685	0	7,963
	Aug	12,126	0	12,101	0.14	3,311	449	7,696	0	7,696	0	155,641	0	12,126
	Sep	636	0	634	0.23	3,287	757	6,734	0	6,734	0	148,784	0	636
	Annual	97,892	0	97,696	1.72		5,202	96,200	0	96,200	0		0	97,892
1969	Oct	301	0	300	0.13	3,202	420	3,848	0	3,848	0	144,817	0	301
	Nov	13	0	13	0.01	3,103	44	8,658	0	8,658	0	136,128	0	13
	Dec	0	0	0	0.00	2,966	-13	8,658	0	8,658	0	127,483	0	0
	Jan	0	0	0	-0.19	2,861	-543	4,810	0	4,810	0	123,216	0	0
	Feb	0	0	0	0.01	2,775	25	5,772	0	5,772	0	117,418	0	0
	Mar	598	0	597	0.07	2,619	176	11,544	0	11,544	0	106,295	0	598
	Apr	23,405	0	23,358	0.23	2,548	575	19,240	0	19,240	0	109,838	0	23,405
	May	41,751	0	41,667	0.21	2,902	617	2,886	0	2,886	0	148,002	0	41,751
	Jun	32,529	0	32,464	0.27	3,417	914	5,772	0	5,772	0	173,780	0	32,529
	Jul	13,287	0	13,261	0.34	3,623	1,214	10,582	0	10,582	0	175,245	0	13,287
	Aug	4,740	0	4,730	0.04	3,611	152	7,696	0	7,696	0	172,127	0	4,740
	Sep	3,332	0	3,326	0.04	3,563	132	6,734	0	6,734	0	168,587	0	3,332
	Annual	119,956	0	119,716	1.15		3,714	96,200	0	96,200	0		0	119,956
1970	Oct	4,276	0	4,267	-0.03	3,540	-114	3,848	0	3,848	0	169,120	0	4,276
	Nov	2,464	0	2,459	0.05	3,497	182	8,658	0	8,658	0	162,739	0	2,464
	Dec	393	0	393	-0.04	3,388	-130	8,658	0	8,658	0	154,604	0	393
	Jan	0	0	0	0.03	3,287	97	4,810	0	4,810	0	149,697	0	0
	Feb	0	0	0	0.08	3,201	268	5,772	0	5,772	0	143,657	0	0
	Mar	259	0	258	0.02	3,064	63	11,544	0	11,544	0	132,309	0	259
	Apr	6,451	0	6,438	0.20	2,863	577	19,240	0	19,240	0	118,929	0	6,451
	May	35,058	0	34,987	0.39	3,001	1,176	2,886	0	2,886	0	149,854	0	35,058
	Jun	24,176	0	24,128	0.37	3,382	1,263	5,772	0	5,772	0	166,947	0	24,176
	Jul	7,128	0	7,114	0.32	3,478	1,125	10,582	0	10,582	0	162,355	0	7,128
	Aug	1,902	0	1,898	0.27	3,392	922	7,696	0	7,696	0	155,634	0	1,902
	Sep	15,026	0	14,996	0.18	3,400	612	6,734	0	6,734	0	163,284	0	15,026
	Annual	97,131	0	96,937	1.86		6,040	96,200	0	96,200	0		0	97,131

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1971	Oct	2,840	0	2,834	0.08	3,449	265	3,848	0	3,848	0	162,006	0	2,840
	Nov	1,543	0	1,540	0.05	3,383	153	8,658	0	8,658	0	154,735	0	1,543
	Dec	315	0	315	0.02	3,260	81	8,658	0	8,658	0	146,311	0	315
	Jan	381	0	380	-0.02	3,160	-62	4,810	0	4,810	0	141,943	0	381
	Feb	540	0	539	0.02	3,085	67	5,772	0	5,772	0	136,643	0	540
	Mar	3,311	0	3,304	0.11	2,975	338	11,544	0	11,544	0	128,065	0	3,311
	Apr	12,865	0	12,839	0.23	2,846	658	19,240	0	19,240	0	121,007	0	12,865
	May	13,292	0	13,265	0.34	2,866	966	2,886	0	2,886	0	130,420	0	13,292
	Jun	20,991	0	20,949	0.52	3,052	1,584	5,772	0	5,772	0	144,012	0	20,991
	Jul	4,199	0	4,191	0.37	3,099	1,139	10,582	0	10,582	0	136,481	0	4,199
	Aug	3,471	0	3,464	0.23	3,002	682	7,696	0	7,696	0	131,568	0	3,471
	Sep	982	0	980	0.18	2,912	534	6,734	0	6,734	0	125,279	0	982
	Annual	64,730	0	64,601	2.13		6,405	96,200	0	96,200	0		0	64,730
1972	Oct	3,033	0	3,026	0.04	2,852	117	3,848	0	3,848	0	124,341	0	3,033
	Nov	2,469	0	2,464	0.04	2,790	107	8,658	0	8,658	0	118,040	0	2,469
	Dec	849	0	847	-0.10	2,665	-275	8,658	0	8,658	0	110,504	0	849
	Jan	609	0	608	0.03	2,554	66	4,810	0	4,810	0	106,236	0	609
	Feb	326	0	325	0.04	2,456	106	5,772	0	5,772	0	100,683	0	326
	Mar	5,572	0	5,561	0.16	2,331	379	11,544	0	11,544	0	94,322	0	5,572
	Apr	9,303	0	9,284	0.30	2,146	641	19,240	0	19,240	0	83,724	0	9,303
	May	10,603	0	10,582	0.47	2,103	998	2,886	0	2,886	0	90,422	0	10,603
	Jun	8,698	0	8,680	0.41	2,199	899	5,772	0	5,772	0	92,431	0	8,698
	Jul	471	0	470	0.48	2,096	1,012	10,582	0	10,582	0	81,307	0	471
	Aug	57	0	57	0.33	1,868	618	7,696	0	7,696	0	73,050	0	57
	Sep	430	0	429	0.17	1,698	282	6,734	0	6,734	0	66,462	0	430
	Annual	42,420	0	42,335	2.37		4,952	96,200	0	96,200	0		0	42,420
1973	Oct	16,703	0	16,670	-0.12	1,780	-214	3,848	0	3,848	0	79,498	0	16,703
	Nov	4,200	0	4,192	-0.03	1,872	-64	8,658	0	8,658	0	75,096	0	4,200
	Dec	2,091	0	2,086	-0.09	1,746	-162	8,658	0	8,658	0	68,687	0	2,091
	Jan	1,559	0	1,556	-0.05	1,644	-75	4,810	0	4,810	0	65,507	0	1,559
	Feb	1,180	0	1,178	0.00	1,567	-1	5,772	0	5,772	0	60,914	0	1,180
	Mar	1,926	0	1,922	-0.04	1,424	-50	11,544	0	11,544	0	51,342	0	1,926
	Apr	11,845	0	11,822	0.16	1,245	203	19,240	0	19,240	0	43,721	0	11,845
	May	48,778	0	48,680	0.24	1,657	392	2,886	0	2,886	0	89,122	0	48,778
	Jun	56,247	0	56,135	0.41	2,611	1,080	5,772	0	5,772	0	138,405	0	56,247
	Jul	30,367	0	30,307	0.31	3,219	989	10,582	0	10,582	0	157,140	0	30,367
	Aug	4,397	0	4,388	0.32	3,331	1,051	7,696	0	7,696	0	152,781	0	4,397
	Sep	2,061	0	2,057	0.26	3,253	836	6,734	0	6,734	0	147,267	0	2,061
	Annual	181,354	0	180,991	1.37		3,986	96,200	0	96,200	0		0	181,354
1974	Oct	1,046	0	1,044	0.18	3,183	576	3,848	0	3,848	0	143,888	0	1,046
	Nov	89	0	89	0.07	3,088	203	8,658	0	8,658	0	135,116	0	89
	Dec	20	0	20	-0.05	2,951	-162	8,658	0	8,658	0	126,641	0	20
	Jan	0	0	0	-0.09	2,844	-252	4,810	0	4,810	0	122,083	0	0
	Feb	0	0	0	0.03	2,754	84	5,772	0	5,772	0	116,227	0	0
	Mar	3,246	0	3,240	0.07	2,622	194	11,544	0	11,544	0	107,728	0	3,246
	Apr	8,552	0	8,535	0.26	2,425	623	19,240	0	19,240	0	96,401	0	8,552
	May	23,900	0	23,852	0.49	2,505	1,217	2,886	0	2,886	0	116,150	0	23,900
	Jun	9,513	0	9,494	0.45	2,724	1,229	5,772	0	5,772	0	118,643	0	9,513
	Jul	2,288	0	2,284	0.37	2,659	975	10,582	0	10,582	0	109,369	0	2,288
	Aug	2,270	0	2,265	0.25	2,513	623	7,696	0	7,696	0	103,315	0	2,270
	Sep	43	0	43	0.32	2,376	750	6,734	0	6,734	0	95,874	0	43
	Annual	50,969	0	50,867	2.33		6,059	96,200	0	96,200	0		0	50,969
1975	Oct	555	0	554	0.00	2,261	-2	3,848	0	3,848	0	92,583	0	555
	Nov	683	0	681	0.03	2,136	63	8,658	0	8,658	0	84,543	0	683
	Dec	34	0	34	-0.02	1,944	-44	8,658	0	8,658	0	75,964	0	34
	Jan	42	0	42	-0.03	1,781	-62	4,810	0	4,810	0	71,258	0	42
	Feb	0	0	0	-0.09	1,669	-152	5,772	0	5,772	0	65,638	0	0
	Mar	186	0	185	-0.01	1,500	-18	11,544	0	11,544	0	54,297	0	186
	Apr	10,451	0	10,430	0.20	1,291	264	19,240	0	19,240	0	45,224	0	10,451
	May	42,312	0	42,227	0.37	1,616	601	2,886	0	2,886	0	83,964	0	42,312
	Jun	54,547	0	54,438	0.48	2,497	1,203	5,772	0	5,772	0	131,427	0	54,547
	Jul	35,184	0	35,113	0.28	3,147	872	10,582	0	10,582	0	155,086	0	35,184
	Aug	4,736	0	4,726	0.31	3,302	1,039	7,696	0	7,696	0	151,077	0	4,736
	Sep	1,709	0	1,706	0.19	3,225	615	6,734	0	6,734	0	145,434	0	1,709
	Annual	150,439	0	150,138	1.71		4,379	96,200	0	96,200	0		0	150,439

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1976	Oct	260	0	259	0.26	3,146	814	3,848	0	3,848	0	141,032	0	260
	Nov	103	0	103	-0.03	3,046	-84	8,658	0	8,658	0	132,561	0	103
	Dec	52	0	52	0.04	2,907	123	8,658	0	8,658	0	123,831	0	52
	Jan	52	0	52	0.05	2,793	136	4,810	0	4,810	0	118,937	0	52
	Feb	137	0	137	0.08	2,698	223	5,772	0	5,772	0	113,079	0	137
	Mar	2,462	0	2,457	0.17	2,551	443	11,544	0	11,544	0	103,549	0	2,462
	Apr	14,864	0	14,835	0.28	2,406	668	19,240	0	19,240	0	98,475	0	14,864
	May	34,277	0	34,208	0.30	2,637	797	2,886	0	2,886	0	129,000	0	34,277
	Jun	28,818	0	28,760	0.61	3,087	1,879	5,772	0	5,772	0	150,110	0	28,818
	Jul	3,999	0	3,991	0.44	3,192	1,396	10,582	0	10,582	0	142,123	0	3,999
	Aug	1,177	0	1,175	0.31	3,071	957	7,696	0	7,696	0	134,645	0	1,177
	Sep	1,897	0	1,893	0.10	2,971	305	6,734	0	6,734	0	129,500	0	1,897
	Annual	88,097	0	87,921	2.62		7,656	96,200	0	96,200	0		0	88,097
1977	Oct	982	0	980	0.21	2,900	596	3,848	0	3,848	0	126,036	0	982
	Nov	5	0	5	0.04	2,797	121	8,658	0	8,658	0	117,262	0	5
	Dec	52	0	52	0.05	2,639	141	8,658	0	8,658	0	108,515	0	52
	Jan	61	0	61	-0.02	2,510	-38	4,810	0	4,810	0	103,804	0	61
	Feb	0	0	0	0.07	2,402	180	5,772	0	5,772	0	97,853	0	0
	Mar	410	0	409	0.16	2,214	344	11,544	0	11,544	0	86,374	0	410
	Apr	4,866	0	4,856	0.18	1,909	348	19,240	0	19,240	0	71,642	0	4,866
	May	4,529	0	4,520	0.35	1,741	616	2,886	0	2,886	0	72,660	0	4,529
	Jun	2,811	0	2,805	0.45	1,716	769	5,772	0	5,772	0	68,923	0	2,811
	Jul	1,777	0	1,773	0.23	1,588	360	10,582	0	10,582	0	59,754	0	1,777
	Aug	4,276	0	4,268	0.37	1,455	534	7,696	0	7,696	0	55,792	0	4,276
	Sep	2,014	0	2,010	0.29	1,363	392	6,734	0	6,734	0	50,676	0	2,014
	Annual	21,782	0	21,738	2.38		4,363	96,200	0	96,200	0		0	21,782
1978	Oct	876	0	875	0.23	1,279	296	3,848	0	3,848	0	47,406	0	876
	Nov	130	0	130	0.03	1,160	40	8,658	0	8,658	0	38,837	0	130
	Dec	0	0	0	0.06	990	62	8,658	0	8,658	0	30,117	0	0
	Jan	0	0	0	-0.08	857	-71	4,810	0	4,810	0	25,378	0	0
	Feb	55	0	55	-0.05	748	-40	5,772	0	5,772	0	19,701	0	55
	Mar	2,257	0	2,253	0.05	582	31	11,544	0	11,544	0	10,379	0	2,257
	Apr	19,351	0	19,312	0.32	473	150	19,240	0	19,240	0	10,302	0	19,351
	May	31,754	0	31,691	0.17	774	129	2,886	0	2,886	0	38,978	0	31,754
	Jun	45,907	0	45,815	0.50	1,487	744	5,772	0	5,772	0	78,278	0	45,907
	Jul	7,002	0	6,988	0.53	1,839	984	10,582	0	10,582	0	73,700	0	7,002
	Aug	163	0	162	0.44	1,697	739	7,696	0	7,696	0	65,427	0	163
	Sep	93	0	93	0.29	1,539	453	6,734	0	6,734	0	58,333	0	93
	Annual	107,589	0	107,373	2.49		3,515	96,200	0	96,200	0		0	107,589
1979	Oct	283	0	283	0.14	1,428	200	3,848	0	3,848	0	54,568	0	283
	Nov	235	0	235	-0.04	1,304	-51	8,658	0	8,658	0	46,197	0	235
	Dec	34	0	34	-0.26	1,138	-297	8,658	0	8,658	0	37,870	0	34
	Jan	230	0	230	-0.12	1,012	-124	4,810	0	4,810	0	33,413	0	230
	Feb	45	0	45	-0.01	913	-12	5,772	0	5,772	0	27,698	0	45
	Mar	751	0	750	0.11	740	81	11,544	0	11,544	0	16,823	0	751
	Apr	20,824	0	20,782	0.22	639	140	19,240	0	19,240	0	18,225	0	20,824
	May	48,540	0	48,443	0.11	1,116	118	2,886	0	2,886	0	63,664	0	48,540
	Jun	57,906	0	57,790	0.41	2,127	875	5,772	0	5,772	0	114,808	0	57,906
	Jul	31,556	0	31,493	0.50	2,842	1,423	10,582	0	10,582	0	134,295	0	31,556
	Aug	5,391	0	5,380	0.31	2,981	927	7,696	0	7,696	0	131,052	0	5,391
	Sep	141	0	141	0.32	2,893	920	6,734	0	6,734	0	123,539	0	141
	Annual	165,938	0	165,606	1.68		4,201	96,200	0	96,200	0		0	165,938
1980	Oct	161	0	161	0.22	2,793	626	3,848	0	3,848	0	119,225	0	161
	Nov	192	0	191	-0.02	2,679	-45	8,658	0	8,658	0	110,804	0	192
	Dec	5	0	5	-0.01	2,516	-36	8,658	0	8,658	0	102,186	0	5
	Jan	149	0	148	-0.16	2,386	-380	4,810	0	4,810	0	97,905	0	149
	Feb	0	0	0	-0.07	2,280	-170	5,772	0	5,772	0	92,303	0	0
	Mar	111	0	111	0.03	2,089	65	11,544	0	11,544	0	80,805	0	111
	Apr	17,830	0	17,794	0.19	1,937	367	19,240	0	19,240	0	78,992	0	17,830
	May	44,966	0	44,876	0.32	2,344	740	2,886	0	2,886	0	120,243	0	44,966
	Jun	59,689	0	59,570	0.57	3,182	1,813	5,772	0	5,772	0	172,227	0	59,689
	Jul	17,628	0	17,593	0.45	3,628	1,646	10,582	0	10,582	0	177,592	0	17,628
	Aug	2,742	0	2,737	0.31	3,623	1,136	7,696	0	7,696	0	171,497	0	2,742
	Sep	2,499	0	2,494	0.22	3,543	781	6,734	0	6,734	0	166,477	0	2,499
	Annual	145,972	0	145,680	2.05		6,542	96,200	0	96,200	0		0	145,972

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1981	Oct	329	0	328	0.13	3,476	440	3,848	0	3,848	0	162,517	0	329
	Nov	385	0	384	0.06	3,382	219	8,658	0	8,658	0	154,024	0	385
	Dec	42	0	42	0.07	3,246	218	8,658	0	8,658	0	145,191	0	42
	Jan	9	0	9	0.06	3,138	195	4,810	0	4,810	0	140,194	0	9
	Feb	8	0	8	0.10	3,052	291	5,772	0	5,772	0	134,139	0	8
	Mar	103	0	103	0.08	2,909	241	11,544	0	11,544	0	122,457	0	103
	Apr	11,453	0	11,430	0.26	2,737	717	19,240	0	19,240	0	113,930	0	11,453
	May	18,171	0	18,134	0.26	2,786	721	2,886	0	2,886	0	128,457	0	18,171
	Jun	19,878	0	19,839	0.49	3,012	1,477	5,772	0	5,772	0	141,047	0	19,878
	Jul	3,837	0	3,830	0.35	3,052	1,069	10,582	0	10,582	0	133,226	0	3,837
	Aug	944	0	942	0.23	2,929	671	7,696	0	7,696	0	125,801	0	944
	Sep	1,039	0	1,037	0.22	2,814	617	6,734	0	6,734	0	119,487	0	1,039
	Annual	56,198	0	56,086	2.31		6,876	96,200	0	96,200	0		0	56,198
1982	Oct	7,195	0	7,180	0.05	2,788	149	3,848	0	3,848	0	122,670	0	7,195
	Nov	818	0	817	0.10	2,744	284	8,658	0	8,658	0	114,545	0	818
	Dec	32	0	32	0.06	2,587	151	8,658	0	8,658	0	105,767	0	32
	Jan	1	0	1	-0.10	2,456	-246	4,810	0	4,810	0	101,204	0	1
	Feb	1	0	1	-0.10	2,351	-223	5,772	0	5,772	0	95,657	0	1
	Mar	1,312	0	1,309	0.05	2,178	104	11,544	0	11,544	0	85,318	0	1,312
	Apr	23,320	0	23,274	0.33	2,102	687	19,240	0	19,240	0	88,665	0	23,320
	May	45,559	0	45,468	0.22	2,544	561	2,886	0	2,886	0	130,687	0	45,559
	Jun	52,379	0	52,274	0.48	3,294	1,570	5,772	0	5,772	0	175,619	0	52,379
	Jul	19,962	0	19,922	0.21	3,696	787	10,582	0	10,582	0	184,171	0	19,962
	Aug	9,938	0	9,918	0.01	3,768	47	7,696	0	7,696	0	186,347	0	9,938
	Sep	14,228	0	14,200	0.03	3,828	131	6,734	0	6,734	0	193,682	0	14,228
	Annual	174,745	0	174,395	1.35		4,000	96,200	0	96,200	0		0	174,745
1983	Oct	5,189	0	5,178	0.10	3,879	390	3,848	0	3,848	0	194,622	0	5,189
	Nov	2,485	0	2,480	-0.03	3,847	-97	8,658	0	8,658	0	188,542	0	2,485
	Dec	1,518	0	1,515	-0.06	3,766	-230	8,658	0	8,658	0	181,628	0	1,518
	Jan	1,001	0	999	-0.02	3,696	-74	4,810	0	4,810	0	177,892	0	1,001
	Feb	739	0	737	-0.03	3,635	-111	5,772	0	5,772	0	172,968	0	739
	Mar	3,335	0	3,328	-0.01	3,540	-18	11,544	0	11,544	0	164,771	0	3,335
	Apr	11,983	0	11,959	0.19	3,420	653	19,240	0	19,240	0	156,837	0	11,983
	May	34,551	0	34,482	0.33	3,577	1,175	2,886	0	2,886	0	187,258	0	34,551
	Jun	55,827	0	55,716	0.26	4,080	1,072	5,772	0	5,772	0	236,130	0	55,827
	Jul	29,006	0	28,948	0.39	4,455	1,720	10,582	0	10,582	0	252,775	0	29,006
	Aug	6,337	0	6,324	0.08	4,535	345	7,696	0	7,696	0	251,058	0	6,337
	Sep	1,677	0	1,674	0.16	4,496	730	6,734	0	6,734	0	245,268	0	1,677
	Annual	153,648	0	153,341	1.37		5,554	96,200	0	96,200	0		0	153,648
1984	Oct	4,640	0	4,630	0.04	4,468	180	3,848	0	3,848	0	245,871	0	4,640
	Nov	480	0	479	-0.13	4,431	-589	8,658	0	8,658	0	238,281	0	480
	Dec	301	0	300	-0.14	4,347	-606	8,658	0	8,658	0	230,530	0	301
	Jan	447	0	446	0.00	4,280	-18	4,810	0	4,810	0	226,184	0	447
	Feb	648	0	646	0.06	4,226	274	5,772	0	5,772	0	220,785	0	648
	Mar	3,257	0	3,250	0.06	4,146	266	11,544	0	11,544	0	212,225	0	3,257
	Apr	19,742	0	19,702	0.17	4,095	697	19,240	0	19,240	0	211,991	0	19,742
	May	47,213	0	47,119	0.45	4,326	1,963	2,886	0	2,886	0	254,261	0	47,213
	Jun	41,963	0	41,879	0.33	4,727	1,542	5,772	0	5,772	0	288,826	0	41,963
	Jul	9,897	0	9,877	0.35	4,883	1,705	10,582	0	10,582	0	286,417	0	9,897
	Aug	6,165	0	6,153	0.27	4,858	1,305	7,696	0	7,696	0	283,568	0	6,165
	Sep	2,167	0	2,163	0.20	4,819	948	6,734	0	6,734	0	278,049	0	2,167
	Annual	136,919	0	136,646	1.66		7,665	96,200	0	96,200	0		0	136,919
1985	Oct	7,925	0	7,909	-0.20	4,817	-961	3,848	0	3,848	0	283,071	0	7,925
	Nov	4,065	0	4,056	0.07	4,818	355	8,658	0	8,658	0	278,115	0	4,065
	Dec	1,703	0	1,699	-0.03	4,763	-127	8,658	0	8,658	0	271,283	0	1,703
	Jan	1,436	0	1,433	-0.01	4,715	-51	4,810	0	4,810	0	267,957	0	1,436
	Feb	718	0	717	-0.01	4,675	-47	5,772	0	5,772	0	262,949	0	718
	Mar	6,729	0	6,715	-0.02	4,626	-87	11,544	0	11,544	0	258,208	0	6,729
	Apr	39,255	0	39,176	0.02	4,698	74	19,240	0	19,240	0	278,070	0	39,255
	May	53,168	0	53,061	0.25	5,020	1,272	2,886	0	2,886	0	326,974	0	53,168
	Jun	54,758	0	54,648	0.38	5,458	2,081	5,772	0	5,772	0	373,770	0	54,758
	Jul	22,411	0	22,367	0.25	5,715	1,457	10,582	0	10,582	0	384,098	0	22,411
	Aug	5,139	0	5,129	0.29	5,741	1,656	7,696	0	7,696	0	379,875	0	5,139
	Sep	6,088	0	6,076	0.06	5,719	344	6,734	0	6,734	0	378,872	0	6,088
	Annual	203,394	0	202,987	1.06		5,964	96,200	0	96,200	0		0	203,394

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Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1986	Oct	9,054	0	9,036	-0.02	5,737	-122	3,848	0	3,848	0	384,182	0	9,054
	Nov	2,354	0	2,349	-0.06	5,734	-338	8,658	0	8,658	0	378,211	0	2,354
	Dec	1,355	0	1,352	0.02	5,676	108	8,658	0	8,658	0	370,797	0	1,355
	Jan	1,273	0	1,270	0.06	5,626	363	4,810	0	4,810	0	366,894	0	1,273
	Feb	1,202	0	1,200	-0.04	5,590	-245	5,772	0	5,772	0	362,567	0	1,202
	Mar	11,633	0	11,609	0.14	5,568	779	11,544	0	11,544	0	361,853	0	11,633
	Apr	28,386	0	28,329	0.01	5,605	78	19,240	0	19,240	0	370,864	0	28,386
	May	45,210	0	45,120	0.25	5,775	1,451	2,886	0	2,886	10,317	401,330	10,337	34,873
	Jun	51,815	0	51,712	0.21	5,905	1,248	5,772	0	5,772	44,691	401,330	44,781	7,034
	Jul	20,496	0	20,455	0.18	5,905	1,057	10,582	0	10,582	8,815	401,330	8,833	11,663
	Aug	3,687	0	3,680	0.15	5,885	897	7,696	0	7,696	0	396,417	0	3,687
	Sep	7,236	0	7,222	-0.03	5,867	-185	6,734	0	6,734	0	397,090	0	7,236
	Annual	183,701	0	183,333	0.88		5,093	96,200	0	96,200	63,823		63,951	119,750
1987	Oct	16,336	0	16,303	-0.05	5,888	-270	3,848	0	3,848	8,484	401,330	8,502	7,834
	Nov	11,570	0	11,546	-0.11	5,905	-665	8,658	0	8,658	3,553	401,330	3,560	8,009
	Dec	3,241	0	3,235	0.00	5,883	-21	8,658	0	8,658	0	395,928	0	3,241
	Jan	1,171	0	1,169	0.00	5,845	1	4,810	0	4,810	0	392,286	0	1,171
	Feb	848	0	846	-0.03	5,809	-152	5,772	0	5,772	0	387,512	0	848
	Mar	3,562	0	3,555	0.07	5,753	377	11,544	0	11,544	0	379,145	0	3,562
	Apr	26,487	0	26,434	0.18	5,744	1,030	19,240	0	19,240	0	385,309	0	26,487
	May	39,985	0	39,905	0.13	5,838	748	2,886	0	2,886	20,250	401,330	20,291	19,694
	Jun	45,648	0	45,557	0.32	5,905	1,860	5,772	0	5,772	37,925	401,330	38,001	7,647
	Jul	7,951	597	7,339	0.39	5,882	2,318	10,582	0	10,582	0	395,769	0	7,354
	Aug	2,256	2,256	0	0.20	5,821	1,149	7,696	0	7,696	0	386,924	0	0
	Sep	171	171	0	0.29	5,747	1,681	6,734	0	6,734	0	378,509	0	0
	Annual	159,225	3,024	155,889	1.38		8,057	96,200	0	96,200	70,212		70,353	85,848
1988	Oct	833	0	831	0.15	5,694	832	3,848	0	3,848	0	374,661	0	833
	Nov	2,493	0	2,488	-0.06	5,652	-347	8,658	0	8,658	0	368,838	0	2,493
	Dec	188	0	188	-0.06	5,590	-351	8,658	0	8,658	0	360,719	0	188
	Jan	0	0	0	-0.08	5,536	-459	4,810	0	4,810	0	356,368	0	0
	Feb	189	0	189	-0.03	5,491	-165	5,772	0	5,772	0	350,950	0	189
	Mar	2,855	0	2,850	0.18	5,422	968	11,544	0	11,544	0	341,288	0	2,855
	Apr	14,711	0	14,681	0.13	5,354	717	19,240	0	19,240	0	336,012	0	14,711
	May	22,037	0	21,993	0.30	5,410	1,638	2,886	0	2,886	0	353,481	0	22,037
	Jun	23,937	0	23,889	0.23	5,565	1,267	5,772	0	5,772	0	370,331	0	23,937
	Jul	4,647	0	4,638	0.33	5,605	1,837	10,582	0	10,582	0	362,550	0	4,647
	Aug	3,374	0	3,367	0.09	5,549	491	7,696	0	7,696	0	357,731	0	3,374
	Sep	1,398	0	1,395	0.17	5,500	955	6,734	0	6,734	0	351,437	0	1,398
	Annual	76,663	0	76,509	1.34		7,382	96,200	0	96,200	0		0	76,663
1989	Oct	145	0	145	0.19	5,450	1,029	3,848	0	3,848	0	346,705	0	145
	Nov	96	0	96	0.03	5,388	146	8,658	0	8,658	0	337,997	0	96
	Dec	0	0	0	0.03	5,306	182	8,658	0	8,658	0	329,157	0	0
	Jan	0	0	0	-0.05	5,244	-263	4,810	0	4,810	0	324,610	0	0
	Feb	373	0	372	-0.01	5,198	77	5,772	0	5,772	0	319,288	0	373
	Mar	12,034	0	12,010	0.15	5,171	781	11,544	0	11,544	0	318,972	0	12,034
	Apr	25,700	0	25,649	0.33	5,191	1,738	19,240	0	19,240	0	323,643	0	25,700
	May	20,823	0	20,781	0.44	5,286	2,334	2,886	0	2,886	0	339,204	0	20,823
	Jun	11,328	0	11,305	0.47	5,373	2,539	5,772	0	5,772	0	342,199	0	11,328
	Jul	2,484	0	2,479	0.37	5,341	1,974	10,582	0	10,582	0	332,122	0	2,484
	Aug	2,593	0	2,588	0.22	5,264	1,157	7,696	0	7,696	0	325,857	0	2,593
	Sep	601	0	600	0.30	5,198	1,578	6,734	0	6,734	0	318,145	0	601
	Annual	76,178	0	76,025	2.48		13,117	96,200	0	96,200	0		0	76,178
1990	Oct	2,309	0	2,305	0.11	5,151	563	3,848	0	3,848	0	316,038	0	2,309
	Nov	5	0	5	0.12	5,099	630	8,658	0	8,658	0	306,755	0	5
	Dec	0	0	0	0.05	5,016	276	8,658	0	8,658	0	297,822	0	0
	Jan	0	0	0	0.00	4,954	8	4,810	0	4,810	0	293,004	0	0
	Feb	0	0	0	0.04	4,905	183	5,772	0	5,772	0	287,048	0	0
	Mar	855	0	853	0.10	4,825	479	11,544	0	11,544	0	275,878	0	855
	Apr	10,206	0	10,186	0.08	4,729	375	19,240	0	19,240	0	266,449	0	10,206
	May	25,157	0	25,106	0.29	4,782	1,390	2,886	0	2,886	0	287,280	0	25,157
	Jun	24,156	0	24,108	0.49	4,952	2,403	5,772	0	5,772	0	303,213	0	24,156
	Jul	4,260	0	4,251	0.17	4,992	861	10,582	0	10,582	0	296,021	0	4,260
	Aug	2,371	0	2,366	0.13	4,933	630	7,696	0	7,696	0	290,061	0	2,371
	Sep	4,708	0	4,698	0.11	4,893	538	6,734	0	6,734	0	287,488	0	4,708
	Annual	74,027	0	73,879	1.69		8,336	96,200	0	96,200	0		0	74,027

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1991	Oct	6,510	0	6,497	0.03	4,893	126	3,848	0	3,848	0	290,012	0	6,510
	Nov	3,250	0	3,244	0.01	4,880	44	8,658	0	8,658	0	284,553	0	3,250
	Dec	574	0	573	-0.18	4,820	-868	8,658	0	8,658	0	277,336	0	574
	Jan	285	0	285	-0.02	4,766	-85	4,810	0	4,810	0	272,896	0	285
	Feb	814	0	812	0.09	4,719	414	5,772	0	5,772	0	267,521	0	814
	Mar	2,156	0	2,152	0.04	4,646	183	11,544	0	11,544	0	257,946	0	2,156
	Apr	28,726	0	28,668	0.26	4,640	1,215	19,240	0	19,240	0	266,159	0	28,726
	May	44,452	0	44,363	0.34	4,865	1,645	2,886	0	2,886	0	305,991	0	44,452
	Jun	36,351	0	36,278	0.31	5,184	1,596	5,772	0	5,772	0	334,901	0	36,351
	Jul	6,632	0	6,619	0.30	5,293	1,593	10,582	0	10,582	0	329,345	0	6,632
	Aug	5,263	0	5,252	0.26	5,250	1,350	7,696	0	7,696	0	325,552	0	5,263
	Sep	3,832	0	3,825	0.13	5,215	681	6,734	0	6,734	0	321,961	0	3,832
	Annual	138,846	0	138,568	1.56		7,895	96,200	0	96,200	0		0	138,846
1992	Oct	243	0	242	0.13	5,177	679	3,848	0	3,848	0	317,677	0	243
	Nov	1,513	0	1,510	-0.09	5,125	-462	8,658	0	8,658	0	310,991	0	1,513
	Dec	712	0	710	-0.07	5,060	-372	8,658	0	8,658	0	303,416	0	712
	Jan	0	0	0	0.01	5,005	57	4,810	0	4,810	0	298,548	0	0
	Feb	60	0	60	0.03	4,956	160	5,772	0	5,772	0	292,676	0	60
	Mar	2,021	0	2,017	-0.01	4,886	-45	11,544	0	11,544	0	283,194	0	2,021
	Apr	27,985	0	27,929	0.23	4,877	1,104	19,240	0	19,240	0	290,780	0	27,985
	May	47,309	0	47,214	0.06	5,115	286	2,886	0	2,886	0	334,822	0	47,309
	Jun	33,649	0	33,582	0.37	5,436	2,020	5,772	0	5,772	0	360,612	0	33,649
	Jul	8,493	0	8,476	0.23	5,539	1,296	10,582	0	10,582	0	357,209	0	8,493
	Aug	6,724	0	6,711	0.11	5,516	591	7,696	0	7,696	0	355,632	0	6,724
	Sep	955	0	953	0.25	5,476	1,367	6,734	0	6,734	0	348,485	0	955
	Annual	129,664	0	129,405	1.25		6,681	96,200	0	96,200	0		0	129,664
1993	Oct	130	0	130	0.17	5,423	944	3,848	0	3,848	0	343,823	0	130
	Nov	346	0	346	-0.03	5,364	-159	8,658	0	8,658	0	335,669	0	346
	Dec	0	0	0	-0.14	5,289	-729	8,658	0	8,658	0	327,740	0	0
	Jan	8	0	8	-0.12	5,233	-649	4,810	0	4,810	0	323,586	0	8
	Feb	0	0	0	-0.09	5,188	-455	5,772	0	5,772	0	318,269	0	0
	Mar	5,537	0	5,526	0.12	5,130	625	11,544	0	11,544	0	311,626	0	5,537
	Apr	22,296	0	22,251	0.23	5,108	1,179	19,240	0	19,240	0	313,458	0	22,296
	May	46,985	0	46,892	0.15	5,317	811	2,886	0	2,886	0	356,653	0	46,985
	Jun	52,744	0	52,639	0.41	5,711	2,326	5,772	0	5,772	0	401,193	0	52,744
	Jul	17,062	0	17,028	0.54	5,905	3,207	10,582	0	10,582	3,103	401,330	3,109	13,953
	Aug	8,711	0	8,693	0.08	5,905	501	7,696	0	7,696	496	401,330	497	8,213
	Sep	4,614	0	4,604	0.21	5,891	1,250	6,734	0	6,734	0	397,951	0	4,614
	Annual	158,433	0	158,116	1.55		8,851	96,200	0	96,200	3,599		3,606	154,827
1994	Oct	2,269	0	2,264	0.03	5,869	199	3,848	0	3,848	0	396,168	0	2,269
	Nov	446	0	445	-0.05	5,829	-274	8,658	0	8,658	0	388,230	0	446
	Dec	0	0	0	0.03	5,757	160	8,658	0	8,658	0	379,412	0	0
	Jan	12	0	12	0.03	5,697	195	4,810	0	4,810	0	374,419	0	12
	Feb	0	0	0	-0.10	5,653	-580	5,772	0	5,772	0	369,227	0	0
	Mar	5,374	0	5,363	0.09	5,601	488	11,544	0	11,544	0	362,558	0	5,374
	Apr	23,789	0	23,741	0.03	5,590	171	19,240	0	19,240	0	366,889	0	23,789
	May	48,046	0	47,950	0.12	5,757	678	2,886	0	2,886	9,945	401,330	9,964	38,082
	Jun	44,688	0	44,598	0.39	5,905	2,273	5,772	0	5,772	36,553	401,330	36,626	8,062
	Jul	3,264	0	3,258	0.39	5,865	2,278	10,582	0	10,582	0	391,728	0	3,264
	Aug	841	0	839	0.22	5,790	1,286	7,696	0	7,696	0	383,585	0	841
	Sep	3,045	0	3,039	0.06	5,737	369	6,734	0	6,734	0	379,521	0	3,045
	Annual	131,774	0	131,511	1.24		7,243	96,200	0	96,200	46,497		46,590	85,184
1995	Oct	1,646	0	1,643	0.05	5,709	271	3,848	0	3,848	0	377,045	0	1,646
	Nov	1,288	0	1,285	-0.11	5,668	-637	8,658	0	8,658	0	370,309	0	1,288
	Dec	753	0	752	0.03	5,603	154	8,658	0	8,658	0	362,249	0	753
	Jan	466	0	465	-0.10	5,551	-553	4,810	0	4,810	0	358,458	0	466
	Feb	1,946	0	1,942	0.06	5,516	306	5,772	0	5,772	0	354,322	0	1,946
	Mar	9,553	0	9,534	-0.04	5,489	-227	11,544	0	11,544	0	352,539	0	9,553
	Apr	15,685	0	15,654	0.07	5,463	360	19,240	0	19,240	0	348,593	0	15,685
	May	36,096	0	36,024	0.16	5,588	890	2,886	0	2,886	0	380,840	0	36,096
	Jun	55,616	0	55,505	0.37	5,818	2,150	5,772	0	5,772	27,093	401,330	27,148	28,469
	Jul	39,138	0	39,060	0.40	5,905	2,374	10,582	0	10,582	26,104	401,330	26,156	12,982
	Aug	9,233	0	9,214	0.20	5,905	1,181	7,696	0	7,696	337	401,330	338	8,895
	Sep	1,964	0	1,960	0.12	5,882	730	6,734	0	6,734	0	395,826	0	1,964
	Annual	173,384	0	173,037	1.20		6,998	96,200	0	96,200	53,534		53,642	119,742

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1996	Oct	902	0	900	0.20	5,842	1,189	3,848	0	3,848	0	391,689	0	902
	Nov	341	0	340	0.07	5,787	434	8,658	0	8,658	0	382,937	0	341
	Dec	0	0	0	0.04	5,711	249	8,658	0	8,658	0	374,030	0	0
	Jan	0	0	0	-0.02	5,652	-117	4,810	0	4,810	0	369,337	0	0
	Feb	604	0	603	0.00	5,608	28	5,772	0	5,772	0	364,140	0	604
	Mar	2,069	0	2,065	0.10	5,541	530	11,544	0	11,544	0	354,130	0	2,069
	Apr	16,633	0	16,600	0.28	5,477	1,547	19,240	0	19,240	0	349,942	0	16,633
	May	30,764	0	30,703	0.49	5,569	2,745	2,886	0	2,886	0	375,014	0	30,764
	Jun	6,469	0	6,456	0.35	5,674	2,014	5,772	0	5,772	0	373,685	0	6,469
	Jul	2,690	0	2,685	0.25	5,628	1,410	10,582	0	10,582	0	364,377	0	2,690
	Aug	100	0	100	0.21	5,548	1,175	7,696	0	7,696	0	355,606	0	100
	Sep	538	0	537	0.17	5,476	953	6,734	0	6,734	0	348,455	0	538
	Annual	61,110	0	60,988	2.17		12,159	96,200	0	96,200	0		0	61,110
1997	Oct	280	0	280	0.08	5,426	440	3,848	0	3,848	0	344,447	0	280
	Nov	989	0	987	-0.09	5,374	-485	8,658	0	8,658	0	337,261	0	989
	Dec	32	0	32	-0.01	5,301	-53	8,658	0	8,658	0	328,687	0	32
	Jan	411	0	410	-0.18	5,245	-954	4,810	0	4,810	0	325,241	0	411
	Feb	208	0	208	0.00	5,202	13	5,772	0	5,772	0	319,663	0	208
	Mar	9,769	0	9,750	0.18	5,163	941	11,544	0	11,544	0	316,928	0	9,769
	Apr	14,178	0	14,150	0.09	5,124	447	19,240	0	19,240	0	311,391	0	14,178
	May	44,667	0	44,578	0.17	5,288	912	2,886	0	2,886	0	352,170	0	44,667
	Jun	48,431	0	48,334	0.35	5,656	1,966	5,772	0	5,772	0	392,767	0	48,431
	Jul	11,906	0	11,882	0.26	5,833	1,528	10,582	0	10,582	0	392,539	0	11,906
	Aug	9,170	0	9,152	0.18	5,833	1,047	7,696	0	7,696	0	392,948	0	9,170
	Sep	6,857	0	6,843	0.12	5,833	724	6,734	0	6,734	0	392,333	0	6,857
	Annual	146,898	0	146,604	1.16		6,526	96,200	0	96,200	0		0	146,898
1998	Oct	5,183	0	5,173	0.08	5,833	486	3,848	0	3,848	0	393,172	0	5,183
	Nov	1,744	0	1,741	0.01	5,806	59	8,658	0	8,658	0	386,196	0	1,744
	Dec	723	0	722	-0.06	5,744	-323	8,658	0	8,658	0	378,583	0	723
	Jan	588	0	587	0.01	5,693	30	4,810	0	4,810	0	374,329	0	588
	Feb	12	0	12	-0.02	5,650	-125	5,772	0	5,772	0	368,694	0	12
	Mar	4,604	0	4,595	0.07	5,592	393	11,544	0	11,544	0	361,352	0	4,604
	Apr	12,800	0	12,774	0.16	5,527	894	19,240	0	19,240	0	353,993	0	12,800
	May	42,288	0	42,203	0.36	5,658	2,039	2,886	0	2,886	0	391,271	0	42,288
	Jun	29,231	0	29,173	0.52	5,863	3,057	5,772	0	5,772	10,284	401,330	10,305	18,926
	Jul	8,925	0	8,908	0.25	5,892	1,472	10,582	0	10,582	0	398,183	0	8,925
	Aug	2,096	0	2,091	0.18	5,851	1,073	7,696	0	7,696	0	391,505	0	2,096
	Sep	366	0	366	0.25	5,789	1,437	6,734	0	6,734	0	383,700	0	366
	Annual	108,561	0	108,344	1.82		10,493	96,200	0	96,200	10,284		10,305	98,256
1999	Oct	3,569	0	3,562	-0.04	5,755	-233	3,848	0	3,848	0	383,647	0	3,569
	Nov	3,090	0	3,083	-0.04	5,732	-217	8,658	0	8,658	0	378,290	0	3,090
	Dec	982	0	980	0.05	5,674	292	8,658	0	8,658	0	370,319	0	982
	Jan	357	0	356	0.04	5,619	211	4,810	0	4,810	0	365,654	0	357
	Feb	424	0	424	0.09	5,572	500	5,772	0	5,772	0	359,805	0	424
	Mar	4,723	0	4,713	0.19	5,511	1,025	11,544	0	11,544	0	351,949	0	4,723
	Apr	13,031	0	13,005	0.06	5,446	353	19,240	0	19,240	0	345,361	0	13,031
	May	33,264	0	33,198	0.29	5,544	1,631	2,886	0	2,886	0	374,042	0	33,264
	Jun	39,772	0	39,692	0.43	5,789	2,480	5,772	0	5,772	4,152	401,330	4,161	35,611
	Jul	12,734	0	12,709	0.22	5,905	1,307	10,582	0	10,582	820	401,330	822	11,913
	Aug	13,250	0	13,224	0.09	5,905	512	7,696	0	7,696	5,016	401,330	5,026	8,224
	Sep	4,298	0	4,289	0.14	5,892	799	6,734	0	6,734	0	398,086	0	4,298
	Annual	129,493	0	129,234	1.52		8,660	96,200	0	96,200	9,988		10,008	119,485
2000	Oct	677	0	675	0.25	5,859	1,466	3,848	0	3,848	0	393,447	0	677
	Nov	23	0	23	0.13	5,799	754	8,658	0	8,658	0	384,058	0	23
	Dec	0	0	0	0.06	5,720	364	8,658	0	8,658	0	375,036	0	0
	Jan	0	0	0	-0.04	5,661	-201	4,810	0	4,810	0	370,427	0	0
	Feb	0	0	0	0.08	5,612	457	5,772	0	5,772	0	364,198	0	0
	Mar	796	0	794	0.03	5,536	139	11,544	0	11,544	0	353,310	0	796
	Apr	16,061	0	16,029	0.32	5,465	1,738	19,240	0	19,240	0	348,361	0	16,061
	May	21,265	0	21,222	0.48	5,513	2,662	2,886	0	2,886	0	364,035	0	21,265
	Jun	5,253	0	5,243	0.49	5,569	2,724	5,772	0	5,772	0	360,782	0	5,253
	Jul	103	0	102	0.49	5,496	2,680	10,582	0	10,582	0	347,623	0	103
	Aug	257	0	256	0.42	5,392	2,261	7,696	0	7,696	0	337,922	0	257
	Sep	0	0	0	0.42	5,306	2,222	6,734	0	6,734	0	328,966	0	0
	Annual	44,435	0	44,346	3.13		17,266	96,200	0	96,200	0		0	44,435

Attachment 1. Heron Reservoir Monthly Operations Study - 1984 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
2001	Oct	925	0	923	0.00	5,250	8	3,848	0	3,848	0	326,033	0	925
	Nov	246	0	246	-0.03	5,197	-149	8,658	0	8,658	0	317,770	0	246
	Dec	0	0	0	0.03	5,116	172	8,658	0	8,658	0	308,940	0	0
	Jan	0	0	0	-0.07	5,056	-372	4,810	0	4,810	0	304,502	0	0
	Feb	0	0	0	0.03	5,010	155	5,772	0	5,772	0	298,575	0	0
	Mar	1,673	0	1,670	0.04	4,937	209	11,544	0	11,544	0	288,491	0	1,673
	Apr	19,625	0	19,585	0.20	4,888	973	19,240	0	19,240	0	287,864	0	19,625
	May	51,373	0	51,271	0.32	5,101	1,655	2,886	0	2,886	0	334,593	0	51,373
	Jun	29,570	0	29,511	0.55	5,412	2,964	5,772	0	5,772	0	355,368	0	29,570
	Jul	4,789	0	4,780	0.29	5,474	1,596	10,582	0	10,582	0	347,970	0	4,789
	Aug	4,982	0	4,972	0.25	5,422	1,342	7,696	0	7,696	0	343,904	0	4,982
	Sep	313	0	312	0.40	5,363	2,131	6,734	0	6,734	0	335,351	0	313
	Annual	113,496	0	113,269	2.01		10,685	96,200	0	96,200	0		0	113,496
2002	Oct	66	0	66	0.23	5,300	1,196	3,848	0	3,848	0	330,373	0	66
	Nov	25	0	25	0.02	5,236	103	8,658	0	8,658	0	321,637	0	25
	Dec	0	0	0	-0.01	5,154	-66	8,658	0	8,658	0	313,045	0	0
	Jan	0	0	0	0.03	5,090	133	4,810	0	4,810	0	308,102	0	0
	Feb	0	0	0	0.08	5,040	406	5,772	0	5,772	0	301,924	0	0
	Mar	897	0	896	0.16	4,961	792	11,544	0	11,544	0	290,484	0	897
	Apr	4,885	0	4,875	0.34	4,835	1,662	19,240	0	19,240	0	274,456	0	4,885
	May	932	0	930	0.57	4,738	2,714	2,886	0	2,886	0	269,787	0	932
	Jun	171	0	170	0.66	4,673	3,066	5,772	0	5,772	0	261,119	0	171
	Jul	0	0	0	0.42	4,566	1,897	10,582	0	10,582	0	248,639	0	0
	Aug	0	0	0	0.42	4,449	1,884	7,696	0	7,696	0	239,060	0	0
	Sep	200	0	200	0.05	4,361	206	6,734	0	6,734	0	232,319	0	200
	Annual	7,176	0	7,162	2.96		13,993	96,200	0	96,200	0		0	7,176
2003	Oct	189	0	189	0.06	4,303	270	3,848	0	3,848	0	228,390	0	189
	Nov	175	0	175	0.02	4,232	68	8,658	0	8,658	0	219,838	0	175
	Dec	0	0	0	-0.01	4,134	-62	8,658	0	8,658	0	211,242	0	0
	Jan	0	0	0	0.09	4,054	371	4,810	0	4,810	0	206,061	0	0
	Feb	0	0	0	-0.05	3,990	-216	5,772	0	5,772	0	200,505	0	0
	Mar	1,429	0	1,426	0.15	3,891	570	11,544	0	11,544	0	189,817	0	1,429
	Apr	11,657	0	11,634	0.28	3,771	1,042	19,240	0	19,240	0	181,169	0	11,657
	May	26,743	0	26,690	0.39	3,854	1,502	2,886	0	2,886	0	203,471	0	26,743
	Jun	18,996	0	18,958	0.56	4,056	2,287	5,772	0	5,772	0	214,370	0	18,996
	Jul	796	0	795	0.56	4,050	2,255	10,582	0	10,582	0	202,328	0	796
	Aug	667	0	666	0.23	3,930	910	7,696	0	7,696	0	194,388	0	667
	Sep	3,782	0	3,774	0.15	3,860	592	6,734	0	6,734	0	190,836	0	3,782
	Annual	64,435	0	64,306	2.42		9,589	96,200	0	96,200	0		0	64,435
2004	Oct	468	0	467	0.17	3,813	645	3,848	0	3,848	0	186,810	0	468
	Nov	646	0	645	-0.02	3,736	-73	8,658	0	8,658	0	178,870	0	646
	Dec	177	0	176	0.04	3,623	135	8,658	0	8,658	0	170,254	0	177
	Jan	0	0	0	0.00	3,526	2	4,810	0	4,810	0	165,442	0	0
	Feb	0	0	0	-0.05	3,448	-158	5,772	0	5,772	0	159,829	0	0
	Mar	11,506	0	11,483	0.24	3,400	814	11,544	0	11,544	0	158,954	0	11,506
	Apr	15,557	0	15,526	0.12	3,361	419	19,240	0	19,240	0	154,821	0	15,557
	May	30,242	0	30,182	0.52	3,517	1,840	2,886	0	2,886	0	180,277	0	30,242
	Jun	20,482	0	20,441	0.56	3,784	2,124	5,772	0	5,772	0	192,821	0	20,482
	Jul	2,240	0	2,236	0.46	3,799	1,733	10,582	0	10,582	0	182,742	0	2,240
	Aug	265	0	264	0.46	3,672	1,693	7,696	0	7,696	0	173,617	0	265
	Sep	4,364	0	4,356	0.28	3,585	991	6,734	0	6,734	0	170,248	0	4,364
	Annual	85,947	0	85,775	2.78		10,164	96,200	0	96,200	0		0	85,947
2005	Oct	2,985	0	2,979	0.09	3,552	333	3,848	0	3,848	0	169,046	0	2,985
	Nov	1,774	0	1,770	0.09	3,490	308	8,658	0	8,658	0	161,850	0	1,774
	Dec	295	0	295	0.02	3,372	76	8,658	0	8,658	0	153,410	0	295
	Jan	477	0	476	-0.11	3,276	-372	4,810	0	4,810	0	149,448	0	477
	Feb	508	0	507	-0.11	3,205	-356	5,772	0	5,772	0	144,539	0	508
	Mar	2,099	0	2,094	0.11	3,090	326	11,544	0	11,544	0	134,764	0	2,099
	Apr	31,720	0	31,657	0.16	3,107	494	19,240	0	19,240	0	146,686	0	31,720
	May	46,428	0	46,335	0.34	3,507	1,182	2,886	0	2,886	0	188,953	0	46,428
	Jun	50,208	0	50,108	0.49	4,064	1,976	5,772	0	5,772	0	231,313	0	50,208
	Jul	13,347	0	13,320	0.60	4,313	2,589	10,582	0	10,582	0	231,462	0	13,347
	Aug	4,439	0	4,430	0.36	4,287	1,526	7,696	0	7,696	0	226,670	0	4,439
	Sep	4,030	0	4,022	0.28	4,239	1,188	6,734	0	6,734	0	222,769	0	4,030
	Annual	158,309	0	157,992	2.30		9,271	96,200	0	96,200	0		0	158,309

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1936	Oct	2,438	0	2,433	0.11	3,083	352	3,848	0	3,848	0	138,233	0	2,438
	Nov	339	0	339	0.05	3,001	142	8,658	0	8,658	0	129,772	0	339
	Dec	0	0	0	0.03	2,860	81	8,658	0	8,658	0	121,033	0	0
	Jan	29	0	29	-0.02	2,746	-48	4,810	0	4,810	0	116,299	0	29
	Feb	0	0	0	-0.07	2,652	-197	5,772	0	5,772	0	110,724	0	0
	Mar	5,042	0	5,032	0.16	2,531	401	11,544	0	11,544	0	103,812	0	5,042
	Apr	39,972	0	39,892	0.13	2,652	332	19,240	0	19,240	0	124,132	0	39,972
	May	56,339	0	56,227	0.33	3,244	1,068	2,886	0	2,886	0	176,405	0	56,339
	Jun	31,223	0	31,160	0.46	3,800	1,753	5,772	0	5,772	0	200,040	0	31,223
	Jul	7,534	0	7,519	0.34	3,925	1,333	10,582	0	10,582	0	195,644	0	7,534
	Aug	7,462	0	7,447	0.25	3,890	990	7,696	0	7,696	0	194,405	0	7,462
	Sep	4,561	0	4,552	0.08	3,867	302	6,734	0	6,734	0	191,921	0	4,561
	Annual	154,940	0	154,630	1.84		6,508	96,200	0	96,200	0		0	154,940
1937	Oct	2,060	0	2,056	0.07	3,839	277	3,848	0	3,848	0	189,852	0	2,060
	Nov	2,811	0	2,805	0.08	3,787	295	8,658	0	8,658	0	183,704	0	2,811
	Dec	619	0	617	-0.07	3,695	-249	8,658	0	8,658	0	175,912	0	619
	Jan	111	0	111	-0.14	3,612	-514	4,810	0	4,810	0	171,728	0	111
	Feb	116	0	116	-0.13	3,545	-473	5,772	0	5,772	0	166,545	0	116
	Mar	999	0	997	0.00	3,427	-15	11,544	0	11,544	0	156,013	0	999
	Apr	30,582	0	30,521	0.28	3,426	948	19,240	0	19,240	0	166,346	0	30,582
	May	52,023	0	51,918	0.34	3,811	1,285	2,886	0	2,886	0	214,094	0	52,023
	Jun	39,087	0	39,009	0.44	4,293	1,904	5,772	0	5,772	0	245,427	0	39,087
	Jul	9,996	0	9,976	0.39	4,455	1,734	10,582	0	10,582	0	243,086	0	9,996
	Aug	1,518	0	1,515	0.40	4,399	1,760	7,696	0	7,696	0	235,145	0	1,518
	Sep	518	0	517	0.19	4,316	827	6,734	0	6,734	0	228,101	0	518
	Annual	140,441	0	140,160	1.84		7,780	96,200	0	96,200	0		0	140,441
1938	Oct	465	0	464	0.16	4,254	701	3,848	0	3,848	0	224,016	0	465
	Nov	46	0	46	0.09	4,180	392	8,658	0	8,658	0	215,011	0	46
	Dec	0	0	0	-0.08	4,080	-334	8,658	0	8,658	0	206,687	0	0
	Jan	0	0	0	-0.08	4,005	-333	4,810	0	4,810	0	202,210	0	0
	Feb	0	0	0	-0.13	3,946	-504	5,772	0	5,772	0	196,942	0	0
	Mar	2,109	0	2,105	0.01	3,855	52	11,544	0	11,544	0	187,451	0	2,109
	Apr	26,499	0	26,446	0.17	3,836	668	19,240	0	19,240	0	193,989	0	26,499
	May	40,280	0	40,199	0.27	4,089	1,101	2,886	0	2,886	0	230,201	0	40,280
	Jun	52,815	0	52,709	0.35	4,535	1,566	5,772	0	5,772	0	275,572	0	52,815
	Jul	12,021	0	11,997	0.38	4,768	1,811	10,582	0	10,582	0	275,177	0	12,021
	Aug	2,498	0	2,493	0.38	4,734	1,822	7,696	0	7,696	0	268,152	0	2,498
	Sep	5,115	0	5,105	0.14	4,689	643	6,734	0	6,734	0	265,880	0	5,115
	Annual	141,848	0	141,565	1.67		7,585	96,200	0	96,200	0		0	141,848
1939	Oct	3,148	0	3,142	0.19	4,671	864	3,848	0	3,848	0	264,310	0	3,148
	Nov	495	0	494	0.05	4,620	229	8,658	0	8,658	0	255,918	0	495
	Dec	0	0	0	0.00	4,531	21	8,658	0	8,658	0	247,239	0	0
	Jan	0	0	0	-0.13	4,463	-560	4,810	0	4,810	0	242,989	0	0
	Feb	0	0	0	-0.06	4,411	-267	5,772	0	5,772	0	237,484	0	0
	Mar	4,784	0	4,774	0.08	4,342	338	11,544	0	11,544	0	230,376	0	4,784
	Apr	20,601	0	20,560	0.24	4,304	1,048	19,240	0	19,240	0	230,648	0	20,601
	May	36,278	0	36,206	0.49	4,471	2,177	2,886	0	2,886	0	261,790	0	36,278
	Jun	14,399	0	14,370	0.76	4,663	3,565	5,772	0	5,772	0	266,823	0	14,399
	Jul	743	0	742	0.44	4,627	2,039	10,582	0	10,582	0	254,944	0	743
	Aug	374	0	373	0.31	4,521	1,406	7,696	0	7,696	0	246,216	0	374
	Sep	2,402	0	2,398	0.18	4,447	785	6,734	0	6,734	0	241,094	0	2,402
	Annual	83,224	0	83,058	2.55		11,644	96,200	0	96,200	0		0	83,224
1940	Oct	151	0	151	0.15	4,396	664	3,848	0	3,848	0	236,734	0	151
	Nov	79	0	79	0.02	4,324	93	8,658	0	8,658	0	228,061	0	79
	Dec	0	0	0	-0.01	4,228	-50	8,658	0	8,658	0	219,453	0	0
	Jan	0	0	0	-0.15	4,155	-625	4,810	0	4,810	0	215,268	0	0
	Feb	0	0	0	-0.09	4,099	-361	5,772	0	5,772	0	209,857	0	0
	Mar	3,514	0	3,507	0.07	4,018	300	11,544	0	11,544	0	201,519	0	3,514
	Apr	16,412	0	16,379	0.24	3,946	959	19,240	0	19,240	0	197,699	0	16,412
	May	32,702	0	32,636	0.33	4,089	1,352	2,886	0	2,886	0	226,098	0	32,702
	Jun	13,046	0	13,020	0.40	4,286	1,703	5,772	0	5,772	0	231,642	0	13,046
	Jul	1,097	0	1,095	0.44	4,253	1,853	10,582	0	10,582	0	220,302	0	1,097
	Aug	1,046	0	1,044	0.33	4,143	1,383	7,696	0	7,696	0	212,267	0	1,046
	Sep	1,310	0	1,307	0.20	4,060	818	6,734	0	6,734	0	206,023	0	1,310
	Annual	69,357	0	69,218	1.94		8,090	96,200	0	96,200	0		0	69,357

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1941	Oct	2,929	0	2,923	0.17	4,014	667	3,848	0	3,848	0	204,431	0	2,929
	Nov	358	0	357	-0.09	3,956	-365	8,658	0	8,658	0	196,495	0	358
	Dec	328	0	328	-0.17	3,860	-643	8,658	0	8,658	0	188,808	0	328
	Jan	94	0	94	-0.11	3,786	-412	4,810	0	4,810	0	184,504	0	94
	Feb	57	0	57	0.01	3,721	24	5,772	0	5,772	0	178,766	0	57
	Mar	1,501	0	1,498	0.01	3,611	27	11,544	0	11,544	0	168,692	0	1,501
	Apr	10,581	0	10,560	0.05	3,472	160	19,240	0	19,240	0	159,853	0	10,581
	May	54,190	0	54,081	0.27	3,738	1,006	2,886	0	2,886	0	210,041	0	54,190
	Jun	55,965	0	55,853	0.17	4,342	724	5,772	0	5,772	0	259,398	0	55,965
	Jul	40,854	0	40,773	0.39	4,749	1,863	10,582	0	10,582	0	287,726	0	40,854
	Aug	8,527	0	8,510	0.32	4,880	1,551	7,696	0	7,696	0	286,989	0	8,527
	Sep	4,844	0	4,834	0.10	4,866	467	6,734	0	6,734	0	284,622	0	4,844
	Annual	180,229	0	179,869	1.10		5,069	96,200	0	96,200	0		0	180,229
1942	Oct	23,335	0	23,288	-0.05	4,945	-264	3,848	0	3,848	0	304,327	0	23,335
	Nov	7,425	0	7,410	0.07	5,027	335	8,658	0	8,658	0	302,744	0	7,425
	Dec	3,107	0	3,101	-0.09	4,997	-471	8,658	0	8,658	0	297,659	0	3,107
	Jan	1,656	0	1,653	0.03	4,959	154	4,810	0	4,810	0	294,348	0	1,656
	Feb	886	0	884	-0.01	4,922	-53	5,772	0	5,772	0	289,513	0	886
	Mar	3,022	0	3,016	0.01	4,861	61	11,544	0	11,544	0	280,924	0	3,022
	Apr	36,787	0	36,713	0.07	4,900	366	19,240	0	19,240	0	298,031	0	36,787
	May	41,562	0	41,479	0.45	5,146	2,337	2,886	0	2,886	0	334,287	0	41,562
	Jun	49,328	0	49,230	0.53	5,496	2,899	5,772	0	5,772	0	374,845	0	49,328
	Jul	11,167	0	11,144	0.45	5,670	2,549	10,582	0	10,582	0	372,859	0	11,167
	Aug	2,018	0	2,014	0.36	5,628	2,016	7,696	0	7,696	0	365,161	0	2,018
	Sep	806	0	804	0.35	5,559	1,918	6,734	0	6,734	0	357,314	0	806
	Annual	181,099	0	180,737	2.16		11,845	96,200	0	96,200	0		0	181,099
1943	Oct	228	0	228	0.22	5,502	1,234	3,848	0	3,848	0	352,459	0	228
	Nov	29	0	29	0.10	5,439	563	8,658	0	8,658	0	343,267	0	29
	Dec	0	0	0	-0.02	5,357	-114	8,658	0	8,658	0	334,723	0	0
	Jan	0	0	0	-0.01	5,295	-66	4,810	0	4,810	0	329,979	0	0
	Feb	0	0	0	0.04	5,245	206	5,772	0	5,772	0	324,002	0	0
	Mar	2,175	0	2,171	0.07	5,171	356	11,544	0	11,544	0	314,273	0	2,175
	Apr	32,011	0	31,947	0.29	5,178	1,479	19,240	0	19,240	0	325,501	0	32,011
	May	30,301	0	30,241	0.37	5,349	1,966	2,886	0	2,886	0	350,890	0	30,301
	Jun	24,207	0	24,159	0.41	5,538	2,296	5,772	0	5,772	0	366,981	0	24,207
	Jul	5,645	0	5,634	0.46	5,577	2,586	10,582	0	10,582	0	359,447	0	5,645
	Aug	2,298	0	2,293	0.23	5,513	1,245	7,696	0	7,696	0	352,799	0	2,298
	Sep	484	0	483	0.31	5,447	1,676	6,734	0	6,734	0	344,872	0	484
	Annual	97,379	0	97,184	2.47		13,426	96,200	0	96,200	0		0	97,379
1944	Oct	197	0	197	0.14	5,391	764	3,848	0	3,848	0	340,457	0	197
	Nov	65	0	65	0.04	5,330	228	8,658	0	8,658	0	331,636	0	65
	Dec	0	0	0	-0.19	5,253	-1,013	8,658	0	8,658	0	323,991	0	0
	Jan	0	0	0	-0.06	5,196	-293	4,810	0	4,810	0	319,473	0	0
	Feb	0	0	0	0.02	5,145	108	5,772	0	5,772	0	313,593	0	0
	Mar	143	0	143	0.05	5,065	259	11,544	0	11,544	0	301,933	0	143
	Apr	11,798	0	11,774	0.22	4,974	1,095	19,240	0	19,240	0	293,372	0	11,798
	May	45,284	0	45,193	0.36	5,122	1,850	2,886	0	2,886	0	333,830	0	45,284
	Jun	53,312	0	53,205	0.49	5,510	2,676	5,772	0	5,772	0	378,587	0	53,312
	Jul	16,151	0	16,118	0.29	5,728	1,657	10,582	0	10,582	0	382,466	0	16,151
	Aug	1,663	0	1,659	0.34	5,710	1,919	7,696	0	7,696	0	374,511	0	1,663
	Sep	162	0	161	0.29	5,640	1,619	6,734	0	6,734	0	366,319	0	162
	Annual	128,773	0	128,515	1.99		10,869	96,200	0	96,200	0		0	128,773
1945	Oct	778	0	777	0.11	5,587	596	3,848	0	3,848	0	362,651	0	778
	Nov	238	0	237	0.00	5,534	-20	8,658	0	8,658	0	354,251	0	238
	Dec	0	0	0	-0.13	5,460	-728	8,658	0	8,658	0	346,321	0	0
	Jan	30	0	30	-0.02	5,403	-107	4,810	0	4,810	0	341,648	0	30
	Feb	97	0	97	0.04	5,355	229	5,772	0	5,772	0	335,744	0	97
	Mar	1,019	0	1,017	-0.02	5,278	-99	11,544	0	11,544	0	325,317	0	1,019
	Apr	18,494	0	18,457	0.16	5,221	824	19,240	0	19,240	0	323,709	0	18,494
	May	52,312	0	52,207	0.41	5,429	2,220	2,886	0	2,886	0	370,810	0	52,312
	Jun	43,964	0	43,876	0.53	5,730	3,019	5,772	0	5,772	15,165	390,730	15,196	28,768
	Jul	9,213	0	9,195	0.32	5,802	1,831	10,582	0	10,582	0	387,511	0	9,213
	Aug	2,278	0	2,273	0.22	5,760	1,253	7,696	0	7,696	0	380,836	0	2,278
	Sep	78	0	77	0.36	5,693	2,060	6,734	0	6,734	0	372,119	0	78
	Annual	128,500	0	128,243	1.96		11,077	96,200	0	96,200	15,165		15,196	113,304

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1946	Oct	247	0	247	0.12	5,637	679	3,848	0	3,848	0	367,839	0	247
	Nov	0	0	0	0.09	5,577	496	8,658	0	8,658	0	358,685	0	0
	Dec	0	0	0	-0.08	5,499	-432	8,658	0	8,658	0	350,459	0	0
	Jan	0	0	0	-0.01	5,440	-51	4,810	0	4,810	0	345,700	0	0
	Feb	0	0	0	0.05	5,391	259	5,772	0	5,772	0	339,669	0	0
	Mar	1,026	0	1,023	0.07	5,313	369	11,544	0	11,544	0	328,779	0	1,026
	Apr	14,955	0	14,925	0.18	5,237	926	19,240	0	19,240	0	323,538	0	14,955
	May	12,222	0	12,197	0.36	5,247	1,897	2,886	0	2,886	0	330,952	0	12,222
	Jun	14,738	0	14,709	0.62	5,309	3,317	5,772	0	5,772	0	336,571	0	14,738
	Jul	1,159	0	1,157	0.38	5,282	2,017	10,582	0	10,582	0	325,128	0	1,159
	Aug	1,277	0	1,275	0.12	5,194	600	7,696	0	7,696	0	318,107	0	1,277
	Sep	1,207	0	1,204	0.24	5,129	1,232	6,734	0	6,734	0	311,345	0	1,207
	Annual	46,830	0	46,736	2.14		11,310	96,200	0	96,200	0		0	46,830
1947	Oct	1,291	0	1,288	0.08	5,084	397	3,848	0	3,848	0	308,388	0	1,291
	Nov	875	0	873	0.03	5,035	153	8,658	0	8,658	0	300,450	0	875
	Dec	261	0	260	0.05	4,960	271	8,658	0	8,658	0	291,782	0	261
	Jan	0	0	0	-0.02	4,900	-116	4,810	0	4,810	0	287,088	0	0
	Feb	61	0	60	0.03	4,851	128	5,772	0	5,772	0	281,249	0	61
	Mar	2,306	0	2,301	0.10	4,779	455	11,544	0	11,544	0	271,552	0	2,306
	Apr	10,606	0	10,585	0.26	4,685	1,221	19,240	0	19,240	0	261,675	0	10,606
	May	31,623	0	31,560	0.25	4,767	1,205	2,886	0	2,886	0	289,144	0	31,623
	Jun	23,815	0	23,768	0.63	4,964	3,144	5,772	0	5,772	0	303,996	0	23,815
	Jul	4,260	0	4,252	0.40	4,994	1,975	10,582	0	10,582	0	295,690	0	4,260
	Aug	4,433	0	4,424	0.16	4,938	777	7,696	0	7,696	0	291,640	0	4,433
	Sep	2,764	0	2,759	0.19	4,898	914	6,734	0	6,734	0	286,751	0	2,764
	Annual	82,294	0	82,130	2.15		10,524	96,200	0	96,200	0		0	82,294
1948	Oct	3,198	0	3,191	0.16	4,869	756	3,848	0	3,848	0	285,338	0	3,198
	Nov	756	0	755	0.03	4,824	140	8,658	0	8,658	0	277,296	0	756
	Dec	102	0	102	-0.05	4,748	-223	8,658	0	8,658	0	268,963	0	102
	Jan	0	0	0	0.01	4,685	41	4,810	0	4,810	0	264,112	0	0
	Feb	0	0	0	-0.01	4,632	-53	5,772	0	5,772	0	258,393	0	0
	Mar	565	0	564	0.02	4,545	77	11,544	0	11,544	0	247,336	0	565
	Apr	22,787	0	22,742	0.21	4,501	951	19,240	0	19,240	0	249,887	0	22,787
	May	45,070	0	44,980	0.30	4,712	1,390	2,886	0	2,886	0	290,591	0	45,070
	Jun	41,393	0	41,310	0.34	5,065	1,741	5,772	0	5,772	0	324,388	0	41,393
	Jul	8,010	0	7,994	0.39	5,199	2,006	10,582	0	10,582	0	319,794	0	8,010
	Aug	2,123	0	2,119	0.30	5,143	1,566	7,696	0	7,696	0	312,651	0	2,123
	Sep	187	0	187	0.24	5,074	1,212	6,734	0	6,734	0	304,892	0	187
	Annual	124,192	0	123,944	1.93		9,602	96,200	0	96,200	0		0	124,192
1949	Oct	97	0	97	0.13	5,020	644	3,848	0	3,848	0	300,497	0	97
	Nov	82	0	82	0.05	4,960	226	8,658	0	8,658	0	291,695	0	82
	Dec	0	0	0	-0.11	4,882	-519	8,658	0	8,658	0	283,556	0	0
	Jan	0	0	0	-0.17	4,826	-825	4,810	0	4,810	0	279,571	0	0
	Feb	0	0	0	-0.07	4,783	-313	5,772	0	5,772	0	274,112	0	0
	Mar	858	0	856	0.07	4,705	314	11,544	0	11,544	0	263,110	0	858
	Apr	20,282	0	20,242	0.12	4,654	576	19,240	0	19,240	0	263,535	0	20,282
	May	40,873	0	40,791	0.30	4,826	1,429	2,886	0	2,886	0	300,011	0	40,873
	Jun	50,619	0	50,517	0.22	5,198	1,126	5,772	0	5,772	0	343,631	0	50,619
	Jul	22,545	0	22,500	0.29	5,447	1,601	10,582	0	10,582	0	353,949	0	22,545
	Aug	3,600	0	3,593	0.36	5,467	1,947	7,696	0	7,696	0	347,899	0	3,600
	Sep	665	0	663	0.27	5,404	1,443	6,734	0	6,734	0	340,385	0	665
	Annual	139,620	0	139,341	1.45		7,647	96,200	0	96,200	0		0	139,620
1950	Oct	255	0	254	0.12	5,351	665	3,848	0	3,848	0	336,127	0	255
	Nov	237	0	237	0.06	5,290	341	8,658	0	8,658	0	327,364	0	237
	Dec	0	0	0	0.02	5,207	123	8,658	0	8,658	0	318,583	0	0
	Jan	0	0	0	-0.06	5,143	-290	4,810	0	4,810	0	314,064	0	0
	Feb	0	0	0	0.03	5,095	167	5,772	0	5,772	0	308,125	0	0
	Mar	1,433	0	1,431	0.09	5,021	430	11,544	0	11,544	0	297,582	0	1,433
	Apr	22,447	0	22,402	0.23	4,983	1,135	19,240	0	19,240	0	299,610	0	22,447
	May	21,610	0	21,566	0.38	5,068	1,912	2,886	0	2,886	0	316,379	0	21,610
	Jun	17,252	0	17,217	0.54	5,185	2,798	5,772	0	5,772	0	325,026	0	17,252
	Jul	2,829	0	2,823	0.35	5,181	1,801	10,582	0	10,582	0	315,466	0	2,829
	Aug	438	0	437	0.40	5,093	2,015	7,696	0	7,696	0	306,192	0	438
	Sep	347	0	346	0.20	5,018	990	6,734	0	6,734	0	298,814	0	347
	Annual	66,848	0	66,714	2.36		12,085	96,200	0	96,200	0		0	66,848

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1951	Oct	213	0	213	0.19	4,964	957	3,848	0	3,848	0	294,222	0	213
	Nov	0	0	0	0.07	4,902	357	8,658	0	8,658	0	285,206	0	0
	Dec	0	0	0	-0.05	4,821	-228	8,658	0	8,658	0	276,776	0	0
	Jan	0	0	0	-0.08	4,761	-389	4,810	0	4,810	0	272,355	0	0
	Feb	0	0	0	0.00	4,713	14	5,772	0	5,772	0	266,569	0	0
	Mar	383	0	382	0.11	4,626	490	11,544	0	11,544	0	254,917	0	383
	Apr	6,484	0	6,471	0.14	4,496	618	19,240	0	19,240	0	241,530	0	6,484
	May	20,752	0	20,711	0.36	4,511	1,616	2,886	0	2,886	0	257,739	0	20,752
	Jun	17,686	0	17,651	0.60	4,642	2,794	5,772	0	5,772	0	266,824	0	17,686
	Jul	960	0	958	0.54	4,626	2,481	10,582	0	10,582	0	254,720	0	960
	Aug	1,355	0	1,352	0.22	4,527	980	7,696	0	7,696	0	247,396	0	1,355
	Sep	361	0	360	0.30	4,447	1,314	6,734	0	6,734	0	239,707	0	361
	Annual	48,195	0	48,098	2.39		11,005	96,200	0	96,200	0		0	48,195
1952	Oct	117	0	117	0.15	4,381	670	3,848	0	3,848	0	235,306	0	117
	Nov	5	0	5	0.03	4,308	116	8,658	0	8,658	0	226,538	0	5
	Dec	0	0	0	-0.18	4,215	-765	8,658	0	8,658	0	218,645	0	0
	Jan	0	0	0	-0.09	4,145	-383	4,810	0	4,810	0	214,218	0	0
	Feb	0	0	0	0.02	4,085	90	5,772	0	5,772	0	208,355	0	0
	Mar	421	0	420	0.10	3,981	387	11,544	0	11,544	0	196,844	0	421
	Apr	27,532	0	27,477	0.15	3,958	601	19,240	0	19,240	0	204,481	0	27,532
	May	52,331	0	52,226	0.33	4,273	1,419	2,886	0	2,886	0	252,402	0	52,331
	Jun	53,698	0	53,591	0.45	4,760	2,159	5,772	0	5,772	0	298,062	0	53,698
	Jul	18,300	0	18,264	0.39	5,004	1,937	10,582	0	10,582	0	303,807	0	18,300
	Aug	5,171	0	5,161	0.32	5,011	1,613	7,696	0	7,696	0	299,658	0	5,171
	Sep	925	0	923	0.26	4,960	1,281	6,734	0	6,734	0	292,566	0	925
	Annual	158,500	0	158,183	1.93		9,125	96,200	0	96,200	0		0	158,500
1953	Oct	151	0	151	0.27	4,905	1,307	3,848	0	3,848	0	287,562	0	151
	Nov	27	0	27	-0.12	4,845	-560	8,658	0	8,658	0	279,491	0	27
	Dec	0	0	0	-0.03	4,767	-146	8,658	0	8,658	0	270,978	0	0
	Jan	0	0	0	0.02	4,704	79	4,810	0	4,810	0	266,089	0	0
	Feb	0	0	0	0.04	4,651	181	5,772	0	5,772	0	260,136	0	0
	Mar	2,550	0	2,545	0.12	4,571	545	11,544	0	11,544	0	250,593	0	2,550
	Apr	14,800	0	14,770	0.23	4,492	1,027	19,240	0	19,240	0	245,096	0	14,800
	May	19,424	0	19,385	0.34	4,542	1,528	2,886	0	2,886	0	260,067	0	19,424
	Jun	30,189	0	30,129	0.48	4,726	2,252	5,772	0	5,772	0	282,172	0	30,189
	Jul	3,469	0	3,462	0.32	4,791	1,536	10,582	0	10,582	0	273,516	0	3,469
	Aug	981	0	979	0.29	4,712	1,387	7,696	0	7,696	0	265,412	0	981
	Sep	0	0	0	0.38	4,631	1,772	6,734	0	6,734	0	256,906	0	0
	Annual	71,592	0	71,449	2.33		10,909	96,200	0	96,200	0		0	71,592
1954	Oct	314	0	313	0.14	4,566	629	3,848	0	3,848	0	252,743	0	314
	Nov	118	0	118	0.03	4,498	121	8,658	0	8,658	0	244,082	0	118
	Dec	0	0	0	-0.03	4,406	-141	8,658	0	8,658	0	235,565	0	0
	Jan	0	0	0	0.02	4,333	73	4,810	0	4,810	0	230,681	0	0
	Feb	0	0	0	0.09	4,272	368	5,772	0	5,772	0	224,541	0	0
	Mar	254	0	253	-0.01	4,173	-48	11,544	0	11,544	0	213,298	0	254
	Apr	18,059	0	18,023	0.27	4,095	1,125	19,240	0	19,240	0	210,956	0	18,059
	May	25,262	0	25,211	0.22	4,203	937	2,886	0	2,886	0	232,344	0	25,262
	Jun	9,660	0	9,641	0.51	4,334	2,197	5,772	0	5,772	0	234,016	0	9,660
	Jul	2,222	0	2,217	0.33	4,288	1,433	10,582	0	10,582	0	224,218	0	2,222
	Aug	1,826	0	1,823	0.26	4,194	1,084	7,696	0	7,696	0	217,261	0	1,826
	Sep	643	0	642	0.21	4,114	864	6,734	0	6,734	0	210,305	0	643
	Annual	58,358	0	58,241	2.03		8,642	96,200	0	96,200	0		0	58,358
1955	Oct	600	0	599	0.15	4,051	609	3,848	0	3,848	0	206,447	0	600
	Nov	7	0	7	0.09	3,974	353	8,658	0	8,658	0	197,444	0	7
	Dec	0	0	0	0.02	3,866	94	8,658	0	8,658	0	188,692	0	0
	Jan	0	0	0	0.00	3,781	-6	4,810	0	4,810	0	183,888	0	0
	Feb	0	0	0	-0.07	3,714	-243	5,772	0	5,772	0	178,359	0	0
	Mar	256	0	256	0.12	3,593	424	11,544	0	11,544	0	166,646	0	256
	Apr	7,157	0	7,143	0.22	3,410	762	19,240	0	19,240	0	153,787	0	7,157
	May	21,648	0	21,604	0.30	3,446	1,032	2,886	0	2,886	0	171,473	0	21,648
	Jun	22,982	0	22,936	0.53	3,683	1,961	5,772	0	5,772	0	186,676	0	22,982
	Jul	2,370	0	2,365	0.28	3,725	1,057	10,582	0	10,582	0	177,402	0	2,370
	Aug	2,948	0	2,943	0.21	3,624	752	7,696	0	7,696	0	171,897	0	2,948
	Sep	356	0	355	0.32	3,529	1,114	6,734	0	6,734	0	164,404	0	356
	Annual	58,325	0	58,208	2.18		7,910	96,200	0	96,200	0		0	58,325

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1956	Oct	32	0	32	0.21	3,440	722	3,848	0	3,848	0	159,866	0	32
	Nov	2	0	2	0.02	3,339	72	8,658	0	8,658	0	151,138	0	2
	Dec	0	0	0	-0.05	3,204	-160	8,658	0	8,658	0	142,640	0	0
	Jan	0	0	0	-0.03	3,101	-100	4,810	0	4,810	0	137,930	0	0
	Feb	0	0	0	0.00	3,019	-8	5,772	0	5,772	0	132,166	0	0
	Mar	4,695	0	4,686	0.14	2,913	417	11,544	0	11,544	0	124,890	0	4,695
	Apr	14,242	0	14,214	0.24	2,804	664	19,240	0	19,240	0	119,200	0	14,242
	May	31,271	0	31,209	0.36	2,976	1,084	2,886	0	2,886	0	146,439	0	31,271
	Jun	21,580	0	21,536	0.53	3,306	1,749	5,772	0	5,772	0	160,454	0	21,580
	Jul	1,031	0	1,029	0.42	3,331	1,403	10,582	0	10,582	0	149,498	0	1,031
	Aug	373	0	372	0.36	3,179	1,137	7,696	0	7,696	0	141,036	0	373
	Sep	0	0	0	0.44	3,049	1,330	6,734	0	6,734	0	132,972	0	0
	Annual	73,226	0	73,079	2.64		8,311	96,200	0	96,200	0		0	73,226
1957	Oct	67	0	67	0.15	2,951	446	3,848	0	3,848	0	128,744	0	67
	Nov	0	0	0	0.07	2,842	205	8,658	0	8,658	0	119,881	0	0
	Dec	0	0	0	0.05	2,687	125	8,658	0	8,658	0	111,097	0	0
	Jan	0	0	0	-0.21	2,565	-549	4,810	0	4,810	0	106,837	0	0
	Feb	0	0	0	0.02	2,465	54	5,772	0	5,772	0	101,011	0	0
	Mar	804	0	803	0.07	2,288	164	11,544	0	11,544	0	90,105	0	804
	Apr	12,375	0	12,351	0.14	2,090	287	19,240	0	19,240	0	82,929	0	12,375
	May	24,397	0	24,348	0.08	2,240	180	2,886	0	2,886	0	104,211	0	24,397
	Jun	56,225	0	56,112	0.33	2,890	967	5,772	0	5,772	0	153,584	0	56,225
	Jul	40,230	0	40,150	0.22	3,520	784	10,582	0	10,582	0	182,368	0	40,230
	Aug	15,164	0	15,134	0.14	3,775	515	7,696	0	7,696	0	189,291	0	15,164
	Sep	3,560	0	3,553	0.33	3,791	1,268	6,734	0	6,734	0	184,841	0	3,560
	Annual	152,822	0	152,516	1.40		4,447	96,200	0	96,200	0		0	152,822
1958	Oct	2,314	0	2,310	0.04	3,752	135	3,848	0	3,848	0	183,169	0	2,314
	Nov	2,930	0	2,924	-0.07	3,705	-271	8,658	0	8,658	0	177,705	0	2,930
	Dec	1,057	0	1,055	0.02	3,613	62	8,658	0	8,658	0	170,040	0	1,057
	Jan	572	0	571	-0.11	3,529	-387	4,810	0	4,810	0	166,189	0	572
	Feb	324	0	323	-0.06	3,462	-207	5,772	0	5,772	0	160,947	0	324
	Mar	1,639	0	1,635	-0.01	3,347	-36	11,544	0	11,544	0	151,074	0	1,639
	Apr	17,306	0	17,272	0.10	3,252	316	19,240	0	19,240	0	148,790	0	17,306
	May	52,315	0	52,211	0.34	3,574	1,203	2,886	0	2,886	0	196,911	0	52,315
	Jun	40,475	0	40,395	0.51	4,103	2,096	5,772	0	5,772	0	229,437	0	40,475
	Jul	4,408	0	4,399	0.43	4,247	1,808	10,582	0	10,582	0	221,447	0	4,408
	Aug	1,712	0	1,709	0.30	4,161	1,243	7,696	0	7,696	0	214,217	0	1,712
	Sep	2,548	0	2,542	0.24	4,089	964	6,734	0	6,734	0	209,061	0	2,548
	Annual	127,600	0	127,345	1.70		6,926	96,200	0	96,200	0		0	127,600
1959	Oct	464	0	463	0.14	4,036	568	3,848	0	3,848	0	205,108	0	464
	Nov	8	0	8	0.08	3,958	306	8,658	0	8,658	0	196,152	0	8
	Dec	0	0	0	0.06	3,849	215	8,658	0	8,658	0	187,279	0	0
	Jan	0	0	0	0.05	3,762	181	4,810	0	4,810	0	182,288	0	0
	Feb	0	0	0	0.00	3,691	9	5,772	0	5,772	0	176,508	0	0
	Mar	215	0	215	0.09	3,566	330	11,544	0	11,544	0	164,849	0	215
	Apr	8,692	0	8,675	0.23	3,395	784	19,240	0	19,240	0	153,499	0	8,692
	May	15,714	0	15,683	0.39	3,396	1,312	2,886	0	2,886	0	164,983	0	15,714
	Jun	16,677	0	16,643	0.45	3,551	1,593	5,772	0	5,772	0	174,262	0	16,677
	Jul	414	0	413	0.43	3,534	1,508	10,582	0	10,582	0	162,585	0	414
	Aug	2,061	0	2,057	0.19	3,400	645	7,696	0	7,696	0	156,301	0	2,061
	Sep	178	0	177	0.34	3,292	1,122	6,734	0	6,734	0	148,621	0	178
	Annual	44,423	0	44,334	2.44		8,573	96,200	0	96,200	0		0	44,423
1960	Oct	5,119	0	5,109	0.01	3,241	48	3,848	0	3,848	0	149,834	0	5,119
	Nov	3,052	0	3,046	0.08	3,204	247	8,658	0	8,658	0	143,975	0	3,052
	Dec	119	0	119	-0.10	3,094	-313	8,658	0	8,658	0	135,749	0	119
	Jan	0	0	0	-0.05	2,993	-143	4,810	0	4,810	0	131,082	0	0
	Feb	40	0	40	-0.04	2,909	-114	5,772	0	5,772	0	125,464	0	40
	Mar	4,213	0	4,204	0.06	2,798	182	11,544	0	11,544	0	117,943	0	4,213
	Apr	37,347	0	37,272	0.22	2,878	630	19,240	0	19,240	0	135,344	0	37,347
	May	32,839	0	32,773	0.31	3,248	1,002	2,886	0	2,886	0	164,230	0	32,839
	Jun	42,375	0	42,290	0.46	3,706	1,717	5,772	0	5,772	0	199,030	0	42,375
	Jul	6,210	0	6,197	0.43	3,902	1,660	10,582	0	10,582	0	192,986	0	6,210
	Aug	513	0	512	0.45	3,809	1,722	7,696	0	7,696	0	184,080	0	513
	Sep	94	0	94	0.31	3,701	1,149	6,734	0	6,734	0	176,292	0	94
	Annual	131,920	0	131,656	2.15		7,786	96,200	0	96,200	0		0	131,920

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1961	Oct	37	0	37	0.06	3,619	218	3,848	0	3,848	0	172,263	0	37
	Nov	5	0	5	0.05	3,525	189	8,658	0	8,658	0	163,421	0	5
	Dec	0	0	0	-0.09	3,397	-310	8,658	0	8,658	0	155,073	0	0
	Jan	0	0	0	0.01	3,295	45	4,810	0	4,810	0	150,218	0	0
	Feb	0	0	0	0.00	3,210	15	5,772	0	5,772	0	144,431	0	0
	Mar	807	0	806	0.00	3,081	0	11,544	0	11,544	0	133,693	0	807
	Apr	17,554	0	17,518	0.17	2,979	519	19,240	0	19,240	0	131,452	0	17,554
	May	35,771	0	35,700	0.34	3,208	1,085	2,886	0	2,886	0	163,180	0	35,771
	Jun	19,251	0	19,212	0.39	3,545	1,383	5,772	0	5,772	0	175,237	0	19,251
	Jul	1,964	0	1,960	0.34	3,562	1,199	10,582	0	10,582	0	165,416	0	1,964
	Aug	3,002	0	2,996	0.07	3,453	253	7,696	0	7,696	0	160,462	0	3,002
	Sep	3,132	0	3,126	0.02	3,388	56	6,734	0	6,734	0	156,798	0	3,132
	Annual	81,522	0	81,359	1.37		4,653	96,200	0	96,200	0		0	81,522
1962	Oct	2,259	0	2,255	-0.04	3,349	-137	3,848	0	3,848	0	155,342	0	2,259
	Nov	1,121	0	1,119	-0.01	3,277	-41	8,658	0	8,658	0	147,844	0	1,121
	Dec	96	0	96	-0.07	3,154	-232	8,658	0	8,658	0	139,515	0	96
	Jan	116	0	116	-0.01	3,053	-36	4,810	0	4,810	0	134,856	0	116
	Feb	757	0	756	-0.06	2,977	-192	5,772	0	5,772	0	130,032	0	757
	Mar	1,341	0	1,338	0.06	2,851	174	11,544	0	11,544	0	119,653	0	1,341
	Apr	33,132	0	33,066	0.23	2,874	653	19,240	0	19,240	0	132,826	0	33,132
	May	38,856	0	38,778	0.39	3,251	1,256	2,886	0	2,886	0	167,462	0	38,856
	Jun	35,370	0	35,300	0.48	3,706	1,768	5,772	0	5,772	0	195,222	0	35,370
	Jul	7,230	0	7,215	0.32	3,864	1,235	10,582	0	10,582	0	190,620	0	7,230
	Aug	750	0	748	0.35	3,784	1,308	7,696	0	7,696	0	182,364	0	750
	Sep	401	0	400	0.03	3,687	94	6,734	0	6,734	0	175,936	0	401
	Annual	121,431	0	121,188	1.64		5,850	96,200	0	96,200	0		0	121,431
1963	Oct	755	0	753	0.13	3,616	487	3,848	0	3,848	0	172,354	0	755
	Nov	173	0	173	-0.10	3,532	-338	8,658	0	8,658	0	164,207	0	173
	Dec	0	0	0	0.04	3,405	146	8,658	0	8,658	0	155,403	0	0
	Jan	0	0	0	-0.02	3,301	-76	4,810	0	4,810	0	150,668	0	0
	Feb	0	0	0	-0.03	3,219	-83	5,772	0	5,772	0	144,980	0	0
	Mar	4,094	0	4,086	0.01	3,115	36	11,544	0	11,544	0	137,486	0	4,094
	Apr	16,509	0	16,476	0.26	3,029	792	19,240	0	19,240	0	133,930	0	16,509
	May	28,360	0	28,303	0.42	3,190	1,328	2,886	0	2,886	0	158,019	0	28,360
	Jun	6,595	0	6,582	0.45	3,373	1,502	5,772	0	5,772	0	157,327	0	6,595
	Jul	824	0	823	0.35	3,281	1,134	10,582	0	10,582	0	146,434	0	824
	Aug	550	0	549	0.16	3,136	508	7,696	0	7,696	0	138,779	0	550
	Sep	620	0	619	0.20	3,024	607	6,734	0	6,734	0	132,057	0	620
	Annual	58,480	0	58,363	1.88		6,043	96,200	0	96,200	0		0	58,480
1964	Oct	142	0	142	0.12	2,938	346	3,848	0	3,848	0	128,004	0	142
	Nov	18	0	18	0.07	2,830	208	8,658	0	8,658	0	119,156	0	18
	Dec	0	0	0	0.06	2,674	161	8,658	0	8,658	0	110,337	0	0
	Jan	0	0	0	0.00	2,545	-6	4,810	0	4,810	0	105,533	0	0
	Feb	0	0	0	0.00	2,439	-7	5,772	0	5,772	0	99,768	0	0
	Mar	95	0	95	0.05	2,255	113	11,544	0	11,544	0	88,206	0	95
	Apr	7,083	0	7,068	0.19	1,981	377	19,240	0	19,240	0	75,658	0	7,083
	May	31,611	0	31,548	0.37	2,145	791	2,886	0	2,886	0	103,529	0	31,611
	Jun	12,481	0	12,456	0.52	2,511	1,295	5,772	0	5,772	0	108,918	0	12,481
	Jul	2,580	0	2,575	0.28	2,477	700	10,582	0	10,582	0	100,211	0	2,580
	Aug	6,898	0	6,884	0.17	2,377	393	7,696	0	7,696	0	99,006	0	6,898
	Sep	671	0	669	0.11	2,296	242	6,734	0	6,734	0	92,699	0	671
	Annual	61,578	0	61,455	1.92		4,613	96,200	0	96,200	0		0	61,578
1965	Oct	157	0	157	0.21	2,182	465	3,848	0	3,848	0	88,543	0	157
	Nov	12	0	12	-0.01	2,037	-29	8,658	0	8,658	0	79,926	0	12
	Dec	0	0	0	-0.17	1,833	-315	8,658	0	8,658	0	71,583	0	0
	Jan	0	0	0	-0.11	1,685	-192	4,810	0	4,810	0	66,965	0	0
	Feb	0	0	0	-0.02	1,585	-25	5,772	0	5,772	0	61,218	0	0
	Mar	271	0	270	0.07	1,412	93	11,544	0	11,544	0	49,851	0	271
	Apr	18,000	0	17,964	0.20	1,280	258	19,240	0	19,240	0	48,318	0	18,000
	May	40,606	0	40,525	0.27	1,667	452	2,886	0	2,886	0	85,504	0	40,606
	Jun	51,940	0	51,836	0.32	2,510	791	5,772	0	5,772	0	130,777	0	51,940
	Jul	30,494	0	30,434	0.23	3,100	715	10,582	0	10,582	0	149,914	0	30,494
	Aug	5,857	0	5,845	0.22	3,230	708	7,696	0	7,696	0	147,355	0	5,857
	Sep	5,450	0	5,439	0.06	3,199	189	6,734	0	6,734	0	145,871	0	5,450
	Annual	152,788	0	152,482	1.26		3,111	96,200	0	96,200	0		0	152,788

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1966	Oct	5,399	0	5,388	0.09	3,197	301	3,848	0	3,848	0	147,110	0	5,399
	Nov	1,901	0	1,898	-0.05	3,155	-144	8,658	0	8,658	0	140,493	0	1,901
	Dec	1,047	0	1,045	-0.08	3,046	-243	8,658	0	8,658	0	133,123	0	1,047
	Jan	827	0	826	0.01	2,956	38	4,810	0	4,810	0	129,101	0	827
	Feb	255	0	254	0.02	2,877	60	5,772	0	5,772	0	123,523	0	255
	Mar	5,329	0	5,318	0.11	2,774	312	11,544	0	11,544	0	116,986	0	5,329
	Apr	26,944	0	26,890	0.28	2,777	766	19,240	0	19,240	0	123,870	0	26,944
	May	46,721	0	46,627	0.36	3,171	1,135	2,886	0	2,886	0	166,476	0	46,721
	Jun	24,588	0	24,539	0.35	3,628	1,280	5,772	0	5,772	0	183,963	0	24,588
	Jul	4,374	0	4,365	0.27	3,702	992	10,582	0	10,582	0	176,754	0	4,374
	Aug	1,625	0	1,622	0.23	3,604	818	7,696	0	7,696	0	169,862	0	1,625
	Sep	188	0	188	0.22	3,501	777	6,734	0	6,734	0	162,539	0	188
	Annual	119,198	0	118,960	1.82		6,091	96,200	0	96,200	0		0	119,198
1967	Oct	176	0	175	0.21	3,414	710	3,848	0	3,848	0	158,156	0	176
	Nov	4	0	4	0.08	3,311	264	8,658	0	8,658	0	149,239	0	4
	Dec	852	0	850	-0.19	3,185	-595	8,658	0	8,658	0	142,026	0	852
	Jan	0	0	0	-0.01	3,091	-23	4,810	0	4,810	0	137,239	0	0
	Feb	0	0	0	0.07	3,006	212	5,772	0	5,772	0	131,255	0	0
	Mar	3,183	0	3,176	0.13	2,886	384	11,544	0	11,544	0	122,503	0	3,183
	Apr	11,120	0	11,098	0.28	2,733	753	19,240	0	19,240	0	113,608	0	11,120
	May	23,085	0	23,039	0.37	2,818	1,047	2,886	0	2,886	0	132,714	0	23,085
	Jun	25,706	0	25,654	0.26	3,131	822	5,772	0	5,772	0	151,775	0	25,706
	Jul	7,728	0	7,712	0.22	3,253	701	10,582	0	10,582	0	148,204	0	7,728
	Aug	9,653	0	9,634	0.01	3,240	18	7,696	0	7,696	0	150,124	0	9,653
	Sep	3,407	0	3,400	0.13	3,225	412	6,734	0	6,734	0	146,378	0	3,407
	Annual	84,912	0	84,743	1.56		4,704	96,200	0	96,200	0		0	84,912
1968	Oct	601	0	600	0.16	3,166	507	3,848	0	3,848	0	142,623	0	601
	Nov	112	0	112	0.10	3,068	305	8,658	0	8,658	0	133,772	0	112
	Dec	0	0	0	-0.08	2,930	-244	8,658	0	8,658	0	125,358	0	0
	Jan	0	0	0	0.00	2,820	6	4,810	0	4,810	0	120,542	0	0
	Feb	0	0	0	-0.04	2,728	-117	5,772	0	5,772	0	114,887	0	0
	Mar	1,610	0	1,606	0.08	2,580	215	11,544	0	11,544	0	104,735	0	1,610
	Apr	8,004	0	7,988	0.18	2,359	428	19,240	0	19,240	0	93,054	0	8,004
	May	27,078	0	27,024	0.27	2,472	668	2,886	0	2,886	0	116,524	0	27,078
	Jun	39,763	0	39,684	0.41	2,974	1,205	5,772	0	5,772	0	149,230	0	39,763
	Jul	7,963	0	7,947	0.27	3,212	880	10,582	0	10,582	0	145,715	0	7,963
	Aug	12,126	0	12,101	0.14	3,216	436	7,696	0	7,696	0	149,685	0	12,126
	Sep	636	0	634	0.23	3,194	735	6,734	0	6,734	0	142,849	0	636
	Annual	97,892	0	97,696	1.72		5,025	96,200	0	96,200	0		0	97,892
1969	Oct	301	0	300	0.13	3,110	408	3,848	0	3,848	0	138,894	0	301
	Nov	13	0	13	0.01	3,010	43	8,658	0	8,658	0	130,206	0	13
	Dec	0	0	0	0.00	2,869	-12	8,658	0	8,658	0	121,561	0	0
	Jan	0	0	0	-0.19	2,759	-524	4,810	0	4,810	0	117,275	0	0
	Feb	0	0	0	0.01	2,668	24	5,772	0	5,772	0	111,478	0	0
	Mar	598	0	597	0.07	2,504	168	11,544	0	11,544	0	100,363	0	598
	Apr	23,405	0	23,358	0.23	2,430	548	19,240	0	19,240	0	103,933	0	23,405
	May	41,751	0	41,667	0.21	2,798	595	2,886	0	2,886	0	142,119	0	41,751
	Jun	32,529	0	32,464	0.27	3,328	890	5,772	0	5,772	0	167,920	0	32,529
	Jul	13,287	0	13,261	0.34	3,538	1,185	10,582	0	10,582	0	169,413	0	13,287
	Aug	4,740	0	4,730	0.04	3,526	149	7,696	0	7,696	0	166,299	0	4,740
	Sep	3,332	0	3,326	0.04	3,477	129	6,734	0	6,734	0	162,762	0	3,332
	Annual	119,956	0	119,716	1.15		3,603	96,200	0	96,200	0		0	119,956
1970	Oct	4,276	0	4,267	-0.03	3,454	-111	3,848	0	3,848	0	163,293	0	4,276
	Nov	2,464	0	2,459	0.05	3,410	177	8,658	0	8,658	0	156,916	0	2,464
	Dec	393	0	393	-0.04	3,297	-127	8,658	0	8,658	0	148,777	0	393
	Jan	0	0	0	0.03	3,195	94	4,810	0	4,810	0	143,873	0	0
	Feb	0	0	0	0.08	3,110	260	5,772	0	5,772	0	137,841	0	0
	Mar	259	0	258	0.02	2,972	61	11,544	0	11,544	0	126,494	0	259
	Apr	6,451	0	6,438	0.20	2,763	557	19,240	0	19,240	0	113,135	0	6,451
	May	35,058	0	34,987	0.39	2,903	1,138	2,886	0	2,886	0	144,099	0	35,058
	Jun	24,176	0	24,128	0.37	3,294	1,230	5,772	0	5,772	0	161,225	0	24,176
	Jul	7,128	0	7,114	0.32	3,392	1,097	10,582	0	10,582	0	156,660	0	7,128
	Aug	1,902	0	1,898	0.27	3,304	898	7,696	0	7,696	0	149,963	0	1,902
	Sep	15,026	0	14,996	0.18	3,312	596	6,734	0	6,734	0	157,629	0	15,026
	Annual	97,131	0	96,937	1.86		5,870	96,200	0	96,200	0		0	97,131

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1971	Oct	2,840	0	2,834	0.08	3,362	258	3,848	0	3,848	0	156,357	0	2,840
	Nov	1,543	0	1,540	0.05	3,295	149	8,658	0	8,658	0	149,090	0	1,543
	Dec	315	0	315	0.02	3,172	79	8,658	0	8,658	0	140,668	0	315
	Jan	381	0	380	-0.02	3,073	-61	4,810	0	4,810	0	136,299	0	381
	Feb	540	0	539	0.02	2,997	65	5,772	0	5,772	0	131,001	0	540
	Mar	3,311	0	3,304	0.11	2,883	328	11,544	0	11,544	0	122,434	0	3,311
	Apr	12,865	0	12,839	0.23	2,750	636	19,240	0	19,240	0	115,397	0	12,865
	May	13,292	0	13,265	0.34	2,770	934	2,886	0	2,886	0	124,843	0	13,292
	Jun	20,991	0	20,949	0.52	2,962	1,538	5,772	0	5,772	0	138,481	0	20,991
	Jul	4,199	0	4,191	0.37	3,014	1,108	10,582	0	10,582	0	130,982	0	4,199
	Aug	3,471	0	3,464	0.23	2,914	661	7,696	0	7,696	0	126,088	0	3,471
	Sep	982	0	980	0.18	2,820	517	6,734	0	6,734	0	119,817	0	982
	Annual	64,730	0	64,601	2.13		6,212	96,200	0	96,200	0		0	64,730
1972	Oct	3,033	0	3,026	0.04	2,758	113	3,848	0	3,848	0	118,882	0	3,033
	Nov	2,469	0	2,464	0.04	2,692	103	8,658	0	8,658	0	112,586	0	2,469
	Dec	849	0	847	-0.10	2,561	-264	8,658	0	8,658	0	105,039	0	849
	Jan	609	0	608	0.03	2,444	63	4,810	0	4,810	0	100,774	0	609
	Feb	326	0	325	0.04	2,342	102	5,772	0	5,772	0	95,226	0	326
	Mar	5,572	0	5,561	0.16	2,214	360	11,544	0	11,544	0	88,883	0	5,572
	Apr	9,303	0	9,284	0.30	2,022	604	19,240	0	19,240	0	78,323	0	9,303
	May	10,603	0	10,582	0.47	1,979	939	2,886	0	2,886	0	85,080	0	10,603
	Jun	8,698	0	8,680	0.41	2,082	852	5,772	0	5,772	0	87,136	0	8,698
	Jul	471	0	470	0.48	1,974	953	10,582	0	10,582	0	76,071	0	471
	Aug	57	0	57	0.33	1,751	580	7,696	0	7,696	0	67,853	0	57
	Sep	430	0	429	0.17	1,594	265	6,734	0	6,734	0	61,283	0	430
	Annual	42,420	0	42,335	2.37		4,669	96,200	0	96,200	0		0	42,420
1973	Oct	16,703	0	16,670	-0.12	1,663	-200	3,848	0	3,848	0	74,304	0	16,703
	Nov	4,200	0	4,192	-0.03	1,747	-60	8,658	0	8,658	0	69,898	0	4,200
	Dec	2,091	0	2,086	-0.09	1,635	-152	8,658	0	8,658	0	63,478	0	2,091
	Jan	1,559	0	1,556	-0.05	1,541	-70	4,810	0	4,810	0	60,294	0	1,559
	Feb	1,180	0	1,178	0.00	1,459	-1	5,772	0	5,772	0	55,701	0	1,180
	Mar	1,926	0	1,922	-0.04	1,314	-46	11,544	0	11,544	0	46,125	0	1,926
	Apr	11,845	0	11,822	0.16	1,143	186	19,240	0	19,240	0	38,520	0	11,845
	May	48,778	0	48,680	0.24	1,551	367	2,886	0	2,886	0	83,947	0	48,778
	Jun	56,247	0	56,135	0.41	2,512	1,040	5,772	0	5,772	0	133,270	0	56,247
	Jul	30,367	0	30,307	0.31	3,138	964	10,582	0	10,582	0	152,030	0	30,367
	Aug	4,397	0	4,388	0.32	3,250	1,026	7,696	0	7,696	0	147,696	0	4,397
	Sep	2,061	0	2,057	0.26	3,173	816	6,734	0	6,734	0	142,203	0	2,061
	Annual	181,354	0	180,991	1.37		3,871	96,200	0	96,200	0		0	181,354
1974	Oct	1,046	0	1,044	0.18	3,104	562	3,848	0	3,848	0	138,838	0	1,046
	Nov	89	0	89	0.07	3,008	197	8,658	0	8,658	0	130,072	0	89
	Dec	20	0	20	-0.05	2,868	-158	8,658	0	8,658	0	121,591	0	20
	Jan	0	0	0	-0.09	2,757	-245	4,810	0	4,810	0	117,026	0	0
	Feb	0	0	0	0.03	2,663	82	5,772	0	5,772	0	111,172	0	0
	Mar	3,246	0	3,240	0.07	2,525	187	11,544	0	11,544	0	102,681	0	3,246
	Apr	8,552	0	8,535	0.26	2,320	596	19,240	0	19,240	0	91,381	0	8,552
	May	23,900	0	23,852	0.49	2,403	1,167	2,886	0	2,886	0	111,180	0	23,900
	Jun	9,513	0	9,494	0.45	2,632	1,188	5,772	0	5,772	0	113,714	0	9,513
	Jul	2,288	0	2,284	0.37	2,566	941	10,582	0	10,582	0	104,475	0	2,288
	Aug	2,270	0	2,265	0.25	2,414	599	7,696	0	7,696	0	98,445	0	2,270
	Sep	43	0	43	0.32	2,272	717	6,734	0	6,734	0	91,037	0	43
	Annual	50,969	0	50,867	2.33		5,832	96,200	0	96,200	0		0	50,969
1975	Oct	555	0	554	0.00	2,155	-2	3,848	0	3,848	0	87,746	0	555
	Nov	683	0	681	0.03	2,026	60	8,658	0	8,658	0	79,709	0	683
	Dec	34	0	34	-0.02	1,827	-42	8,658	0	8,658	0	71,127	0	34
	Jan	42	0	42	-0.03	1,676	-58	4,810	0	4,810	0	66,417	0	42
	Feb	0	0	0	-0.09	1,575	-143	5,772	0	5,772	0	60,789	0	0
	Mar	186	0	185	-0.01	1,403	-17	11,544	0	11,544	0	49,447	0	186
	Apr	10,451	0	10,430	0.20	1,196	244	19,240	0	19,240	0	40,393	0	10,451
	May	42,312	0	42,227	0.37	1,511	563	2,886	0	2,886	0	79,172	0	42,312
	Jun	54,547	0	54,438	0.48	2,401	1,157	5,772	0	5,772	0	126,681	0	54,547
	Jul	35,184	0	35,113	0.28	3,071	851	10,582	0	10,582	0	150,361	0	35,184
	Aug	4,736	0	4,726	0.31	3,227	1,016	7,696	0	7,696	0	146,376	0	4,736
	Sep	1,709	0	1,706	0.19	3,152	601	6,734	0	6,734	0	140,747	0	1,709
	Annual	150,439	0	150,138	1.71		4,228	96,200	0	96,200	0		0	150,439

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1976	Oct	260	0	259	0.26	3,074	795	3,848	0	3,848	0	136,364	0	260
	Nov	103	0	103	-0.03	2,971	-82	8,658	0	8,658	0	127,891	0	103
	Dec	52	0	52	0.04	2,829	120	8,658	0	8,658	0	119,165	0	52
	Jan	52	0	52	0.05	2,711	132	4,810	0	4,810	0	114,274	0	52
	Feb	137	0	137	0.08	2,611	215	5,772	0	5,772	0	108,424	0	137
	Mar	2,462	0	2,457	0.17	2,458	427	11,544	0	11,544	0	98,909	0	2,462
	Apr	14,864	0	14,835	0.28	2,308	641	19,240	0	19,240	0	93,863	0	14,864
	May	34,277	0	34,208	0.30	2,549	771	2,886	0	2,886	0	124,415	0	34,277
	Jun	28,818	0	28,760	0.61	3,014	1,834	5,772	0	5,772	0	145,569	0	28,818
	Jul	3,999	0	3,991	0.44	3,121	1,365	10,582	0	10,582	0	137,613	0	3,999
	Aug	1,177	0	1,175	0.31	3,000	934	7,696	0	7,696	0	130,158	0	1,177
	Sep	1,897	0	1,893	0.10	2,898	297	6,734	0	6,734	0	125,020	0	1,897
	Annual	88,097	0	87,921	2.62		7,449	96,200	0	96,200	0		0	88,097
1977	Oct	982	0	980	0.21	2,826	581	3,848	0	3,848	0	121,571	0	982
	Nov	5	0	5	0.04	2,718	118	8,658	0	8,658	0	112,801	0	5
	Dec	52	0	52	0.05	2,554	136	8,658	0	8,658	0	104,059	0	52
	Jan	61	0	61	-0.02	2,420	-37	4,810	0	4,810	0	99,346	0	61
	Feb	0	0	0	0.07	2,307	173	5,772	0	5,772	0	93,402	0	0
	Mar	410	0	409	0.16	2,114	328	11,544	0	11,544	0	81,939	0	410
	Apr	4,866	0	4,856	0.18	1,817	332	19,240	0	19,240	0	67,223	0	4,866
	May	4,529	0	4,520	0.35	1,657	586	2,886	0	2,886	0	68,271	0	4,529
	Jun	2,811	0	2,805	0.45	1,631	731	5,772	0	5,772	0	64,573	0	2,811
	Jul	1,777	0	1,773	0.23	1,500	340	10,582	0	10,582	0	55,423	0	1,777
	Aug	4,276	0	4,268	0.37	1,367	501	7,696	0	7,696	0	51,493	0	4,276
	Sep	2,014	0	2,010	0.29	1,276	367	6,734	0	6,734	0	46,402	0	2,014
	Annual	21,782	0	21,738	2.38		4,156	96,200	0	96,200	0		0	21,782
1978	Oct	876	0	875	0.23	1,188	275	3,848	0	3,848	0	43,153	0	876
	Nov	130	0	130	0.03	1,072	37	8,658	0	8,658	0	34,588	0	130
	Dec	0	0	0	0.06	906	57	8,658	0	8,658	0	25,873	0	0
	Jan	0	0	0	-0.08	770	-64	4,810	0	4,810	0	21,127	0	0
	Feb	55	0	55	-0.05	658	-35	5,772	0	5,772	0	15,445	0	55
	Mar	2,257	0	2,253	0.05	460	24	11,544	0	11,544	0	6,129	0	2,257
	Apr	19,351	0	19,312	0.32	325	103	19,240	0	19,240	0	6,099	0	19,351
	May	31,754	0	31,691	0.17	661	110	2,886	0	2,886	0	34,794	0	31,754
	Jun	45,907	0	45,815	0.50	1,394	697	5,772	0	5,772	0	74,140	0	45,907
	Jul	7,002	0	6,988	0.53	1,742	932	10,582	0	10,582	0	69,614	0	7,002
	Aug	163	0	162	0.44	1,612	702	7,696	0	7,696	0	61,379	0	163
	Sep	93	0	93	0.29	1,458	429	6,734	0	6,734	0	54,309	0	93
	Annual	107,589	0	107,373	2.49		3,267	96,200	0	96,200	0		0	107,589
1979	Oct	283	0	283	0.14	1,347	189	3,848	0	3,848	0	50,555	0	283
	Nov	235	0	235	-0.04	1,223	-48	8,658	0	8,658	0	42,180	0	235
	Dec	34	0	34	-0.26	1,056	-276	8,658	0	8,658	0	33,832	0	34
	Jan	230	0	230	-0.12	934	-114	4,810	0	4,810	0	29,365	0	230
	Feb	45	0	45	-0.01	831	-11	5,772	0	5,772	0	23,650	0	45
	Mar	751	0	750	0.11	654	72	11,544	0	11,544	0	12,784	0	751
	Apr	20,824	0	20,782	0.22	553	121	19,240	0	19,240	0	14,205	0	20,824
	May	48,540	0	48,443	0.11	1,032	109	2,886	0	2,886	0	59,653	0	48,540
	Jun	57,906	0	57,790	0.41	2,049	842	5,772	0	5,772	0	110,829	0	57,906
	Jul	31,556	0	31,493	0.50	2,772	1,389	10,582	0	10,582	0	130,351	0	31,556
	Aug	5,391	0	5,380	0.31	2,916	907	7,696	0	7,696	0	127,128	0	5,391
	Sep	141	0	141	0.32	2,826	899	6,734	0	6,734	0	119,635	0	141
	Annual	165,938	0	165,606	1.68		4,079	96,200	0	96,200	0		0	165,938
1980	Oct	161	0	161	0.22	2,725	611	3,848	0	3,848	0	115,337	0	161
	Nov	192	0	191	-0.02	2,606	-44	8,658	0	8,658	0	106,914	0	192
	Dec	5	0	5	-0.01	2,437	-35	8,658	0	8,658	0	98,296	0	5
	Jan	149	0	148	-0.16	2,303	-367	4,810	0	4,810	0	94,001	0	149
	Feb	0	0	0	-0.07	2,195	-164	5,772	0	5,772	0	88,393	0	0
	Mar	111	0	111	0.03	1,998	62	11,544	0	11,544	0	76,898	0	111
	Apr	17,830	0	17,794	0.19	1,841	348	19,240	0	19,240	0	75,103	0	17,830
	May	44,966	0	44,876	0.32	2,262	714	2,886	0	2,886	0	116,380	0	44,966
	Jun	59,689	0	59,570	0.57	3,120	1,778	5,772	0	5,772	0	168,400	0	59,689
	Jul	17,628	0	17,593	0.45	3,573	1,621	10,582	0	10,582	0	173,790	0	17,628
	Aug	2,742	0	2,737	0.31	3,568	1,119	7,696	0	7,696	0	167,712	0	2,742
	Sep	2,499	0	2,494	0.22	3,487	768	6,734	0	6,734	0	162,704	0	2,499
	Annual	145,972	0	145,680	2.05		6,412	96,200	0	96,200	0		0	145,972

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1981	Oct	329	0	328	0.13	3,419	433	3,848	0	3,848	0	158,751	0	329
	Nov	385	0	384	0.06	3,323	215	8,658	0	8,658	0	150,262	0	385
	Dec	42	0	42	0.07	3,188	214	8,658	0	8,658	0	141,432	0	42
	Jan	9	0	9	0.06	3,080	191	4,810	0	4,810	0	136,440	0	9
	Feb	8	0	8	0.10	2,992	286	5,772	0	5,772	0	130,390	0	8
	Mar	103	0	103	0.08	2,845	236	11,544	0	11,544	0	118,713	0	103
	Apr	11,453	0	11,430	0.26	2,668	699	19,240	0	19,240	0	110,204	0	11,453
	May	18,171	0	18,134	0.26	2,720	704	2,886	0	2,886	0	124,748	0	18,171
	Jun	19,878	0	19,839	0.49	2,952	1,447	5,772	0	5,772	0	137,368	0	19,878
	Jul	3,837	0	3,830	0.35	2,993	1,048	10,582	0	10,582	0	129,567	0	3,837
	Aug	944	0	942	0.23	2,869	657	7,696	0	7,696	0	122,156	0	944
	Sep	1,039	0	1,037	0.22	2,751	603	6,734	0	6,734	0	115,856	0	1,039
	Annual	56,198	0	56,086	2.31		6,733	96,200	0	96,200	0		0	56,198
1982	Oct	7,195	0	7,180	0.05	2,725	146	3,848	0	3,848	0	119,043	0	7,195
	Nov	818	0	817	0.10	2,678	278	8,658	0	8,658	0	110,924	0	818
	Dec	32	0	32	0.06	2,517	147	8,658	0	8,658	0	102,150	0	32
	Jan	1	0	1	-0.10	2,382	-239	4,810	0	4,810	0	97,580	0	1
	Feb	1	0	1	-0.10	2,273	-216	5,772	0	5,772	0	92,025	0	1
	Mar	1,312	0	1,309	0.05	2,096	100	11,544	0	11,544	0	81,691	0	1,312
	Apr	23,320	0	23,274	0.33	2,020	660	19,240	0	19,240	0	85,065	0	23,320
	May	45,559	0	45,468	0.22	2,474	545	2,886	0	2,886	0	127,101	0	45,559
	Jun	52,379	0	52,274	0.48	3,238	1,543	5,772	0	5,772	0	172,060	0	52,379
	Jul	19,962	0	19,922	0.21	3,648	777	10,582	0	10,582	0	180,622	0	19,962
	Aug	9,938	0	9,918	0.01	3,723	46	7,696	0	7,696	0	182,798	0	9,938
	Sep	14,228	0	14,200	0.03	3,783	129	6,734	0	6,734	0	190,135	0	14,228
	Annual	174,745	0	174,395	1.35		3,916	96,200	0	96,200	0		0	174,745
1983	Oct	5,189	0	5,178	0.10	3,835	385	3,848	0	3,848	0	191,080	0	5,189
	Nov	2,485	0	2,480	-0.03	3,803	-96	8,658	0	8,658	0	184,998	0	2,485
	Dec	1,518	0	1,515	-0.06	3,719	-227	8,658	0	8,658	0	178,082	0	1,518
	Jan	1,001	0	999	-0.02	3,647	-73	4,810	0	4,810	0	174,344	0	1,001
	Feb	739	0	737	-0.03	3,585	-110	5,772	0	5,772	0	169,419	0	739
	Mar	3,335	0	3,328	-0.01	3,488	-18	11,544	0	11,544	0	161,221	0	3,335
	Apr	11,983	0	11,959	0.19	3,366	642	19,240	0	19,240	0	153,298	0	11,983
	May	34,551	0	34,482	0.33	3,527	1,159	2,886	0	2,886	0	183,735	0	34,551
	Jun	55,827	0	55,716	0.26	4,038	1,061	5,772	0	5,772	0	232,618	0	55,827
	Jul	29,006	0	28,948	0.39	4,418	1,706	10,582	0	10,582	0	249,278	0	29,006
	Aug	6,337	0	6,324	0.08	4,499	342	7,696	0	7,696	0	247,564	0	6,337
	Sep	1,677	0	1,674	0.16	4,458	724	6,734	0	6,734	0	241,780	0	1,677
	Annual	153,648	0	153,341	1.37		5,496	96,200	0	96,200	0		0	153,648
1984	Oct	4,640	0	4,630	0.04	4,431	179	3,848	0	3,848	0	242,384	0	4,640
	Nov	480	0	479	-0.13	4,393	-584	8,658	0	8,658	0	234,789	0	480
	Dec	301	0	300	-0.14	4,308	-601	8,658	0	8,658	0	227,032	0	301
	Jan	447	0	446	0.00	4,240	-18	4,810	0	4,810	0	222,687	0	447
	Feb	648	0	646	0.06	4,185	271	5,772	0	5,772	0	217,290	0	648
	Mar	3,257	0	3,250	0.06	4,104	263	11,544	0	11,544	0	208,733	0	3,257
	Apr	19,742	0	19,702	0.17	4,054	690	19,240	0	19,240	0	208,506	0	19,742
	May	47,213	0	47,119	0.45	4,288	1,945	2,886	0	2,886	0	250,794	0	47,213
	Jun	41,963	0	41,879	0.33	4,693	1,531	5,772	0	5,772	0	285,370	0	41,963
	Jul	9,897	0	9,877	0.35	4,851	1,693	10,582	0	10,582	0	282,972	0	9,897
	Aug	6,165	0	6,153	0.27	4,827	1,296	7,696	0	7,696	0	280,132	0	6,165
	Sep	2,167	0	2,163	0.20	4,787	942	6,734	0	6,734	0	274,618	0	2,167
	Annual	136,919	0	136,646	1.66		7,607	96,200	0	96,200	0		0	136,919
1985	Oct	7,925	0	7,909	-0.20	4,785	-955	3,848	0	3,848	0	279,634	0	7,925
	Nov	4,065	0	4,056	0.07	4,786	353	8,658	0	8,658	0	274,680	0	4,065
	Dec	1,703	0	1,699	-0.03	4,730	-127	8,658	0	8,658	0	267,848	0	1,703
	Jan	1,436	0	1,433	-0.01	4,681	-50	4,810	0	4,810	0	264,521	0	1,436
	Feb	718	0	717	-0.01	4,640	-47	5,772	0	5,772	0	259,513	0	718
	Mar	6,729	0	6,715	-0.02	4,590	-87	11,544	0	11,544	0	254,771	0	6,729
	Apr	39,255	0	39,176	0.02	4,664	73	19,240	0	19,240	0	274,634	0	39,255
	May	53,168	0	53,061	0.25	4,987	1,263	2,886	0	2,886	0	323,546	0	53,168
	Jun	54,758	0	54,648	0.38	5,426	2,069	5,772	0	5,772	0	370,354	0	54,758
	Jul	22,411	0	22,367	0.25	5,685	1,449	10,582	0	10,582	0	380,689	0	22,411
	Aug	5,139	0	5,129	0.29	5,712	1,647	7,696	0	7,696	0	376,474	0	5,139
	Sep	6,088	0	6,076	0.06	5,688	343	6,734	0	6,734	0	375,474	0	6,088
	Annual	203,394	0	202,987	1.06		5,931	96,200	0	96,200	0		0	203,394

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1986	Oct	9,054	0	9,036	-0.02	5,707	-121	3,848	0	3,848	0	380,783	0	9,054
	Nov	2,354	0	2,349	-0.06	5,705	-336	8,658	0	8,658	0	374,810	0	2,354
	Dec	1,355	0	1,352	0.02	5,647	108	8,658	0	8,658	0	367,397	0	1,355
	Jan	1,273	0	1,270	0.06	5,597	361	4,810	0	4,810	0	363,495	0	1,273
	Feb	1,202	0	1,200	-0.04	5,560	-244	5,772	0	5,772	0	359,167	0	1,202
	Mar	11,633	0	11,609	0.14	5,538	774	11,544	0	11,544	0	358,458	0	11,633
	Apr	28,386	0	28,329	0.01	5,575	78	19,240	0	19,240	0	367,469	0	28,386
	May	45,210	0	45,120	0.25	5,716	1,436	2,886	0	2,886	17,537	390,730	17,572	27,638
	Jun	51,815	0	51,712	0.21	5,816	1,230	5,772	0	5,772	44,710	390,730	44,800	7,016
	Jul	20,496	0	20,455	0.18	5,816	1,041	10,582	0	10,582	8,831	390,730	8,849	11,647
	Aug	3,687	0	3,680	0.15	5,795	883	7,696	0	7,696	0	385,831	0	3,687
	Sep	7,236	0	7,222	-0.03	5,777	-182	6,734	0	6,734	0	386,501	0	7,236
	Annual	183,701	0	183,333	0.88		5,029	96,200	0	96,200	71,078		71,221	112,480
1987	Oct	16,336	0	16,303	-0.05	5,798	-265	3,848	0	3,848	8,491	390,730	8,508	7,828
	Nov	11,570	0	11,546	-0.11	5,816	-655	8,658	0	8,658	3,543	390,730	3,550	8,019
	Dec	3,241	0	3,235	0.00	5,793	-21	8,658	0	8,658	0	385,328	0	3,241
	Jan	1,171	0	1,169	0.00	5,754	1	4,810	0	4,810	0	381,686	0	1,171
	Feb	848	0	846	-0.03	5,717	-149	5,772	0	5,772	0	376,909	0	848
	Mar	3,562	0	3,555	0.07	5,661	371	11,544	0	11,544	0	368,549	0	3,562
	Apr	26,487	0	26,434	0.18	5,651	1,013	19,240	0	19,240	0	374,729	0	26,487
	May	39,985	0	39,905	0.13	5,747	737	2,886	0	2,886	20,282	390,730	20,322	19,663
	Jun	45,648	0	45,557	0.32	5,816	1,832	5,772	0	5,772	37,953	390,730	38,029	7,619
	Jul	7,951	0	7,935	0.39	5,795	2,284	10,582	0	10,582	0	385,799	0	7,951
	Aug	2,256	0	2,252	0.20	5,746	1,134	7,696	0	7,696	0	379,220	0	2,256
	Sep	171	0	171	0.29	5,681	1,662	6,734	0	6,734	0	370,995	0	171
	Annual	159,225	0	158,907	1.38		7,943	96,200	0	96,200	70,269		70,409	88,816
1988	Oct	833	0	831	0.15	5,628	822	3,848	0	3,848	0	367,157	0	833
	Nov	2,493	0	2,488	-0.06	5,586	-343	8,658	0	8,658	0	361,330	0	2,493
	Dec	188	0	188	-0.06	5,523	-347	8,658	0	8,658	0	353,206	0	188
	Jan	0	0	0	-0.08	5,467	-453	4,810	0	4,810	0	348,850	0	0
	Feb	189	0	189	-0.03	5,423	-163	5,772	0	5,772	0	343,430	0	189
	Mar	2,855	0	2,850	0.18	5,353	956	11,544	0	11,544	0	333,780	0	2,855
	Apr	14,711	0	14,681	0.13	5,284	707	19,240	0	19,240	0	328,514	0	14,711
	May	22,037	0	21,993	0.30	5,341	1,617	2,886	0	2,886	0	346,004	0	22,037
	Jun	23,937	0	23,889	0.23	5,498	1,252	5,772	0	5,772	0	362,869	0	23,937
	Jul	4,647	0	4,638	0.33	5,538	1,815	10,582	0	10,582	0	355,110	0	4,647
	Aug	3,374	0	3,367	0.09	5,482	485	7,696	0	7,696	0	350,296	0	3,374
	Sep	1,398	0	1,395	0.17	5,432	943	6,734	0	6,734	0	344,014	0	1,398
	Annual	76,663	0	76,509	1.34		7,291	96,200	0	96,200	0		0	76,663
1989	Oct	145	0	145	0.19	5,382	1,016	3,848	0	3,848	0	339,295	0	145
	Nov	96	0	96	0.03	5,320	144	8,658	0	8,658	0	330,589	0	96
	Dec	0	0	0	0.03	5,237	180	8,658	0	8,658	0	321,751	0	0
	Jan	0	0	0	-0.05	5,174	-260	4,810	0	4,810	0	317,201	0	0
	Feb	373	0	372	-0.01	5,127	-76	5,772	0	5,772	0	311,877	0	373
	Mar	12,034	0	12,010	0.15	5,100	770	11,544	0	11,544	0	311,573	0	12,034
	Apr	25,700	0	25,649	0.33	5,121	1,715	19,240	0	19,240	0	316,267	0	25,700
	May	20,823	0	20,781	0.44	5,217	2,304	2,886	0	2,886	0	331,859	0	20,823
	Jun	11,328	0	11,305	0.47	5,305	2,506	5,772	0	5,772	0	334,886	0	11,328
	Jul	2,484	0	2,479	0.37	5,272	1,948	10,582	0	10,582	0	324,834	0	2,484
	Aug	2,593	0	2,588	0.22	5,195	1,142	7,696	0	7,696	0	318,584	0	2,593
	Sep	601	0	600	0.30	5,129	1,557	6,734	0	6,734	0	310,893	0	601
	Annual	76,178	0	76,025	2.48		12,946	96,200	0	96,200	0		0	76,178
1990	Oct	2,309	0	2,305	0.11	5,084	556	3,848	0	3,848	0	308,794	0	2,309
	Nov	5	0	5	0.12	5,033	622	8,658	0	8,658	0	299,519	0	5
	Dec	0	0	0	0.05	4,951	272	8,658	0	8,658	0	290,589	0	0
	Jan	0	0	0	0.00	4,888	8	4,810	0	4,810	0	285,771	0	0
	Feb	0	0	0	0.04	4,838	181	5,772	0	5,772	0	279,818	0	0
	Mar	855	0	853	0.10	4,757	473	11,544	0	11,544	0	268,654	0	855
	Apr	10,206	0	10,186	0.08	4,659	369	19,240	0	19,240	0	259,231	0	10,206
	May	25,157	0	25,106	0.29	4,713	1,369	2,886	0	2,886	0	280,082	0	25,157
	Jun	24,156	0	24,108	0.49	4,887	2,371	5,772	0	5,772	0	296,047	0	24,156
	Jul	4,260	0	4,251	0.17	4,927	849	10,582	0	10,582	0	288,866	0	4,260
	Aug	2,371	0	2,366	0.13	4,866	621	7,696	0	7,696	0	282,915	0	2,371
	Sep	4,708	0	4,698	0.11	4,827	530	6,734	0	6,734	0	280,349	0	4,708
	Annual	74,027	0	73,879	1.69		8,223	96,200	0	96,200	0		0	74,027

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1991	Oct	6,510	0	6,497	0.03	4,827	124	3,848	0	3,848	0	282,875	0	6,510
	Nov	3,250	0	3,244	0.01	4,814	44	8,658	0	8,658	0	277,417	0	3,250
	Dec	574	0	573	-0.18	4,754	-856	8,658	0	8,658	0	270,188	0	574
	Jan	285	0	285	-0.02	4,699	-83	4,810	0	4,810	0	265,746	0	285
	Feb	814	0	812	0.09	4,651	408	5,772	0	5,772	0	260,378	0	814
	Mar	2,156	0	2,152	0.04	4,574	181	11,544	0	11,544	0	250,805	0	2,156
	Apr	28,726	0	28,668	0.26	4,567	1,196	19,240	0	19,240	0	259,037	0	28,726
	May	44,452	0	44,363	0.34	4,798	1,622	2,886	0	2,886	0	298,892	0	44,452
	Jun	36,351	0	36,278	0.31	5,119	1,576	5,772	0	5,772	0	327,822	0	36,351
	Jul	6,632	0	6,619	0.30	5,227	1,573	10,582	0	10,582	0	322,286	0	6,632
	Aug	5,263	0	5,252	0.26	5,183	1,332	7,696	0	7,696	0	318,510	0	5,263
	Sep	3,832	0	3,825	0.13	5,147	672	6,734	0	6,734	0	314,928	0	3,832
	Annual	138,846	0	138,568	1.56		7,789	96,200	0	96,200	0		0	138,846
1992	Oct	243	0	242	0.13	5,110	670	3,848	0	3,848	0	310,653	0	243
	Nov	1,513	0	1,510	-0.09	5,061	-456	8,658	0	8,658	0	303,961	0	1,513
	Dec	712	0	710	-0.07	4,997	-368	8,658	0	8,658	0	296,381	0	712
	Jan	0	0	0	0.01	4,941	56	4,810	0	4,810	0	291,514	0	0
	Feb	60	0	60	0.03	4,892	158	5,772	0	5,772	0	285,644	0	60
	Mar	2,021	0	2,017	-0.01	4,820	-44	11,544	0	11,544	0	276,162	0	2,021
	Apr	27,985	0	27,929	0.23	4,812	1,089	19,240	0	19,240	0	283,762	0	27,985
	May	47,309	0	47,214	0.06	5,050	283	2,886	0	2,886	0	327,807	0	47,309
	Jun	33,649	0	33,582	0.37	5,372	1,996	5,772	0	5,772	0	353,621	0	33,649
	Jul	8,493	0	8,476	0.23	5,476	1,282	10,582	0	10,582	0	350,233	0	8,493
	Aug	6,724	0	6,711	0.11	5,453	585	7,696	0	7,696	0	348,663	0	6,724
	Sep	955	0	953	0.25	5,413	1,351	6,734	0	6,734	0	341,531	0	955
	Annual	129,664	0	129,405	1.25		6,601	96,200	0	96,200	0		0	129,664
1993	Oct	130	0	130	0.17	5,360	933	3,848	0	3,848	0	336,881	0	130
	Nov	346	0	346	-0.03	5,300	-157	8,658	0	8,658	0	328,725	0	346
	Dec	0	0	0	-0.14	5,224	-720	8,658	0	8,658	0	320,787	0	0
	Jan	8	0	8	-0.12	5,167	-640	4,810	0	4,810	0	316,625	0	8
	Feb	0	0	0	-0.09	5,122	-449	5,772	0	5,772	0	311,302	0	0
	Mar	5,537	0	5,526	0.12	5,067	617	11,544	0	11,544	0	304,667	0	5,537
	Apr	22,296	0	22,251	0.23	5,045	1,165	19,240	0	19,240	0	306,513	0	22,296
	May	46,985	0	46,892	0.15	5,255	802	2,886	0	2,886	0	349,717	0	46,985
	Jun	52,744	0	52,639	0.41	5,636	2,295	5,772	0	5,772	3,558	390,730	3,566	49,179
	Jul	17,062	0	17,028	0.54	5,816	3,159	10,582	0	10,582	3,287	390,730	3,294	13,768
	Aug	8,711	0	8,693	0.08	5,816	493	7,696	0	7,696	504	390,730	505	8,206
	Sep	4,614	0	4,604	0.21	5,802	1,231	6,734	0	6,734	0	387,370	0	4,614
	Annual	158,433	0	158,116	1.55		8,729	96,200	0	96,200	7,349		7,364	151,069
1994	Oct	2,269	0	2,264	0.03	5,779	196	3,848	0	3,848	0	385,590	0	2,269
	Nov	446	0	445	-0.05	5,737	-270	8,658	0	8,658	0	377,648	0	446
	Dec	0	0	0	0.03	5,664	157	8,658	0	8,658	0	368,833	0	0
	Jan	12	0	12	0.03	5,604	192	4,810	0	4,810	0	363,843	0	12
	Feb	0	0	0	-0.10	5,559	-571	5,772	0	5,772	0	358,641	0	0
	Mar	5,374	0	5,363	0.09	5,506	480	11,544	0	11,544	0	351,980	0	5,374
	Apr	23,789	0	23,741	0.03	5,496	168	19,240	0	19,240	0	356,314	0	23,789
	May	48,046	0	47,950	0.12	5,666	668	2,886	0	2,886	9,980	390,730	10,000	38,046
	Jun	44,688	0	44,598	0.39	5,816	2,239	5,772	0	5,772	36,587	390,730	36,660	8,027
	Jul	3,264	0	3,258	0.39	5,775	2,243	10,582	0	10,582	0	381,163	0	3,264
	Aug	841	0	839	0.22	5,699	1,266	7,696	0	7,696	0	373,041	0	841
	Sep	3,045	0	3,039	0.06	5,645	363	6,734	0	6,734	0	368,982	0	3,045
	Annual	131,774	0	131,511	1.24		7,130	96,200	0	96,200	46,567		46,661	85,113
1995	Oct	1,646	0	1,643	0.05	5,617	266	3,848	0	3,848	0	366,511	0	1,646
	Nov	1,288	0	1,285	-0.11	5,576	-627	8,658	0	8,658	0	359,765	0	1,288
	Dec	753	0	752	0.03	5,509	151	8,658	0	8,658	0	351,707	0	753
	Jan	466	0	465	-0.10	5,456	-544	4,810	0	4,810	0	347,906	0	466
	Feb	1,946	0	1,942	0.06	5,420	301	5,772	0	5,772	0	343,775	0	1,946
	Mar	9,553	0	9,534	-0.04	5,393	-223	11,544	0	11,544	0	341,988	0	9,553
	Apr	15,685	0	15,654	0.07	5,367	353	19,240	0	19,240	0	338,049	0	15,685
	May	36,096	0	36,024	0.16	5,494	875	2,886	0	2,886	0	370,311	0	36,096
	Jun	55,616	0	55,505	0.37	5,728	2,116	5,772	0	5,772	27,198	390,730	27,252	28,364
	Jul	39,138	0	39,060	0.40	5,816	2,338	10,582	0	10,582	26,140	390,730	26,192	12,946
	Aug	9,233	0	9,214	0.20	5,816	1,163	7,696	0	7,696	355	390,730	356	8,877
	Sep	1,964	0	1,960	0.12	5,793	719	6,734	0	6,734	0	385,237	0	1,964
	Annual	173,384	0	173,037	1.20		6,890	96,200	0	96,200	53,692		53,800	119,584

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
1996	Oct	902	0	900	0.20	5,751	1,171	3,848	0	3,848	0	381,118	0	902
	Nov	341	0	340	0.07	5,695	427	8,658	0	8,658	0	372,373	0	341
	Dec	0	0	0	0.04	5,619	245	8,658	0	8,658	0	363,470	0	0
	Jan	0	0	0	-0.02	5,558	-115	4,810	0	4,810	0	358,775	0	0
	Feb	604	0	603	0.00	5,514	28	5,772	0	5,772	0	353,579	0	604
	Mar	2,069	0	2,065	0.10	5,445	521	11,544	0	11,544	0	343,578	0	2,069
	Apr	16,633	0	16,600	0.28	5,381	1,520	19,240	0	19,240	0	339,418	0	16,633
	May	30,764	0	30,703	0.49	5,475	2,698	2,886	0	2,886	0	364,536	0	30,764
	Jun	6,469	0	6,456	0.35	5,583	1,981	5,772	0	5,772	0	363,239	0	6,469
	Jul	2,690	0	2,685	0.25	5,536	1,387	10,582	0	10,582	0	353,955	0	2,690
	Aug	100	0	100	0.21	5,454	1,156	7,696	0	7,696	0	345,203	0	100
	Sep	538	0	537	0.17	5,382	937	6,734	0	6,734	0	338,069	0	538
	Annual	61,110	0	60,988	2.17		11,956	96,200	0	96,200	0		0	61,110
1997	Oct	280	0	280	0.08	5,330	432	3,848	0	3,848	0	334,069	0	280
	Nov	989	0	987	-0.09	5,278	-476	8,658	0	8,658	0	326,874	0	989
	Dec	32	0	32	-0.01	5,203	-52	8,658	0	8,658	0	318,299	0	32
	Jan	411	0	410	-0.18	5,145	-936	4,810	0	4,810	0	314,835	0	411
	Feb	208	0	208	0.00	5,103	13	5,772	0	5,772	0	309,258	0	208
	Mar	9,769	0	9,750	0.18	5,066	923	11,544	0	11,544	0	306,540	0	9,769
	Apr	14,178	0	14,150	0.09	5,030	439	19,240	0	19,240	0	301,011	0	14,178
	May	44,667	0	44,578	0.17	5,194	896	2,886	0	2,886	0	341,807	0	44,667
	Jun	48,431	0	48,334	0.35	5,564	1,934	5,772	0	5,772	0	382,435	0	48,431
	Jul	11,906	0	11,882	0.26	5,744	1,505	10,582	0	10,582	0	382,230	0	11,906
	Aug	9,170	0	9,152	0.18	5,745	1,031	7,696	0	7,696	0	382,656	0	9,170
	Sep	6,857	0	6,843	0.12	5,744	714	6,734	0	6,734	0	382,051	0	6,857
	Annual	146,898	0	146,604	1.16		6,422	96,200	0	96,200	0		0	146,898
1998	Oct	5,183	0	5,173	0.08	5,745	479	3,848	0	3,848	0	382,897	0	5,183
	Nov	1,744	0	1,741	0.01	5,719	58	8,658	0	8,658	0	375,922	0	1,744
	Dec	723	0	722	-0.06	5,655	-318	8,658	0	8,658	0	368,304	0	723
	Jan	588	0	587	0.01	5,603	30	4,810	0	4,810	0	364,051	0	588
	Feb	12	0	12	-0.02	5,559	-123	5,772	0	5,772	0	358,414	0	12
	Mar	4,604	0	4,595	0.07	5,501	386	11,544	0	11,544	0	351,079	0	4,604
	Apr	12,800	0	12,774	0.16	5,435	879	19,240	0	19,240	0	343,734	0	12,800
	May	42,288	0	42,203	0.36	5,567	2,006	2,886	0	2,886	0	381,045	0	42,288
	Jun	29,231	0	29,173	0.52	5,775	3,011	5,772	0	5,772	10,704	390,730	10,726	18,505
	Jul	8,925	0	8,908	0.25	5,803	1,450	10,582	0	10,582	0	387,606	0	8,925
	Aug	2,096	0	2,091	0.18	5,761	1,057	7,696	0	7,696	0	380,944	0	2,096
	Sep	366	0	366	0.25	5,699	1,415	6,734	0	6,734	0	373,161	0	366
	Annual	108,561	0	108,344	1.82		10,329	96,200	0	96,200	10,704		10,726	97,835
1999	Oct	3,569	0	3,562	-0.04	5,665	-229	3,848	0	3,848	0	373,105	0	3,569
	Nov	3,090	0	3,083	-0.04	5,641	-214	8,658	0	8,658	0	367,744	0	3,090
	Dec	982	0	980	0.05	5,581	287	8,658	0	8,658	0	359,778	0	982
	Jan	357	0	356	0.04	5,525	208	4,810	0	4,810	0	355,116	0	357
	Feb	424	0	424	0.09	5,478	492	5,772	0	5,772	0	349,276	0	424
	Mar	4,723	0	4,713	0.19	5,416	1,008	11,544	0	11,544	0	341,438	0	4,723
	Apr	13,031	0	13,005	0.06	5,349	346	19,240	0	19,240	0	334,856	0	13,031
	May	33,264	0	33,198	0.29	5,449	1,604	2,886	0	2,886	0	363,565	0	33,264
	Jun	39,772	0	39,692	0.43	5,698	2,441	5,772	0	5,772	4,314	390,730	4,322	35,449
	Jul	12,734	0	12,709	0.22	5,816	1,287	10,582	0	10,582	840	390,730	841	11,893
	Aug	13,250	0	13,224	0.09	5,816	504	7,696	0	7,696	5,024	390,730	5,034	8,216
	Sep	4,298	0	4,289	0.14	5,802	787	6,734	0	6,734	0	387,498	0	4,298
	Annual	129,493	0	129,234	1.52		8,520	96,200	0	96,200	10,177		10,197	119,295
2000	Oct	677	0	675	0.25	5,769	1,444	3,848	0	3,848	0	382,882	0	677
	Nov	23	0	23	0.13	5,709	743	8,658	0	8,658	0	373,504	0	23
	Dec	0	0	0	0.06	5,628	358	8,658	0	8,658	0	364,488	0	0
	Jan	0	0	0	-0.04	5,568	-198	4,810	0	4,810	0	359,876	0	0
	Feb	0	0	0	0.08	5,519	449	5,772	0	5,772	0	353,655	0	0
	Mar	796	0	794	0.03	5,442	136	11,544	0	11,544	0	342,769	0	796
	Apr	16,061	0	16,029	0.32	5,370	1,708	19,240	0	19,240	0	337,851	0	16,061
	May	21,265	0	21,222	0.48	5,419	2,616	2,886	0	2,886	0	353,571	0	21,265
	Jun	5,253	0	5,243	0.49	5,476	2,678	5,772	0	5,772	0	350,363	0	5,253
	Jul	103	0	102	0.49	5,401	2,634	10,582	0	10,582	0	337,250	0	103
	Aug	257	0	256	0.42	5,296	2,221	7,696	0	7,696	0	327,589	0	257
	Sep	0	0	0	0.42	5,208	2,181	6,734	0	6,734	0	318,674	0	0
	Annual	44,435	0	44,346	3.13		16,970	96,200	0	96,200	0		0	44,435

Attachment 2. Heron Reservoir Monthly Operations Study - 2070 Reservoir Conditions

Water Year	Mon	SJCP Adjusted Potential Diversions (af)	Reduction in SJCP Diversions for 1-yr or 10-yr limits (af)	Heron Reservoir Inflow (af)	Heron Reservoir Net Evap Rate (feet)	Mean Reservoir Surface Area (acres)	Heron Reservoir Evap Loss (af)	SJCP Demand at Heron Dam (af)	Shortage to Demand (af)	SJCP Release from Heron Reservoir (af)	Reduction in SJCP Inflows to Avoid Spill (af)	EOM Reservoir Contents (af)	Reduction in SJCP Diversions to Avoid Spill (af)	SJCP Estimated Diversion (af)
2001	Oct	925	0	923	0.00	5,152	8	3,848	0	3,848	0	315,741	0	925
	Nov	246	0	246	-0.03	5,100	-146	8,658	0	8,658	0	307,475	0	246
	Dec	0	0	0	0.03	5,023	169	8,658	0	8,658	0	298,649	0	0
	Jan	0	0	0	-0.07	4,963	-365	4,810	0	4,810	0	294,204	0	0
	Feb	0	0	0	0.03	4,916	152	5,772	0	5,772	0	288,279	0	0
	Mar	1,673	0	1,670	0.04	4,842	205	11,544	0	11,544	0	278,200	0	1,673
	Apr	19,625	0	19,585	0.20	4,793	954	19,240	0	19,240	0	277,591	0	19,625
	May	51,373	0	51,271	0.32	5,005	1,624	2,886	0	2,886	0	324,352	0	51,373
	Jun	29,570	0	29,511	0.55	5,317	2,912	5,772	0	5,772	0	345,179	0	29,570
	Jul	4,789	0	4,780	0.29	5,380	1,568	10,582	0	10,582	0	337,808	0	4,789
	Aug	4,982	0	4,972	0.25	5,328	1,319	7,696	0	7,696	0	333,765	0	4,982
	Sep	313	0	312	0.40	5,269	2,094	6,734	0	6,734	0	325,249	0	313
	Annual	113,496	0	113,269	2.01		10,494	96,200	0	96,200	0		0	113,496
2002	Oct	66	0	66	0.23	5,206	1,174	3,848	0	3,848	0	320,293	0	66
	Nov	25	0	25	0.02	5,140	101	8,658	0	8,658	0	311,558	0	25
	Dec	0	0	0	-0.01	5,060	-65	8,658	0	8,658	0	302,966	0	0
	Jan	0	0	0	0.03	5,000	131	4,810	0	4,810	0	298,025	0	0
	Feb	0	0	0	0.08	4,949	399	5,772	0	5,772	0	291,854	0	0
	Mar	897	0	896	0.16	4,869	777	11,544	0	11,544	0	280,428	0	897
	Apr	4,885	0	4,875	0.34	4,740	1,630	19,240	0	19,240	0	264,434	0	4,885
	May	932	0	930	0.57	4,641	2,659	2,886	0	2,886	0	259,819	0	932
	Jun	171	0	170	0.66	4,573	3,000	5,772	0	5,772	0	251,217	0	171
	Jul	0	0	0	0.42	4,461	1,854	10,582	0	10,582	0	238,782	0	0
	Aug	0	0	0	0.42	4,342	1,838	7,696	0	7,696	0	229,247	0	0
	Sep	200	0	200	0.05	4,252	201	6,734	0	6,734	0	222,512	0	200
	Annual	7,176	0	7,162	2.96		13,699	96,200	0	96,200	0		0	7,176
2003	Oct	189	0	189	0.06	4,192	263	3,848	0	3,848	0	218,590	0	189
	Nov	175	0	175	0.02	4,120	67	8,658	0	8,658	0	210,040	0	175
	Dec	0	0	0	-0.01	4,019	-60	8,658	0	8,658	0	201,442	0	0
	Jan	0	0	0	0.09	3,937	360	4,810	0	4,810	0	196,272	0	0
	Feb	0	0	0	-0.05	3,871	-210	5,772	0	5,772	0	190,709	0	0
	Mar	1,429	0	1,426	0.15	3,768	552	11,544	0	11,544	0	180,039	0	1,429
	Apr	11,657	0	11,634	0.28	3,639	1,006	19,240	0	19,240	0	171,428	0	11,657
	May	26,743	0	26,690	0.39	3,726	1,452	2,886	0	2,886	0	193,779	0	26,743
	Jun	18,996	0	18,958	0.56	3,942	2,222	5,772	0	5,772	0	204,743	0	18,996
	Jul	796	0	795	0.56	3,935	2,191	10,582	0	10,582	0	192,765	0	796
	Aug	667	0	666	0.23	3,813	883	7,696	0	7,696	0	184,852	0	667
	Sep	3,782	0	3,774	0.15	3,741	574	6,734	0	6,734	0	181,319	0	3,782
	Annual	64,435	0	64,306	2.42		9,300	96,200	0	96,200	0		0	64,435
2004	Oct	468	0	467	0.17	3,690	624	3,848	0	3,848	0	177,313	0	468
	Nov	646	0	645	-0.02	3,605	-71	8,658	0	8,658	0	169,371	0	646
	Dec	177	0	176	0.04	3,484	129	8,658	0	8,658	0	160,760	0	177
	Jan	0	0	0	0.00	3,383	2	4,810	0	4,810	0	155,948	0	0
	Feb	0	0	0	-0.05	3,302	-152	5,772	0	5,772	0	150,328	0	0
	Mar	11,506	0	11,483	0.24	3,252	779	11,544	0	11,544	0	149,488	0	11,506
	Apr	15,557	0	15,526	0.12	3,212	400	19,240	0	19,240	0	145,374	0	15,557
	May	30,242	0	30,182	0.52	3,375	1,766	2,886	0	2,886	0	170,904	0	30,242
	Jun	20,482	0	20,441	0.56	3,658	2,054	5,772	0	5,772	0	183,519	0	20,482
	Jul	2,240	0	2,236	0.46	3,677	1,677	10,582	0	10,582	0	173,496	0	2,240
	Aug	265	0	264	0.46	3,541	1,632	7,696	0	7,696	0	164,431	0	265
	Sep	4,364	0	4,356	0.28	3,450	953	6,734	0	6,734	0	161,099	0	4,364
	Annual	85,947	0	85,775	2.78		9,795	96,200	0	96,200	0		0	85,947
2005	Oct	2,985	0	2,979	0.09	3,416	320	3,848	0	3,848	0	159,910	0	2,985
	Nov	1,774	0	1,770	0.09	3,351	296	8,658	0	8,658	0	152,727	0	1,774
	Dec	295	0	295	0.02	3,229	73	8,658	0	8,658	0	144,290	0	295
	Jan	477	0	476	-0.11	3,132	-355	4,810	0	4,810	0	140,312	0	477
	Feb	508	0	507	-0.11	3,063	-340	5,772	0	5,772	0	135,387	0	508
	Mar	2,099	0	2,094	0.11	2,945	311	11,544	0	11,544	0	125,626	0	2,099
	Apr	31,720	0	31,657	0.16	2,962	471	19,240	0	19,240	0	137,572	0	31,720
	May	46,428	0	46,335	0.34	3,378	1,139	2,886	0	2,886	0	179,882	0	46,428
	Jun	50,208	0	50,108	0.49	3,955	1,923	5,772	0	5,772	0	222,295	0	50,208
	Jul	13,347	0	13,320	0.60	4,213	2,528	10,582	0	10,582	0	222,505	0	13,347
	Aug	4,439	0	4,430	0.36	4,187	1,491	7,696	0	7,696	0	217,748	0	4,439
	Sep	4,030	0	4,022	0.28	4,138	1,160	6,734	0	6,734	0	213,876	0	4,030
	Annual	158,309	0	157,992	2.30		9,016	96,200	0	96,200	0		0	158,309