RECLAMATION

Managing Water in the West

Missouri River Basin Depletions Database

Great Plains Region



U.S. Department of the Interior
Bureau of Reclamation

September 2012

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

BUREAU OF RECLAMATION

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Introduction

The Bureau of Reclamation, Great Plains Regional Office, updated the process used to calculate surface water depletion estimates within the Missouri River Basin. Reclamation created a Microsoft Access database, called the Depletions Database in this report, to automatically compute depletions within the Missouri River Basin. This report documents the data and methods used in the Depletions Database.

In 1977, Reclamation, along with state and other federal agencies within the Missouri River Basin, formed work teams to evaluate the effects of depletions on streamflows in the Missouri River Basin. This study, completed in 1982, was initiated by the Missouri River Basin Commission, later to be known as the Missouri Basin States Association (MBSA)[1]. The MBSA study identified the following categories to be evaluated in estimating total depletions within the Missouri River Basin: irrigation, municipal, industrial, rural domestic, livestock, forest accretions, stock ponds, large and small reservoir evaporation, and conservation land practices (contour farming, tillage, and border grading).

Missouri River Basin States Association – An organization formed in 1981 as a nonprofit corporation by the Missouri River Basin governors as a successor organization to the Missouri River Basin Commission. This group was to "conduct, encourage, and participate in activities which promote interstate coordination of water resources management in the Missouri River Basin."[1]

In the MBSA study, 93 node basins were established for calculating depletions. The MBSA covered a period of record of 1944 to 1978. After the MBSA study was completed, Reclamation assumed responsibility for maintaining the data and methods used for estimating Missouri River Basin depletions.

In 2005, Reclamation completed a report titled A *Study to Determine the Historic and Present Level Depletions in the Missouri River Basin* which built upon the work done in the MBSA study by extending the period of record from1929 to 2002 and increasing the number of nodes from 93 to 118. In the 2005 study, Reclamation concentrated on the irrigated agriculture depletions since a large majority of the depletions can be attributed to this use. All other depletion categories were accounted for by using the data developed during the MBSA study by adding an appropriate adjustment to the irrigated agriculture depletions. Figure 1 shows a breakdown of water diversions in the Missouri River Basin by category. Thermoelectric power generation diversions were not included in Figure 1 because thermoelectric power generation depletes a small percentage of water even though thermoelectric power generation diverts a large quantity of water as determined by the USGS water use reports.

[1] U.S. Army Corps of Engineers. *Big Dam Era.* 1993. Page 186.

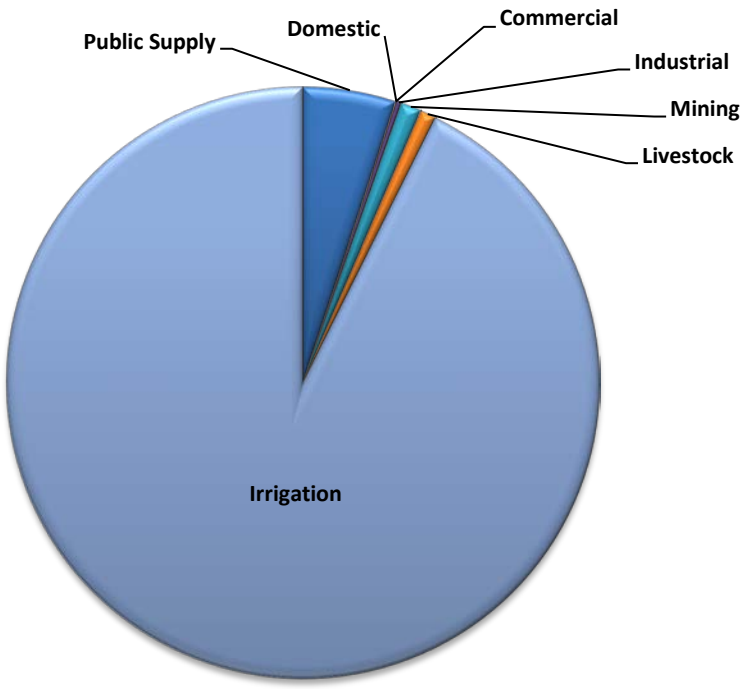


Figure 1. 1995 water diversions in the Missouri River Basin. Source: USGS Water Use Reports.

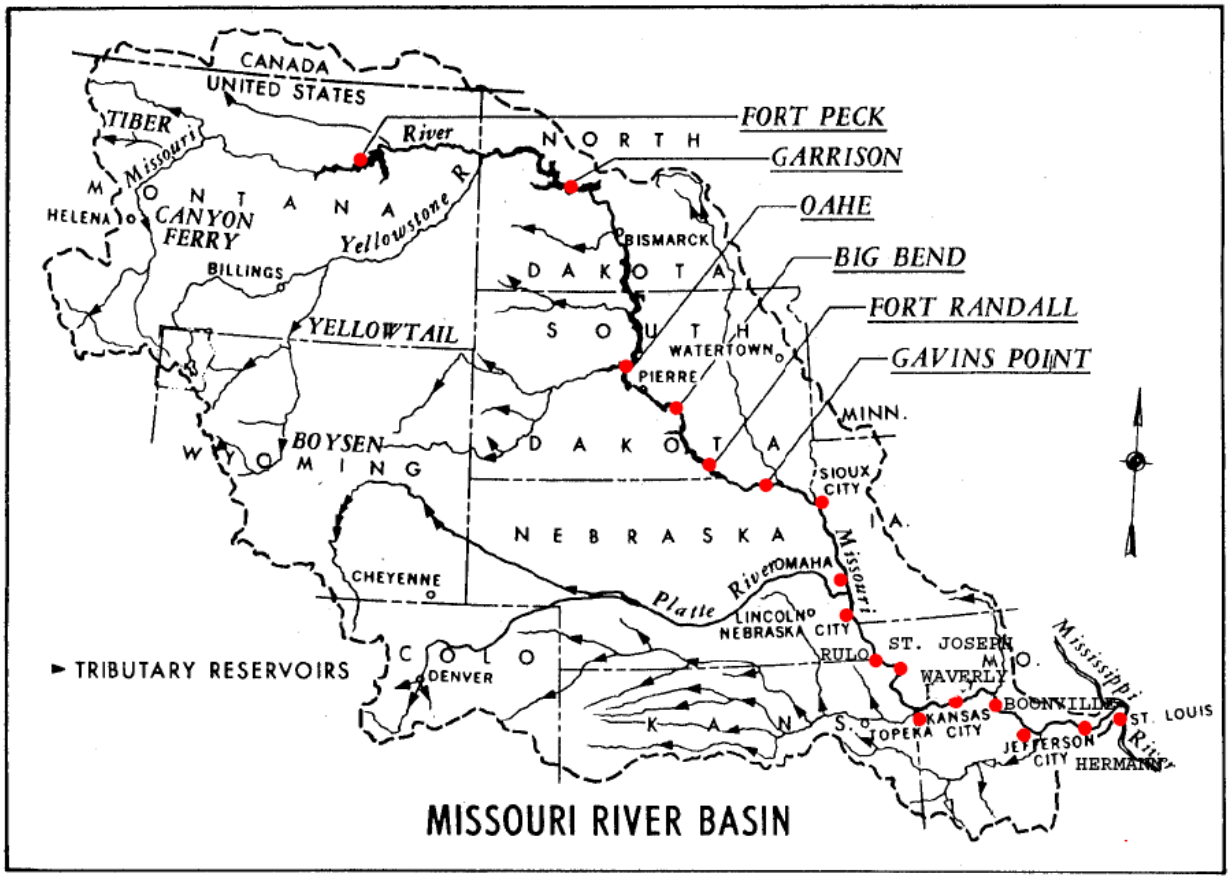
The Depletions Database builds upon both the MBSA study and Reclamation's 2005 study. For the Depletions Database, the MBSA nodes have been replaced with United States Geological Survey (USGS) standard hydrologic units. Each hydrologic unit is assigned a Hydrologic Unit Code (HUC). The USGS publishes water use inventory every five years. The USGS was compiling water use data by HUC when the decision was made to organize the Depletions Database by HUC making it easy to use the USGS water use data. However, since 2000, the USGS has compiled water use data by county instead of HUC. The Depletions Database currently covers the period 1929 to 2007.

The same data and methods used in the MBSA study and the 2005 study were used when developing the Depletions Database. The Depletions Database covers the top two depletions categories for water diversions, irrigated agriculture and public surface water supply systems, which together account for approximately 94 percent of the total estimated depletions in the basin.

Historic Level Depletions – Estimated amount of water depleted from the system from 1929 to 2007, given in acre-feet by month.

Present Level Depletions – Estimated amount of water that would be depleted since 1929 based on the current level of development, given in acre-feet by month.

In the Depletions Database, both historic and present-level depletions for the Missouri River Basin above Hermann, Missouri are estimated by HUC. The data can also easily be compiled by the following Missouri River reaches for use by the United States Army Corps of Engineers (Corps) in their river operation models.



Missouri River Basin Reaches:

Missouri River - Above Fort Peck Dam, Montana
Missouri River - Fort Peck Dam to Garrison Dam, North Dakota
Missouri River - Garrison Dam to Oahe Dam, South Dakota
Missouri River - Oahe Dam to Big Bend Dam, South Dakota
Missouri River - Big Bend Dam to Fort Randall Dam, South Dakota
Missouri River - Fort Randall Dam to Gavins Point Dam, South Dakota
Missouri River - Gavins Point Dam to Sioux City, Iowa
Missouri River - Sioux City to Omaha, Nebraska
Missouri River - Omaha to Nebraska City, Nebraska
Missouri River - Nebraska City to St. Joseph, Missouri
Missouri River – St. Joseph to Kansas City, Missouri
Missouri River - Kansas City to Boonville, Missouri
Missouri River - Boonville to Hermann, Missouri

Irrigated Agriculture Depletions

This section describes the data requirements, data sources, methods, and assumptions used to estimate irrigated agriculture depletions. The crop irrigation requirement, diversion requirement, and a return flow component are all calculated on a monthly time step to determine the irrigation depletions in each HUC. The difference between the diversion requirement and the return flow is the water loss, or depletion. This value is the sum of the crop use, transmission losses, non beneficial consumptive uses, and return flow losses.

Depletions – A loss of water from a surface water system resulting from a man induced activity.

Crop Irrigation Requirement – The additional water, supplied by irrigation, needed to supplement the effective precipitation to adequately grow a given crop to maturity.

Diversion Requirement - The amount of water diverted from a surface water source (stream) to satisfy the crop irrigation requirement, and on-farm and conveyance losses.

Return Flow – The portion of the water diverted for a beneficial use that returns to the stream for potential future diversion or in-stream uses.

Irrigated Acreage

The main piece of information required to calculate agriculture depletions is the number of irrigated acres in each HUC. Procedures for collecting irrigated agricultural acres and definitions of the data requested have varied over the years. The U.S. Department of Agriculture (USDA) Census of Agriculture (Ag Census) is the largest and most complete data source available for irrigated acres. Therefore, Reclamation decided to use this data source for the number of irrigated acres. The 2007 Ag Census[2] data is the latest available irrigated acreage data. The Ag Census data are compiled by county. Also used by Reclamation to supplement the Ag Census data are irrigated acreage data collected by several states.

From 1929 to 1940, the Ag Census was conducted every 10 years in coordination with the population census. Since 1944, the Ag Census has been conducted every 5 years. Irrigated acres in each county for the study period are entered into the Depletions Database. Annual values are determined by straight line interpolation between Ag Census values.

Both the MBSA study and Reclamation's 2005 study used Ag Census data. Since the 2005 study was completed, the 2007 Ag Census data became available, and these data are also used in the Depletions Database. Reclamation plans to update the Depletions Database each time new Ag Census data becomes available. The 2012 Ag Census data are expected in either 2013 or 2014.

Some state collected irrigated acreage data are also used in the Depletions Database. The state of Montana performed field verification of irrigated acres in 1975 and 1987. Ag Census data for the counties in Montana are adjusted for the period 1929 through 1975 using the ratio of the

[2] U.S. Department of Agriculture reports are available on the internet at http://www.agcensus.usda.gov/Publications/2007/index.asp

State's data to the 1975 Ag Census data, and again for the period 1976 through 2007 using the ratio of the state of Montana's 1987 data to the 1987 Ag Census data.

During the MBSA study, North Dakota, South Dakota, Colorado, Missouri, and Nebraska, elected to use Ag Census data for the years 1944 through 1973 while providing their own county figures for the ensuing years. The following data provided by the states are used in Depletions Database. For all other years, Ag Census data are used.

- North Dakota: 1974 through 2002
- South Dakota: 1970 through 1977
- Colorado: 1974 through 1978
- Missouri: 1974 through 1978
- Nebraska: 1974 through 1978

Distribution of Irrigated Acres to HUCs

Ag Census data are reported by county, while the Depletions Database calculates depletion estimates by HUC. Therefore, county irrigation data had to be distributed to the appropriate HUCs. Reclamation explored several methods for distributing the county data. The Natural Resources Conservation Service (NRCS) used to release Irrigation Systems Inventory Reports that listed county irrigated data by irrigation type and divided county data into HUCs. However, several Missouri River Basin states, primarily in the lower portion of the basin and with limited irrigation data, did not complete these reports. Therefore, other sources of information were needed.

At one time, the NRCS had an irrigation database for Kansas. The database identified how many irrigated acres by county were located in each HUC. In addition, the Environmental Protection Agency (EPA) maintains a software package called BASINS, which displays total land area under production by county within each HUC. The following data sources are used as follows to distribute each county's irrigated or production acres to the appropriate associated HUC.

- NRCS 1996 Irrigation Systems Inventory Report: Montana, North Dakota, South Dakota, Wyoming, and Colorado
- 2005 NRCS Irrigation Database: Kansas
- EPA's software called BASINS, Version 3.0, June 2001: Minnesota, Missouri, Iowa, and Nebraska

These data are used to estimate what percentage of the irrigated lands (or production land) within each county lies within each HUC. The irrigated acres for each HUC are determined by multiplying the irrigated acreage for each county by the percent of each county's irrigated acres located in each HUC.

Irrigation Data

One of the MBSA study groups requested each Soil Conservation Service, now the NRCS, District Conservationist provide their best estimate of irrigation use within their county. The information requested included the following.

- Verify the 1978 irrigated acre value for their county
- Acreage for each node basin in 1978
- Crop distribution for the acres within each node basin
- Estimate the split between groundwater and surface water use for the years 1944, 1964, and 1978
- Irrigation types and estimates of associated efficiencies

This same information is used in the Depletions Database for the breakdown of irrigated acres into the various irrigation types, crop distribution, groundwater, and surface water split.

Irrigation Categories

The MBSA study divided irrigated acres into eight categories for both surface water and ground water irrigation. The Depletions Database uses these same categories, which include the following:

- Furrow – Full Service Irrigation
- Furrow – Partial Service Irrigation
- Waterspreaders – Full Service Irrigation
- Waterspreaders – Partial Service Irrigation
- Center Pivot Sprinklers – Full Service Irrigation
- Center Pivot Sprinklers – Partial Service Irrigation
- Other Sprinklers – Full Service Irrigation
- Other Sprinklers – Partial Service Irrigation

These categories are used to assign different conveyance system and on-farm efficiencies. Reclamation initially assumed that each type of irrigation system had a unique efficiency associated with it. However, NRCS data indicated there was not a significant difference in some of the irrigation systems. Therefore, irrigated acres within each HUC having the same or similar efficiencies were added together resulting in up to four efficiency groups for each HUC.

Data from the MBSA study were used to estimate the percentage of the irrigated acres in each irrigation category for each HUC. Beginning with the first HUC and using the drainage basin map from the MBSA study, each county was identified, its node basin was determined, and by looking at the input file for that particular node basin, the percentages for the irrigation categories were located and used as input to the Depletions Database.

Conveyance System –Portion of the delivery system that provides water from the source of water supply to the farm lateral.

On-Farm System – Portion of the delivery system that provides water from the field headgate to the crops.

Conveyance system and on-farm efficiencies are needed to calculate diversion requirements. These efficiencies differ

among the irrigation categories.

As water moves through the conveyance system, losses from canal seepage, deep percolation, and evaporation are realized. Data for each HUC was taken from estimates provided by the NRCS during the MBSA study. Conveyance system losses were estimated for a variety of systems including open channel, pipe, or a combination of both. In addition, estimated efficiencies vary to account for early season build up of seepage in the canal prism, peak season irrigation, end-of-season canal draw down, and late season irrigation.

On-farm system losses include deep percolation, operational waste, and in the case of sprinklers, wind drift and spray losses. Data for each HUC are the data provided by the NRCS during the MBSA study. On-farm losses are estimates for a variety of irrigation systems including flood and sprinkler. Monthly losses are estimated to account for more efficient operation during the irrigation season.

Sprinkler Systems

Sprinkler systems were not used in the Missouri River Basin prior to the mid-1940s. Therefore, it was necessary to make adjustments to the subcategories involving sprinkler systems. Originally, the irrigated acreage was computed for each category using the percentages of each county within the HUC. For each irrigation category, one value was used for the entire period of record for each county. An adjustment was used to handle the distribution of acres that assigned to sprinkler systems for the years 1929 through 1953.

All sprinkler acres for the years 1929 through 1943 were added to the furrow, full service surface water irrigation category. For 1944 through 1953, a ramping process of 10 percent per year was applied to the acres in the sprinkler categories, allowing for gradual development of sprinkler system irrigation over time.

Length of Irrigation Season

During the MBSA study, parameters were established that define the length of time irrigation water is supplied depending irrigation type. These same parameters are used in the Depletions Database.

In the upper portion of the basin, full service irrigation means that a full service water supply is provided for each crop for the entire growing season from plant date to harvest date. Partial service provides each crop with a full service supply until July 1, a 50 percent supply for the month of July, and no additional irrigation water after July 31. Waterspreaders receive a full water supply until June 1, after which no irrigation water is made available to the crops.

In the lower portion of the basin, full service irrigation means a full service supply is provided for the entire growing season from plant date to harvest date for each crop. Partial service indicates that each crop receives 50 percent of a full service supply for each month during the irrigation season. Waterspreader acres receive a double water supply allotment through June 1, after which no irrigation water is made available to the crops.

Crop Data

During the MBSA study, average crop distribution percentages were estimated for each node basin based upon information provided by the NRCS. For the Depletions Database, HUC and node basins maps were used to select the appropriate node basin crop distribution percentages for each HUC. The cropping pattern does not vary over the period of record. It is recognized that this could affect the accuracy of crop irrigation requirement estimates. However, major changes in cropping patterns would be necessary to significantly alter the monthly crop irrigation requirements.

Planting dates and harvest dates were obtained from NRCS Crop Irrigation Guides and information accumulated in the MBSA study. Cover dates were determined based upon the planting date and information from the NRCS.

Climate Data

Monthly mean temperature and total monthly precipitation are also required to calculate the crop irrigation requirement. Climate data were obtained from EarthInfo, Inc., and from the National Oceanic and Atmospheric Administration (NOAA) National Climate Data Center. Using these two data sources, it was possible to establish long term temperature and precipitation records for representative climate stations in each HUC.

Primary stations were selected based on period of record and location. For each HUC, an attempt was made to identify a centrally located station with a long period of record. If a station did not meet both criteria, the station in the HUC with the longest period of record was selected as the primary climate station. Other nearby stations were selected as secondary stations which were used to fill in data gaps in the record of the primary station.

Two methods are used to calculate crop irrigation requirement: Jensen-Haise and Blaney-Criddle.[3] For the MBSA study and the Depletions Database, the method used varied by state based on each state's preference. For the Jensen-Haise method, solar radiation data are also required to calculate evapotranspiration. Solar radiation is estimated from percent of possible sunshine which comes from published climate stations summaries. Where these data were not available, historical monthly averages are used. There is a computer routine in the Depletions Database that converts percent of possible sunshine data into solar radiation data.

Crop Irrigation and Diversion Requirements

Using the temperature, precipitation, and cropping data described above, the Depletions Database calculates the crop irrigation requirement. For any given year, if the crop irrigation requirement is 115 percent of average or more, a second set of conveyance system and on-farm efficiencies are used because it is assumed to be a drought year. The drought year efficiencies effectively decrease the diversion requirement to account for the potential lack of water in the

[3] Missouri Basin States Association. *Technical Paper Agriculture Water Use Including Identification of Irrigated Lands*. September 1982. Page 16

system. Diversion requirement is calculated using the crop irrigation requirement and conveyance loss efficiencies.

Return Flow Distribution Patterns

Irrigation water that is not consumptively used or lost in other ways is available to be returned to the river system and is available for use again downstream. The return of this water is not instantaneous in many cases, and may require several months to return to the river. In the Depletions Database, all return flows occur within the same HUC in which the water is diverted. The Montana Department of Natural Resources and Conservation provided estimates of return flow patterns for the reach above Fort Peck Reservoir based on upon a Missouri River Basin modeling work performed in the 1980's and 1990's. Data from the MBSA study was used for the remaining HUCs.

Based upon these typical return flow patterns, a portion of the diversion is returned to the river in the same month that the diversion occurs, and the remaining portion is lagged over the following 12 months. The following example illustrates the return flow pattern, assuming that 1.0 AF of the diverted water eventually returns to the river.

	%	Month	Return Flow (in AF)
Return flow during month of diversion	60	July	0.60
Month one following diversion	50	August	0.20 (50% of the remaining 40%)
Month two following diversion	15	September	0.06 (15% of the remaining 40%)
Month three following diversion	13	October	0.05 (13% of the remaining 40%)
Month four following diversion	8	November	0.03 (8% of the remaining 40%)
Month five following diversion	4	December	0.02 (4% of the remaining 40%)
Month six following diversion	3	January	0.01 (3% of the remaining 40%)
Month seven following diversion	2	February	0.01 (2% of the remaining 40%)
Month eight following diversion	1	March	0.01 (1% of the remaining 40%)
Month nine following diversion	1	April	0.01 (1% of the remaining 40%)
Month ten following diversion	1	May	0.00 (1% of the remaining 40%)
Month eleven following diversion	1	June	0.00 (1% of the remaining 40%)
Month twelve following diversion	1	July	0.00 (1% of the remaining 40%)

Non-beneficial consumptive use is a loss that occurs within the irrigation system. It is primarily weeds, trees, and other vegetation growing along canals and ditches that use water that would normally be returned to the stream. The available return flow is adjusted to account for these losses. Accurate figures are very difficult to measure, but a common value used is 15 to 20 percent. In the Depletions Database, a non-beneficial consumptive use value of 20 percent is used for both conveyance system and on-farm losses for all HUCs.

Depletions Due to Groundwater Irrigation

Large capacity wells located near streams can reduce streamflows significantly by reducing aquifer discharge to streams or by inducing flow out of the stream. Factors controlling the degree of depletions include, but are not limited to, the hydraulic connection between the aquifer and stream, distance of well from stream, and quantity and duration of water pumped.

The Kansas River and Platte River sub-basins have a large amount of irrigation supplied by aquifers that have minimal hydraulic connections to streams. Generally, the further a well is from a stream, the less impact it has on stream flow. In the Depletions Database, net groundwater use is approximated using groundwater irrigated acres based on Ag Census data and MBSA groundwater and surface water percentages. The Depletions Database does not include information on the location of groundwater wells in relation to nearby streams. The surface-water depletions already include ground water depletions for all basins except the Kansas River and Platte River. However, a procedure was needed to adjust the groundwater depletion for the Kansas and Platte River Basins.

The MBSA study addressed this issue by utilizing analytical groundwater models and well locations to delineate the reduced effects of irrigation wells on streamflows as the distance from well to stream increases. In the MBSA report, *Technical Paper, Ground Water Depletion*, there is a listing of annual streamflows depletions and groundwater pumpage for the sub-basins in the Kansas and Platte River Basins. A ratio of depletions to irrigation water pumped was developed for each year from 1944 to 1978 (the period of record for the MBSA study).

The procedure used in the Depletions Database for the Kansas and Platter River Basins to approximate the percent of groundwater use that depletes nearby streams is as follows. Groundwater acres are multiplied by the ratios developed in the MBSA study to compute the depletions. For the years not covered by the MBSA study, average ratios are used. The mean ratio from 1944 - 1953 (0.33) was used for years 1929 -1943, and the mean ratio from 1969 - 1978 (0.12) was used for the years 1979 - 2007. The ratios calculated in the MBSA study indicate that the depletions as a percentage of groundwater pumpage decreased over time. The likely explanation is that most wells were initially drilled near streams. As time passed, wells were developed further from streams where there is less hydraulic connection and hence less effect on streamflows.

For the North Fork Republican, Arikaree, and South Fork Republican sub-basins, the MBSA study did not use any analytic groundwater models to determine streamflow depletions via groundwater pumpage. For the Depletions Database, the groundwater usage in these three HUCs is adjusted using the same depletion to pumpage ratios described above.

Using the above steps, the monthly depletions due to net groundwater withdrawals were estimated for 1929-2007. The monthly groundwater depletions were then summed with surface water depletions to arrive at total irrigation depletions by HUC.

For these two river basins, the present-level ground water depletions are calculated the same way as historic, except that the annual average depletion-to-pumpage ratio for 1969-78 (0.12) was applied to every month for 1929 thru 2002, and the present-level net withdrawals were used.

Historic and Present-Level Agriculture Depletions

Historic and present-level depletions are the output of the Depletions Database. As an intermediate step in the computing process, a depletions rate is calculated as acre-feet (AF) depleted per acre irrigated. This depletions rate takes into account the multiple crop types located in the HUC, the climate data, and also takes into account on-farm efficiencies, conveyance system efficiencies, and return flow distribution patterns.

Historic depletions are calculated by multiplying the number of acres historically irrigated by the monthly depletion rate. The resultant is the number of acre-feet historically depleted in each month for each HUC over the period of record.

The present-level depletion is defined as the depletion that would have occurred in a past year given the present level of development. For example, how would the irrigation development of today affect the depletion in 1935 assuming 1935 climate conditions? Present-level irrigation depletions are calculated the same way as historical depletions, except that the 2007 irrigated acreage is used for all years in the period of record (1929 - 2007). The following example illustrates calculation of present-level depletions:

- 1929 irrigated acreage for HUC X is 10,000 acres
- 2007 irrigated acreage for HUC X is 25,000 acres
- July 1929 irrigation depletion rate was .87 AF/acre (depletion is the diversion requirement minus return flow)
- July 1929 historic depletion was 8,700 AF (10,000 acres times X 0.87 AF/acre)
- Present-level depletion for July 1929 would be 21,750 AF (25,000 acres X 0.87 AF/acre) 21,750 AF

Thus, had 25,000 acres of irrigation been in place in July of 1929, the depletion for that month would have been 21,750 AF. Historically, only 8,700 AF of depletion occurred.

Surface Water Public Supply Depletions

During development of the Depletions Database, a need to quantify depletions to streams in the Missouri River Basin by diversions for public water supplies was identified. However, there were minimal sources of data to quantify those depletions, so several assumptions were needed to define a systematic process for quantifying those depletions in the Missouri River Basin.

Public Supply Diversions

USGS water use reports provide data on public water supplies in the Missouri River Basin. These reports are published every 5 years, with more comprehensive reports starting in 1985. Historically, the water use data were aggregated by both counties and HUCs. However, the 2000 and 2005 reports did not aggregate water use by HUC, and it is anticipated that future reports will only include state and county-level data.

Reclamation used the 1985, 1990, and 1995 published USGS water use reports as the basis for calculating public supply consumption information by HUC. The per capita consumption was multiplied by the estimated number of people served by a public water supply in each HUC to calculate total public supply diversion. The process is based on the primary assumption that public supply water usage parallels population growth in a HUC.

Ratios of population served by public supply surface water system to total HUC population were developed from the 1985, 1990, and 1995 USGS water use data. The three ratios were averaged for each HUC, and that average was multiplied by the historic HUC population to estimate population served by public supply surface water systems over the period of record.

The average per capita water use for each HUC was calculated from the 1985, 1990, and 1995 USGS water use data. For each HUC, the per capita use was multiplied by the population served by surface water public systems to estimate the annual surface water public supply diversions.

Public Supply Depletions

USGS[4] estimated that 37 percent of the water diverted for public supplies in Montana is consumed, with the remaining 63 percent returned to surface waters. Reclamation uses this value for the Depletions Database for all Missouri River Basin states. Public supply water diversions are multiplied by 0.37 to estimate actual consumptive use, or depletions. The monthly distribution of municipal water use developed for the MBSA study was used to distribute the depletions as follows:

Monthly Distribution of Public Water Supply Depletions (in percent)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3	3	6	7	10	13	18	15	11	8	3	3	100

Population Data

U.S. Census Bureau population data are used in the Depletions Database. Because the Census Bureau data are reported by county, Reclamation developed a GIS application to distribute population data into the respective HUCs that overly the counties. The GIS application

[4] United State Geological Survey. *Estimated Water Use in Montana in 2000, Scientific Investigations Report*. 2004. Page 39

calculated the area of each census block group that lies within a particular HUC. The ratio of a block group's area within a HUC to the total block-group area was used to distribute the Census 2000 block group's population into the respective HUCs.

The Census 2000 block-group population has been distributed into respective HUCs. Census data for prior census years are not readily available in GIS format. Therefore, Reclamation used the distribution of the Census 2000 population by HUC for all prior census years and again for 2010. The ratios of county aggregated population by HUC to total county population were calculated and the county ratios were then multiplied by historic county census data to estimate the population by HUC. Population for years between census years was estimated by linear interpolation.

Broomfield County, Colorado, (located in Denver metropolitan area) was established in November 2001. This presented a problem in that the methods used to disaggregate census blocks and counties into respective HUCs in Colorado would have to be redone to accommodate the new county. As a simplifying procedure to incorporate census data for Broomfield into the Depletions Database, 100 percent of Broomfield's population and public supply consumption is in HUC 10190003.

Historic and Present Level Public Supply Depletions

The difference between historic and present level depletions for public supply is straight forward. Historic depletions are the calculated surface water public supply depletions using historic Census Bureau population data. Present level depletions are calculated using the most recent year of Census Bureau population data for every year in the Depletions Database.

Data Summary

The following tables and graphs summarize the depletions data calculated in the Depletion Database. The data are summarized by the Missouri River Basin reaches described in the introduction. The graphs summarize the data annually and the tables summarize the data monthly and annually.

HISTORIC

DEPLETIONS

Missouri River above Fort Peck Reservoir

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs above Fort Peck

Units - 1,000's of Acre-Feet

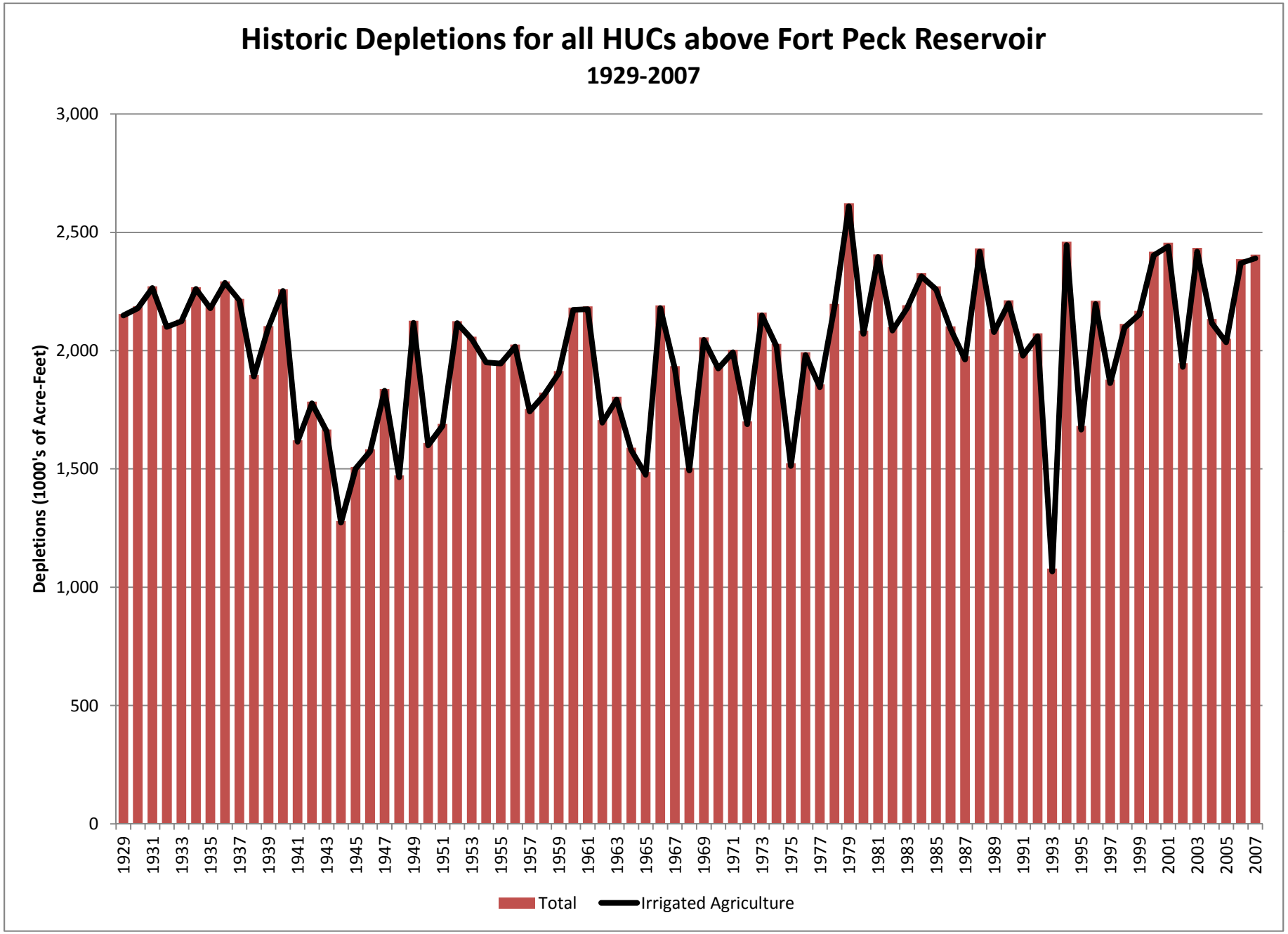
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-40	-33	-28	-9	137	572	928	717	56	-59	-50	-37	2,155
1930	-30	-24	-20	-7	206	822	768	498	140	-77	-51	-38	2,187
1931	-30	-25	-21	-2	216	750	734	690	93	-44	-52	-37	2,271
1932	-30	-24	-20	-7	275	479	766	545	305	-82	-59	-43	2,106
1933	-34	-28	-23	-18	40	842	1,022	297	184	-62	-51	-38	2,131
1934	-30	-25	-21	19	466	332	901	694	101	-73	-55	-41	2,268
1935	-33	-28	-24	-20	73	646	838	619	277	-71	-53	-38	2,187
1936	-30	-24	-20	-10	355	559	944	493	174	-57	-52	-39	2,293
1937	-31	-26	-22	0	449	337	821	717	142	-59	-63	-46	2,218
1938	-37	-30	-26	-14	10	419	738	658	362	-86	-57	-41	1,898
1939	-32	-26	-21	5	198	304	1,005	662	194	-83	-59	-44	2,103
1940	-35	-29	-24	-17	373	677	746	719	16	-69	-56	-43	2,259
1941	-34	-29	-24	-10	100	465	876	431	-39	-42	-42	-31	1,621
1942	-25	-21	-18	-4	-7	341	872	612	179	-59	-50	-36	1,784
1943	-28	-23	-19	2	60	231	806	535	255	-65	-50	-36	1,667
1944	-28	-23	-19	27	55	38	704	431	193	-32	-39	-27	1,280
1945	-21	-18	-15	-11	34	102	911	548	94	-41	-44	-32	1,508
1946	-25	-21	-17	24	38	472	696	490	63	-64	-42	-32	1,583
1947	-25	-21	-18	0	278	213	937	534	75	-49	-50	-37	1,838
1948	-30	-25	-21	-4	17	167	678	566	244	-43	-45	-32	1,473
1949	-25	-21	-17	11	96	666	806	621	169	-79	-57	-43	2,126
1950	-35	-29	-25	-20	195	322	679	505	143	-46	-46	-34	1,609
1951	-28	-23	-19	-15	166	459	788	349	159	-65	-46	-35	1,690
1952	-28	-24	-20	33	85	601	815	533	293	-61	-59	-43	2,125
1953	-35	-29	-24	-20	4	362	1,062	600	268	-44	-49	-36	2,059
1954	-29	-24	-20	-16	270	383	972	391	185	-58	-55	-41	1,959
1955	-33	-28	-23	-18	66	523	622	807	200	-62	-57	-42	1,955
1956	-33	-28	-23	-16	100	707	774	438	272	-67	-56	-42	2,025
1957	-34	-29	-24	-18	41	352	886	533	210	-76	-50	-37	1,754
1958	-30	-25	-21	-10	446	185	502	682	241	-51	-56	-42	1,822
1959	-33	-28	-23	-19	28	561	965	529	85	-64	-49	-37	1,914
1960	-30	-25	-21	-17	99	765	944	372	230	-52	-48	-36	2,181
1961	-29	-24	-21	-16	79	982	766	596	-6	-53	-49	-38	2,187
1962	-31	-26	-22	-2	-9	603	613	469	258	-57	-51	-38	1,706
1963	-30	-25	-21	-13	118	200	873	637	221	-61	-55	-40	1,805
1964	-32	-27	-22	-16	26	185	960	423	220	-44	-48	-35	1,589
1965	-28	-24	-20	-16	80	365	791	448	-8	-29	-41	-31	1,487
1966	-25	-21	-17	-12	272	481	915	534	239	-71	-59	-45	2,191
1967	-36	-31	-26	-22	34	234	916	761	273	-74	-55	-40	1,935
1968	-32	-26	-22	-16	52	315	962	322	63	-40	-42	-32	1,504
1969	-26	-22	-18	13	273	190	851	727	252	-83	-58	-44	2,056
1970	-36	-30	-25	-20	49	600	706	723	124	-62	-54	-41	1,935
1971	-33	-27	-23	-16	89	546	880	602	141	-62	-53	-40	2,004

Missouri River above Fort Peck Reservoir

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs above Fort Peck

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-33	-28	-23	-12	119	665	584	406	162	-55	-48	-36	1,701
1973	-29	-25	-21	-15	321	546	902	509	111	-54	-49	-37	2,160
1974	-30	-25	-21	-8	26	873	825	302	223	-46	-52	-38	2,028
1975	-31	-26	-22	-18	11	261	726	452	320	-73	-44	-33	1,524
1976	-26	-21	-17	-10	317	390	825	490	200	-59	-55	-41	1,993
1977	-33	-28	-24	24	97	748	761	402	38	-41	-49	-38	1,858
1978	-31	-26	-22	-13	25	824	780	703	119	-54	-61	-46	2,198
1979	-37	-31	-26	-22	239	768	913	636	353	-67	-59	-44	2,623
1980	-35	-29	-25	8	45	597	1,013	507	166	-68	-54	-41	2,084
1981	-33	-28	-23	3	-8	588	980	794	341	-92	-66	-49	2,407
1982	-39	-33	-27	-16	18	520	928	763	148	-61	-58	-43	2,100
1983	-35	-29	-24	-9	160	621	778	734	153	-58	-57	-42	2,191
1984	-34	-29	-24	-16	263	513	1,018	669	150	-80	-58	-45	2,328
1985	-37	-31	-26	2	212	941	1,078	319	-24	-63	-56	-44	2,272
1986	-36	-31	-26	-19	187	782	797	627	-28	-55	-54	-42	2,103
1987	-34	-29	-24	25	55	818	569	430	320	-53	-59	-43	1,976
1988	-35	-29	-24	0	129	882	930	587	142	-54	-54	-42	2,432
1989	-34	-29	-24	-18	89	801	876	331	276	-74	-58	-44	2,092
1990	-35	-30	-25	-12	21	691	886	467	438	-76	-64	-48	2,213
1991	-38	-32	-27	-22	10	290	1,101	677	190	-62	-55	-41	1,992
1992	-33	-28	-23	-7	352	535	608	623	234	-80	-61	-46	2,074
1993	-38	-32	-27	-15	134	320	253	327	259	-39	-37	-27	1,079
1994	-21	-18	-15	-8	161	707	822	667	356	-83	-61	-46	2,460
1995	-37	-31	-26	-19	12	383	650	712	192	-68	-49	-37	1,682
1996	-30	-25	-21	-11	4	730	841	739	150	-64	-59	-45	2,211
1997	-36	-31	-26	-21	54	442	782	588	287	-66	-55	-41	1,878
1998	-33	-28	-23	-11	94	263	962	740	322	-68	-61	-45	2,113
1999	-36	-30	-25	-17	105	543	1,023	542	228	-60	-60	-45	2,168
2000	-36	-30	-26	-7	124	664	1,013	713	195	-85	-61	-46	2,418
2001	-38	-32	-27	-16	413	445	884	780	244	-78	-69	-52	2,456
2002	-42	-36	-30	-19	108	426	1,033	462	211	-67	-56	-42	1,947
2003	-34	-29	-24	-13	167	617	1,041	661	193	-52	-53	-40	2,434
2004	-32	-27	-23	-1	40	632	1,001	497	205	-64	-54	-41	2,134
2005	-33	-28	-24	-17	96	280	1,120	605	217	-70	-55	-41	2,051
2006	-33	-28	-23	1	184	568	1,065	628	195	-71	-56	-43	2,387
2007	-35	-29	-24	-10	80	668	1,126	642	140	-62	-51	-39	2,406
Average	-32	-27	-23	-8	133	515	851	567	187	-62	-53	-40	2,008


Historic Depletions for all HUCs above Fort Peck Reservoir
1929-2007
Depletions (1000's of Acre-Feet)
3,000
2,500
2,000
1,500
1,000
500
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Fort Peck Dam to Garrison Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Fort Peck Dam to Garrison Dam

Units - 1,000's of Acre-Feet

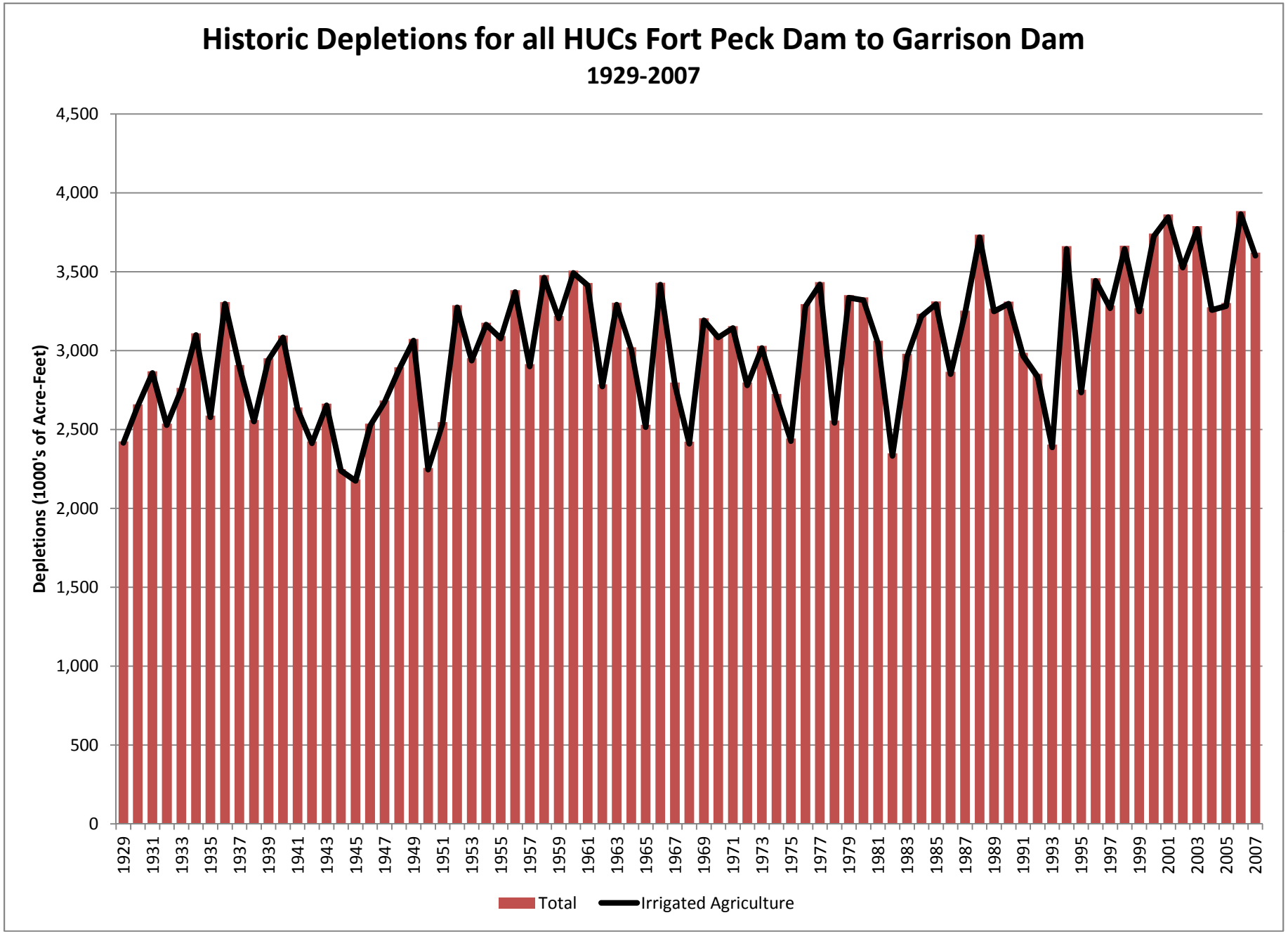
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-28	-20	-16	28	427	718	820	604	60	-58	-67	-42	2,425
1930	-28	-20	-16	216	599	746	730	435	190	-84	-67	-42	2,659
1931	-28	-21	-17	106	725	934	704	503	146	-64	-73	-46	2,869
1932	-30	-23	-19	78	704	505	827	496	207	-92	-72	-44	2,537
1933	-30	-22	-18	18	445	1,068	937	293	233	-45	-71	-46	2,764
1934	-29	-21	-18	211	1,235	588	726	489	80	-42	-68	-42	3,110
1935	-30	-23	-20	3	337	842	874	517	274	-59	-78	-49	2,589
1936	-31	-22	-17	100	1,154	776	889	469	168	-65	-70	-43	3,308
1937	-30	-23	-19	117	934	521	755	628	226	-69	-81	-50	2,909
1938	-34	-25	-20	99	379	732	713	533	373	-57	-82	-52	2,560
1939	-32	-23	-18	225	812	408	987	524	267	-62	-83	-52	2,951
1940	-35	-26	-21	44	980	684	824	616	225	-66	-81	-50	3,095
1941	-33	-25	-20	74	926	642	796	494	-36	-72	-66	-41	2,639
1942	-29	-21	-18	132	311	649	877	556	148	-70	-69	-43	2,424
1943	-28	-20	-16	215	522	448	903	558	262	-53	-79	-50	2,664
1944	-33	-23	-18	124	746	179	714	513	170	-13	-68	-43	2,249
1945	-29	-21	-16	13	473	364	927	514	88	-25	-64	-41	2,184
1946	-27	-19	-15	267	415	623	870	543	80	-92	-66	-42	2,537
1947	-28	-21	-17	74	774	348	976	566	177	-41	-77	-48	2,684
1948	-33	-23	-19	154	875	609	644	580	286	-41	-84	-53	2,895
1949	-35	-26	-21	260	813	706	791	666	159	-107	-81	-50	3,075
1950	-35	-26	-21	22	496	599	719	546	82	-17	-66	-42	2,257
1951	-28	-20	-16	52	900	511	776	452	111	-79	-69	-43	2,547
1952	-30	-22	-18	244	726	942	749	571	331	-49	-95	-61	3,288
1953	-40	-30	-24	0	375	852	1,083	623	307	-52	-86	-55	2,952
1954	-35	-25	-20	95	771	753	1,114	516	221	-74	-85	-54	3,177
1955	-36	-27	-22	66	535	803	952	805	227	-62	-92	-58	3,092
1956	-38	-28	-22	63	823	1,194	834	469	291	-51	-92	-59	3,384
1957	-38	-29	-24	34	681	588	1,110	620	198	-89	-84	-53	2,915
1958	-36	-26	-21	137	1,507	560	545	707	328	-61	-101	-62	3,478
1959	-43	-33	-27	50	628	1,027	1,027	664	164	-95	-88	-56	3,219
1960	-37	-27	-22	114	948	889	1,078	477	285	-60	-85	-54	3,507
1961	-36	-27	-23	64	815	1,240	929	737	-54	-90	-78	-49	3,428
1962	-34	-25	-21	258	475	832	678	553	236	-33	-82	-53	2,786
1963	-34	-26	-20	54	896	617	974	702	336	-30	-102	-65	3,303
1964	-43	-31	-24	61	815	486	1,176	496	281	-48	-90	-58	3,022
1965	-38	-28	-22	93	583	659	895	528	-8	-22	-67	-43	2,529
1966	-30	-21	-17	60	1,127	760	1,007	476	271	-65	-84	-54	3,430
1967	-36	-27	-23	27	625	372	1,041	760	257	-56	-87	-55	2,798
1968	-37	-26	-20	42	598	493	961	349	212	-28	-72	-47	2,423
1969	-31	-23	-18	194	1,059	319	815	809	352	-117	-95	-59	3,205
1970	-41	-31	-24	10	635	939	986	761	95	-94	-87	-55	3,096
1971	-37	-27	-22	93	725	967	857	745	101	-115	-82	-51	3,155

Missouri River Fort Peck Dam to Garrison Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Fort Peck Dam to Garrison Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-34	-26	-21	103	709	951	666	489	167	-82	-77	-48	2,797
1973	-32	-25	-20	8	899	879	859	621	29	-57	-81	-51	3,030
1974	-35	-26	-22	115	432	1,021	903	354	176	-72	-74	-48	2,726
1975	-31	-23	-19	-9	341	601	960	547	285	-88	-75	-48	2,442
1976	-31	-22	-17	145	1,140	536	978	552	243	-82	-91	-57	3,295
1977	-39	-29	-24	266	881	1,151	860	397	178	-63	-87	-56	3,435
1978	-38	-29	-25	114	179	1,030	753	649	65	-22	-73	-47	2,557
1979	-31	-22	-17	64	705	1,005	903	578	385	-66	-93	-59	3,351
1980	-38	-29	-23	270	909	883	988	410	199	-87	-88	-57	3,337
1981	-39	-30	-25	249	430	803	886	703	334	-98	-91	-59	3,063
1982	-39	-29	-23	34	448	569	802	648	105	-55	-69	-44	2,349
1983	-30	-21	-17	53	555	842	843	801	154	-63	-84	-53	2,980
1984	-36	-26	-21	83	976	747	970	680	84	-92	-81	-51	3,233
1985	-35	-27	-22	265	1,162	852	909	404	16	-81	-80	-52	3,311
1986	-37	-29	-25	97	628	1,040	772	611	-7	-62	-75	-48	2,867
1987	-33	-25	-21	364	842	1,046	573	413	292	-47	-91	-60	3,254
1988	-40	-31	-26	193	878	1,274	944	596	126	-54	-76	-49	3,735
1989	-34	-26	-22	96	717	924	1,062	532	260	-92	-92	-59	3,267
1990	-39	-29	-24	93	748	953	812	639	399	-82	-97	-61	3,311
1991	-40	-30	-24	54	677	660	1,009	794	108	-85	-84	-53	2,986
1992	-37	-27	-21	183	968	640	514	548	276	-52	-85	-54	2,853
1993	-37	-29	-23	124	1,036	516	269	489	243	-68	-72	-44	2,404
1994	-31	-24	-20	161	1,193	868	814	706	252	-113	-89	-55	3,662
1995	-38	-30	-25	13	505	682	860	775	233	-83	-86	-55	2,752
1996	-37	-27	-21	111	434	1,220	1,091	808	122	-87	-94	-61	3,459
1997	-41	-30	-24	20	912	939	739	656	373	-91	-101	-65	3,287
1998	-43	-33	-27	180	1,304	397	1,046	725	401	-108	-108	-69	3,665
1999	-49	-37	-30	44	687	915	1,067	721	165	-59	-94	-62	3,269
2000	-42	-31	-25	178	927	907	1,045	830	209	-92	-100	-65	3,742
2001	-45	-34	-28	166	1,357	617	906	866	309	-84	-102	-65	3,863
2002	-47	-36	-30	32	833	1,075	1,189	527	289	-118	-101	-66	3,547
2003	-45	-34	-28	200	743	833	1,247	881	236	-79	-100	-65	3,789
2004	-45	-34	-27	206	839	842	891	599	254	-95	-94	-61	3,276
2005	-42	-33	-27	97	517	808	1,241	671	331	-98	-99	-65	3,302
2006	-43	-32	-26	177	1,051	1,060	1,165	677	88	-101	-79	-51	3,885
2007	-37	-29	-24	104	589	989	1,270	737	276	-98	-95	-62	3,621
Average	-35	-26	-21	114	753	767	891	596	203	-70	-83	-53	3,036


Historic Depletions for all HUCs Fort Peck Dam to Garrison Dam
1929-2007
Depletions (1000's of Acre-Feet)
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
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1959
1961
1963
1965
1967
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1971
1973
1975
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1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Garrison Dam to Oahe Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Garrison Dam to Oahe Dam

Units - 1,000's of Acre-Feet

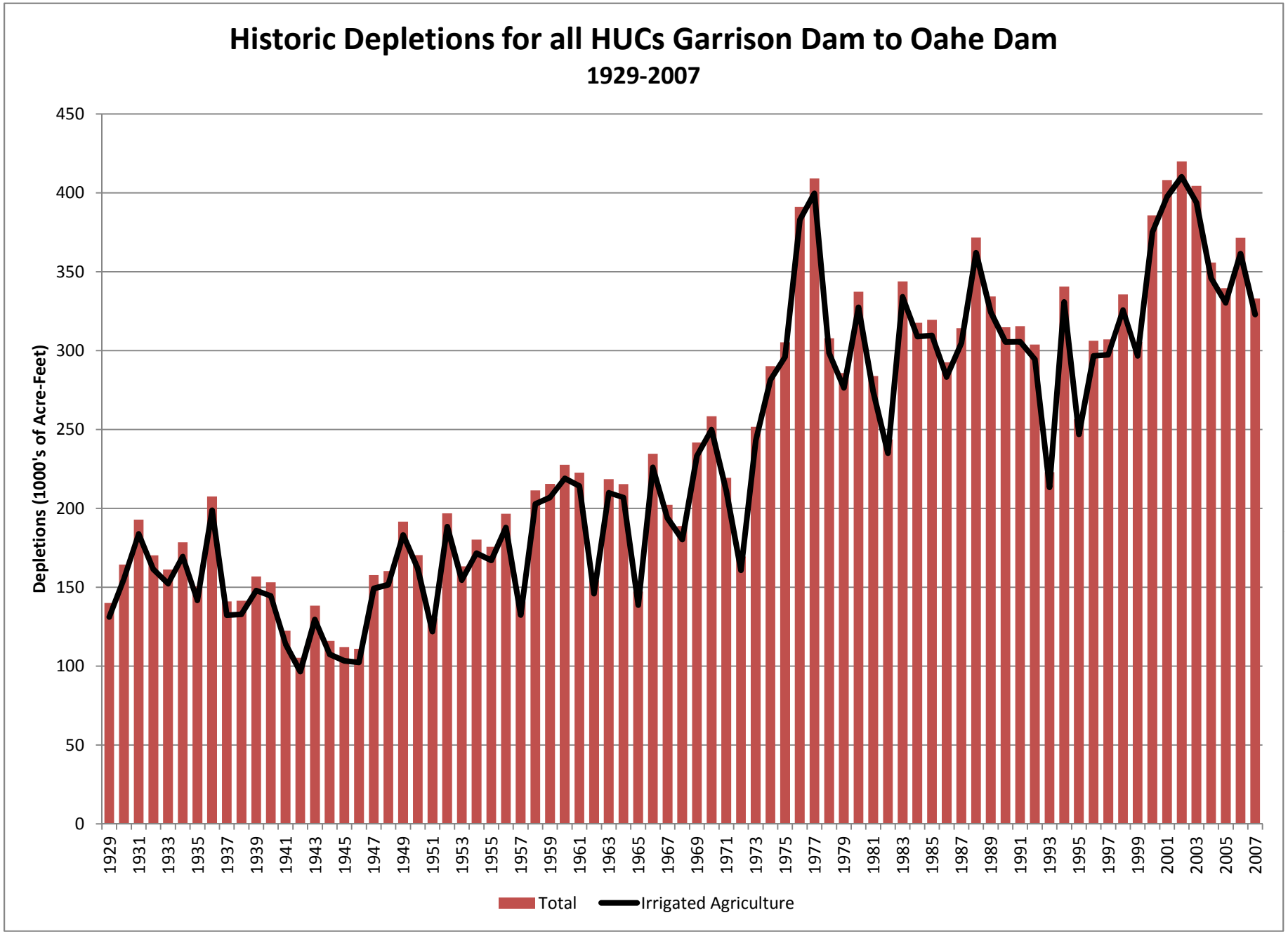
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-1	-1	0	0	8	41	53	40	8	-3	-4	-2	140
1930	-1	-1	0	1	29	35	49	42	22	-4	-5	-3	164
1931	-2	-1	0	1	37	61	51	34	21	-3	-4	-2	193
1932	-1	-1	0	0	26	47	52	39	22	-5	-5	-3	170
1933	-2	-1	-1	0	5	60	57	29	20	-1	-4	-2	161
1934	-1	-1	0	1	68	29	48	33	8	-1	-3	-2	178
1935	-1	-1	0	0	2	35	64	39	22	-2	-5	-3	151
1936	-2	-1	0	0	54	51	58	41	16	-3	-4	-2	208
1937	-1	-1	-1	2	31	24	37	44	13	-2	-4	-2	141
1938	-1	-1	0	1	9	40	45	38	18	-1	-4	-3	141
1939	-1	-1	0	3	46	27	49	27	17	-3	-4	-2	157
1940	-1	-1	0	0	43	32	42	31	15	-1	-3	-2	153
1941	-1	-1	0	0	39	17	44	26	5	-2	-3	-2	122
1942	-1	-1	0	0	2	21	49	32	10	-2	-3	-2	105
1943	-1	-1	0	4	25	18	42	40	20	-3	-4	-2	138
1944	-1	-1	0	0	25	15	37	30	19	-2	-3	-2	116
1945	-1	-1	0	2	18	10	49	35	5	0	-3	-2	112
1946	-1	-1	0	1	1	22	56	36	6	-4	-3	-2	111
1947	-1	-1	0	0	37	8	59	48	16	-3	-4	-3	158
1948	-2	-1	0	0	39	24	48	37	25	-3	-5	-3	160
1949	-2	-1	-1	1	38	48	61	44	16	-6	-5	-3	192
1950	-2	-1	-1	0	35	56	47	35	10	-1	-4	-3	170
1951	-2	-1	-1	1	40	18	47	28	8	-3	-3	-2	130
1952	-1	-1	0	9	24	60	48	39	30	-2	-6	-3	197
1953	-2	-1	-1	0	23	38	58	30	27	-1	-5	-3	163
1954	-2	-1	-1	4	23	36	71	39	23	-4	-5	-3	180
1955	-2	-1	-1	1	32	37	61	45	13	-2	-5	-3	176
1956	-2	-1	-1	2	36	66	52	33	22	-2	-5	-3	197
1957	-2	-1	-1	1	8	27	66	36	19	-4	-4	-2	141
1958	-1	-1	0	0	83	27	30	54	32	-3	-6	-4	211
1959	-2	-2	-1	2	29	58	76	60	9	-5	-5	-3	216
1960	-2	-1	-1	5	43	49	80	40	29	-2	-6	-4	228
1961	-2	-2	-1	0	49	80	47	59	5	-4	-5	-3	223
1962	-2	-1	-1	4	5	27	51	57	25	-3	-5	-3	154
1963	-2	-1	0	0	52	40	66	56	19	-2	-6	-4	219
1964	-2	-1	-1	0	38	27	89	47	31	-2	-6	-4	215
1965	-2	-2	-1	2	5	28	70	48	4	2	-4	-2	147
1966	-2	-1	0	0	81	52	69	32	17	-4	-6	-3	235
1967	-2	-1	-1	-1	29	28	83	64	16	-3	-6	-3	202
1968	-2	-1	-1	2	36	32	68	41	24	-2	-5	-3	189
1969	-2	-1	-1	1	57	25	66	77	39	-8	-7	-4	242
1970	-3	-2	-1	-1	32	78	86	67	17	-5	-6	-4	258
1971	-2	-2	-1	-1	26	58	80	70	7	-8	-5	-3	219

Missouri River Garrison Dam to Oahe Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Garrison Dam to Oahe Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-2	-1	-1	0	19	32	56	49	30	-5	-5	-3	169
1973	-2	-1	0	0	46	79	80	55	8	-4	-6	-3	252
1974	-2	-1	-1	0	47	87	94	50	33	-4	-7	-4	290
1975	-3	-2	-1	-1	48	49	121	75	34	-5	-7	-4	305
1976	-3	-2	-1	0	73	71	122	101	51	-7	-10	-6	391
1977	-4	-2	-2	8	102	117	122	68	25	-11	-9	-6	409
1978	-4	-3	-2	-1	28	90	86	80	48	-3	-9	-5	308
1979	-3	-2	-1	2	59	64	72	56	57	-5	-8	-5	286
1980	-3	-2	-1	8	83	77	119	45	33	-9	-7	-4	337
1981	-3	-2	-1	11	39	70	78	73	37	-6	-7	-4	284
1982	-3	-2	-1	2	8	52	103	79	24	-9	-6	-3	244
1983	-2	-1	-1	1	45	74	118	98	33	-8	-8	-5	344
1984	-3	-2	-1	-1	71	48	107	88	30	-7	-7	-4	318
1985	-3	-2	-1	5	83	60	115	63	16	-6	-7	-4	319
1986	-3	-2	-1	12	77	58	93	77	-4	-6	-6	-3	293
1987	-2	-2	-1	11	32	100	93	64	35	-3	-7	-5	314
1988	-3	-2	-1	9	57	105	114	77	29	-2	-6	-4	372
1989	-2	-2	-1	0	72	84	104	77	20	-7	-7	-4	334
1990	-2	-2	-1	1	39	85	81	91	42	-6	-8	-5	315
1991	-3	-2	-1	-1	25	63	124	95	34	-7	-7	-4	316
1992	-3	-2	-1	5	85	67	50	73	45	-4	-8	-5	304
1993	-3	-2	-1	0	47	39	50	77	29	-2	-6	-4	223
1994	-2	-2	-1	1	102	75	74	76	41	-11	-8	-5	341
1995	-3	-2	-1	-1	10	56	91	90	37	-9	-7	-4	256
1996	-2	-2	-1	1	11	107	103	90	19	-8	-7	-4	306
1997	-3	-2	-1	-1	35	80	83	89	44	-6	-8	-5	307
1998	-3	-2	-1	6	84	34	115	81	45	-12	-8	-5	336
1999	-3	-2	-1	-1	45	51	119	85	27	-2	-8	-5	306
2000	-3	-2	-1	0	64	69	127	109	46	-8	-9	-6	386
2001	-3	-2	-1	-1	100	66	102	124	49	-8	-11	-6	408
2002	-4	-3	-2	8	81	109	142	79	30	-8	-8	-5	420
2003	-3	-2	-1	4	57	67	158	124	20	-4	-10	-6	404
2004	-4	-2	-1	6	60	101	102	89	28	-8	-9	-5	356
2005	-3	-2	-1	2	23	70	134	90	48	-7	-9	-5	340
2006	-3	-2	-1	6	59	105	135	78	15	-9	-7	-4	372
2007	-3	-2	-1	1	42	71	135	71	37	-5	-8	-5	333
Average	-2	-1	-1	2	42	54	78	60	24	-4	-6	-4	242


Historic Depletions for all HUCs Garrison Dam to Oahe Dam
1929-2007
Depletions (1000's of Acre-Feet)
450
400
350
300
250
200
150
100
50
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Oahe Dam to Big Bend Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Oahe Dam to Big Bend Dam

Units - 1,000's of Acre-Feet

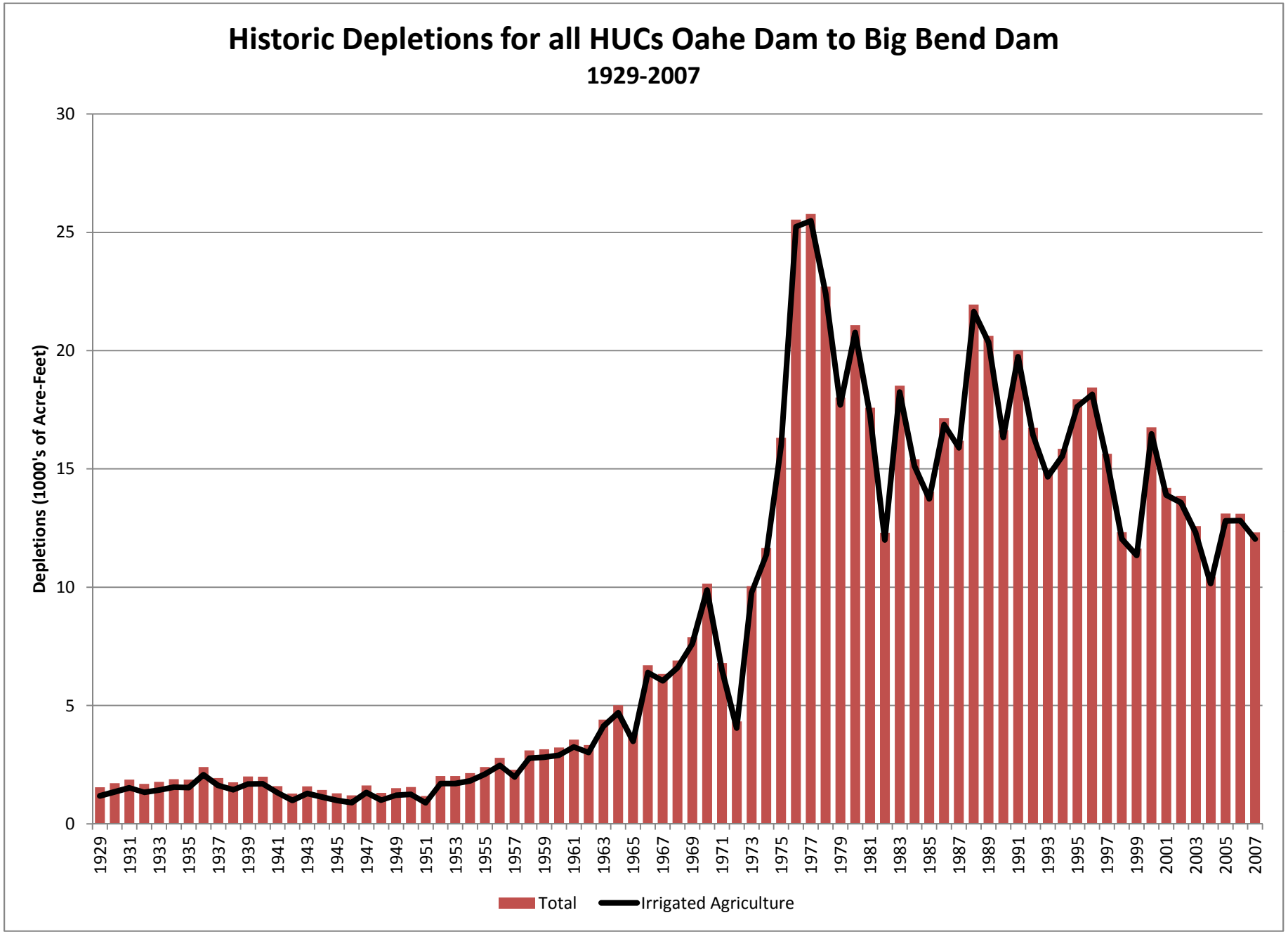
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	0	0	0	0	1	1	0	0	0	0	2
1930	0	0	0	0	0	0	1	0	0	0	0	0	2
1931	0	0	0	0	0	0	1	0	0	0	0	0	2
1932	0	0	0	0	0	0	1	0	0	0	0	0	2
1933	0	0	0	0	0	1	1	0	0	0	0	0	2
1934	0	0	0	0	0	0	1	0	0	0	0	0	2
1935	0	0	0	0	0	0	1	1	0	0	0	0	2
1936	0	0	0	0	0	1	1	0	0	0	0	0	2
1937	0	0	0	0	0	0	1	1	0	0	0	0	2
1938	0	0	0	0	0	0	1	1	0	0	0	0	2
1939	0	0	0	0	0	0	1	1	0	0	0	0	2
1940	0	0	0	0	0	0	1	0	0	0	0	0	2
1941	0	0	0	0	0	0	1	0	0	0	0	0	2
1942	0	0	0	0	0	0	0	0	0	0	0	0	1
1943	0	0	0	0	0	0	1	0	0	0	0	0	2
1944	0	0	0	0	0	0	0	0	0	0	0	0	1
1945	0	0	0	0	0	0	1	0	0	0	0	0	1
1946	0	0	0	0	0	0	1	0	0	0	0	0	1
1947	0	0	0	0	0	0	1	0	0	0	0	0	2
1948	0	0	0	0	0	0	0	0	0	0	0	0	1
1949	0	0	0	0	0	0	1	0	0	0	0	0	2
1950	0	0	0	0	0	1	0	0	0	0	0	0	2
1951	0	0	0	0	0	0	0	0	0	0	0	0	1
1952	0	0	0	0	0	0	1	0	0	0	0	0	2
1953	0	0	0	0	0	0	1	0	0	0	0	0	2
1954	0	0	0	0	0	0	1	0	0	0	0	0	2
1955	0	0	0	0	0	0	1	1	0	0	0	0	2
1956	0	0	0	0	0	1	1	1	0	0	0	0	3
1957	0	0	0	0	0	0	1	1	0	0	0	0	2
1958	0	0	0	0	1	0	1	1	0	0	0	0	3
1959	0	0	0	0	0	1	1	1	0	0	0	0	3
1960	0	0	0	0	0	1	1	1	0	0	0	0	3
1961	0	0	0	0	0	1	1	1	0	0	0	0	4
1962	0	0	0	0	0	1	1	1	0	0	0	0	3
1963	0	0	0	0	1	1	1	1	0	0	0	0	4
1964	0	0	0	0	1	1	2	1	0	0	0	0	5
1965	0	0	0	0	0	1	2	1	0	0	0	0	4
1966	0	0	0	0	1	2	3	1	0	0	0	0	7
1967	0	0	0	0	1	1	3	2	1	0	0	0	6
1968	0	0	0	0	1	1	3	2	0	0	0	0	7
1969	0	0	0	0	1	1	2	3	1	0	0	0	8
1970	0	0	0	0	1	3	4	3	1	0	0	0	10
1971	0	0	0	0	0	2	2	2	0	0	0	0	7

Missouri River Oahe Dam to Big Bend Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Oahe Dam to Big Bend Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	0	0	0	0	0	1	1	2	1	0	0	0	4
1973	0	0	0	0	1	3	3	3	0	0	0	0	10
1974	0	0	0	0	1	3	5	3	1	0	0	0	12
1975	0	0	0	0	2	2	7	4	1	0	0	0	16
1976	0	0	0	0	3	7	8	7	1	0	0	0	26
1977	0	0	0	0	4	9	9	5	0	-1	0	0	26
1978	0	0	0	0	2	7	7	6	3	0	-1	0	23
1979	0	0	0	0	2	5	5	5	4	-1	0	0	18
1980	0	0	0	0	3	5	9	3	2	-1	0	0	21
1981	0	0	0	0	1	4	5	5	3	0	0	0	18
1982	0	0	0	0	0	2	6	5	0	0	0	0	12
1983	0	0	0	0	1	2	7	8	2	0	0	0	19
1984	0	0	0	0	1	3	7	4	2	0	0	0	15
1985	0	0	0	0	2	3	7	3	0	0	0	0	14
1986	0	0	0	0	2	4	8	5	0	0	0	0	17
1987	0	0	0	0	2	4	6	4	1	0	0	0	16
1988	0	0	0	0	1	8	8	6	0	0	0	0	22
1989	0	0	0	0	3	5	7	6	1	0	0	0	21
1990	0	0	0	0	0	5	5	5	3	0	0	0	17
1991	0	0	0	0	0	4	9	6	2	0	0	0	20
1992	0	0	0	0	4	6	3	4	1	0	0	0	17
1993	0	0	0	0	1	2	6	7	0	0	0	0	15
1994	0	0	0	0	2	4	5	4	1	0	0	0	16
1995	0	0	0	0	0	6	8	5	0	0	0	0	18
1996	0	0	0	0	0	5	8	7	0	0	0	0	18
1997	0	0	0	0	0	4	6	5	1	0	0	0	16
1998	0	0	0	0	1	1	6	4	1	0	0	0	12
1999	0	0	0	0	0	2	6	4	0	0	0	0	12
2000	0	0	0	0	1	3	7	5	2	0	0	0	17
2001	0	0	0	0	1	4	5	6	0	0	0	0	14
2002	0	0	0	0	1	4	6	3	1	0	0	0	14
2003	0	0	0	0	0	2	6	4	2	0	0	0	13
2004	0	0	0	0	0	1	5	4	0	0	0	0	10
2005	0	0	0	0	0	2	7	5	1	0	0	0	13
2006	0	0	0	0	1	3	6	3	0	0	0	0	13
2007	0	0	0	0	0	2	7	3	1	0	0	0	12
Average	0	0	0	0	1	2	3	3	1	0	0	0	9


Historic Depletions for all HUCs Oahe Dam to Big Bend Dam
1929-2007
Depletions (1000's of Acre-Feet)
30
25
20
15
10
5
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Big Bend Dam to Fort Randall Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Big Bend Dam to Fort Randall Dam

Units - 1,000's of Acre-Feet

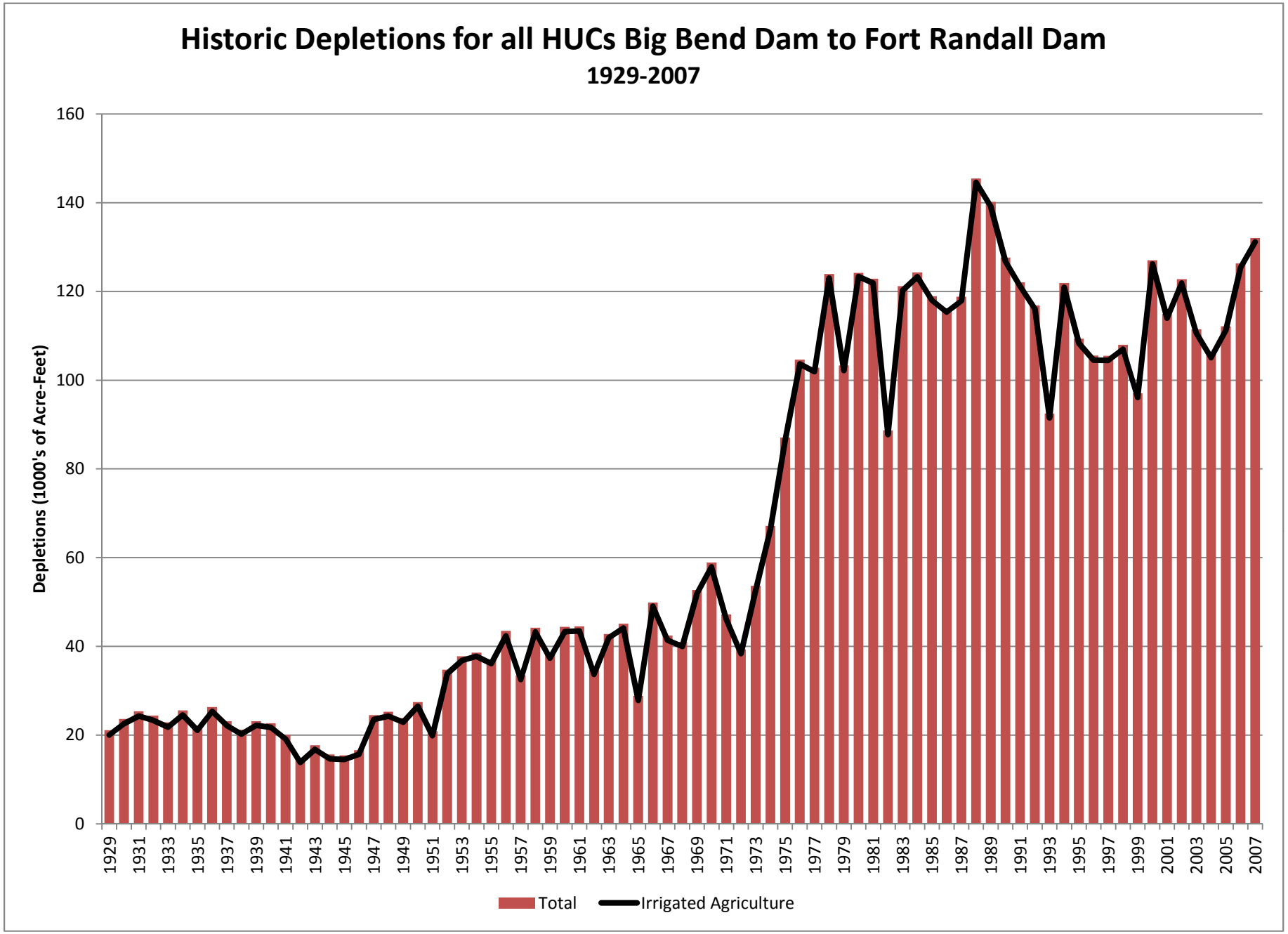
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	0	0	3	4	8	6	2	-1	-1	0	21
1930	0	0	0	0	3	4	10	6	3	-1	-1	0	24
1931	0	0	0	1	4	6	8	5	3	0	-1	0	25
1932	0	0	0	0	4	5	8	6	3	-1	-1	0	24
1933	0	0	0	0	1	8	8	4	3	0	0	0	23
1934	0	0	0	0	8	5	6	5	2	0	-1	0	26
1935	0	0	0	0	0	3	10	7	4	0	-1	0	22
1936	0	0	0	0	7	4	10	6	1	0	-1	0	26
1937	0	0	0	0	3	3	8	7	3	0	-1	0	23
1938	0	0	0	0	0	5	7	7	3	0	-1	0	21
1939	0	0	0	0	4	4	9	5	3	-1	-1	0	23
1940	0	0	0	0	6	5	7	5	2	0	0	0	23
1941	0	0	0	0	6	2	6	6	2	-1	-1	0	20
1942	0	0	0	0	0	3	6	6	2	-1	0	0	15
1943	0	0	0	0	1	3	6	6	3	0	-1	0	18
1944	0	0	0	0	1	4	4	5	3	0	-1	0	16
1945	0	0	0	0	3	1	6	5	2	0	0	0	15
1946	0	0	0	0	0	3	9	6	0	0	0	0	17
1947	0	0	0	0	2	2	10	9	3	0	-1	0	25
1948	0	0	0	0	3	4	9	8	4	-1	-1	0	25
1949	0	0	0	0	2	4	9	8	3	-1	-1	0	24
1950	0	0	0	0	3	8	8	9	1	0	-1	0	27
1951	0	0	0	0	4	2	7	7	1	0	-1	0	21
1952	0	0	0	1	2	7	12	9	6	0	-1	0	35
1953	0	0	0	0	4	7	12	9	7	0	-1	-1	38
1954	0	0	0	0	2	7	16	12	5	-1	-1	-1	39
1955	0	0	0	0	4	7	16	10	3	0	-1	-1	37
1956	0	0	0	0	5	14	11	10	6	0	-1	-1	44
1957	0	0	0	0	0	7	12	13	5	-1	-1	-1	33
1958	0	0	0	0	12	6	8	15	7	0	-1	-1	44
1959	0	0	0	0	2	10	14	14	1	-1	-1	-1	38
1960	0	0	0	0	5	7	18	12	6	-1	-1	-1	44
1961	0	0	0	0	3	14	13	15	3	-1	-1	-1	45
1962	0	0	0	1	1	4	12	14	7	-1	-1	-1	35
1963	0	0	0	0	7	7	13	15	3	0	-1	-1	43
1964	0	0	0	0	6	7	17	12	7	0	-1	-1	45
1965	-1	0	0	0	2	4	12	14	0	0	-1	0	29
1966	0	0	0	0	14	11	16	8	4	-1	-1	-1	50
1967	0	0	0	0	2	3	18	17	6	-1	-1	-1	42
1968	0	0	0	0	3	6	19	13	5	-1	-1	-1	41
1969	0	0	0	1	8	7	14	19	8	-2	-2	-1	53
1970	-1	0	0	0	7	11	21	19	6	-1	-1	-1	59
1971	0	0	0	0	2	13	16	19	1	-1	-1	-1	47

Missouri River Big Bend Dam to Fort Randall Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Big Bend Dam to Fort Randall Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	0	0	0	0	2	9	11	14	6	-1	-1	-1	39
1973	0	0	0	0	6	17	17	19	-1	0	-1	-1	54
1974	0	0	0	0	8	16	23	16	9	-1	-1	-1	67
1975	-1	0	0	0	10	11	36	26	11	-1	-2	-1	87
1976	-1	-1	0	0	10	26	35	29	10	-1	-2	-1	105
1977	-1	0	0	0	11	35	36	21	6	-1	-2	-1	103
1978	-1	-1	0	0	7	33	35	35	22	-1	-3	-2	124
1979	-1	-1	-1	1	12	23	31	23	24	-2	-3	-2	103
1980	-1	-1	0	3	14	29	51	19	19	-2	-3	-2	124
1981	-1	-1	-1	2	8	27	38	35	22	-3	-3	-2	123
1982	-1	-1	-1	1	0	16	41	32	8	-3	-2	-1	89
1983	-1	0	0	0	4	15	45	51	17	-3	-3	-2	121
1984	-1	-1	0	0	13	25	43	38	16	-3	-3	-2	124
1985	-1	-1	-1	2	21	25	48	29	3	-2	-2	-1	119
1986	-1	-1	0	0	16	23	48	38	-1	-2	-2	-1	116
1987	-1	-1	0	2	13	30	39	30	13	-2	-3	-2	119
1988	-1	-1	-1	1	6	44	51	42	8	-1	-2	-1	145
1989	-1	-1	0	0	18	32	49	38	10	0	-2	-2	140
1990	-1	-1	0	0	6	31	39	38	22	-2	-3	-2	128
1991	-1	-1	-1	0	2	21	52	42	15	-3	-3	-2	122
1992	-1	-1	0	2	32	26	21	28	15	-1	-3	-2	117
1993	-1	-1	-1	0	15	11	26	43	5	-1	-2	-1	93
1994	-1	-1	0	1	18	28	38	31	16	-3	-3	-2	122
1995	-1	-1	-1	0	0	26	50	34	10	-4	-2	-1	109
1996	-1	-1	0	0	0	30	41	36	7	-2	-2	-1	106
1997	-1	-1	0	0	5	22	37	36	14	-3	-3	-2	105
1998	-1	-1	0	2	13	14	42	32	15	-4	-3	-2	108
1999	-1	-1	0	0	5	15	45	34	3	0	-2	-1	97
2000	-1	-1	0	0	8	30	44	39	15	-2	-3	-2	127
2001	-1	-1	0	0	11	24	36	44	8	-2	-3	-2	115
2002	-1	-1	0	0	9	35	51	28	7	-3	-2	-1	123
2003	-1	-1	0	0	7	14	49	37	12	-1	-3	-2	111
2004	-1	-1	0	2	12	24	39	33	4	-2	-2	-1	106
2005	-1	-1	0	0	4	16	47	36	17	-2	-3	-2	112
2006	-1	-1	0	0	18	29	54	31	3	-2	-3	-2	126
2007	-1	-1	-1	0	12	26	57	33	16	-4	-3	-2	132
Average	-1	0	0	0	7	14	24	20	7	-1	-2	-1	67


Historic Depletions for all HUCs Big Bend Dam to Fort Randall Dam
1929-2007
Depletions (1000's of Acre-Feet)
160
140
120
100
80
60
40
20
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Fort Randall Dam to Gavins Point Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Fort Randall Dam to Gavins Point Dam

Units - 1,000's of Acre-Feet

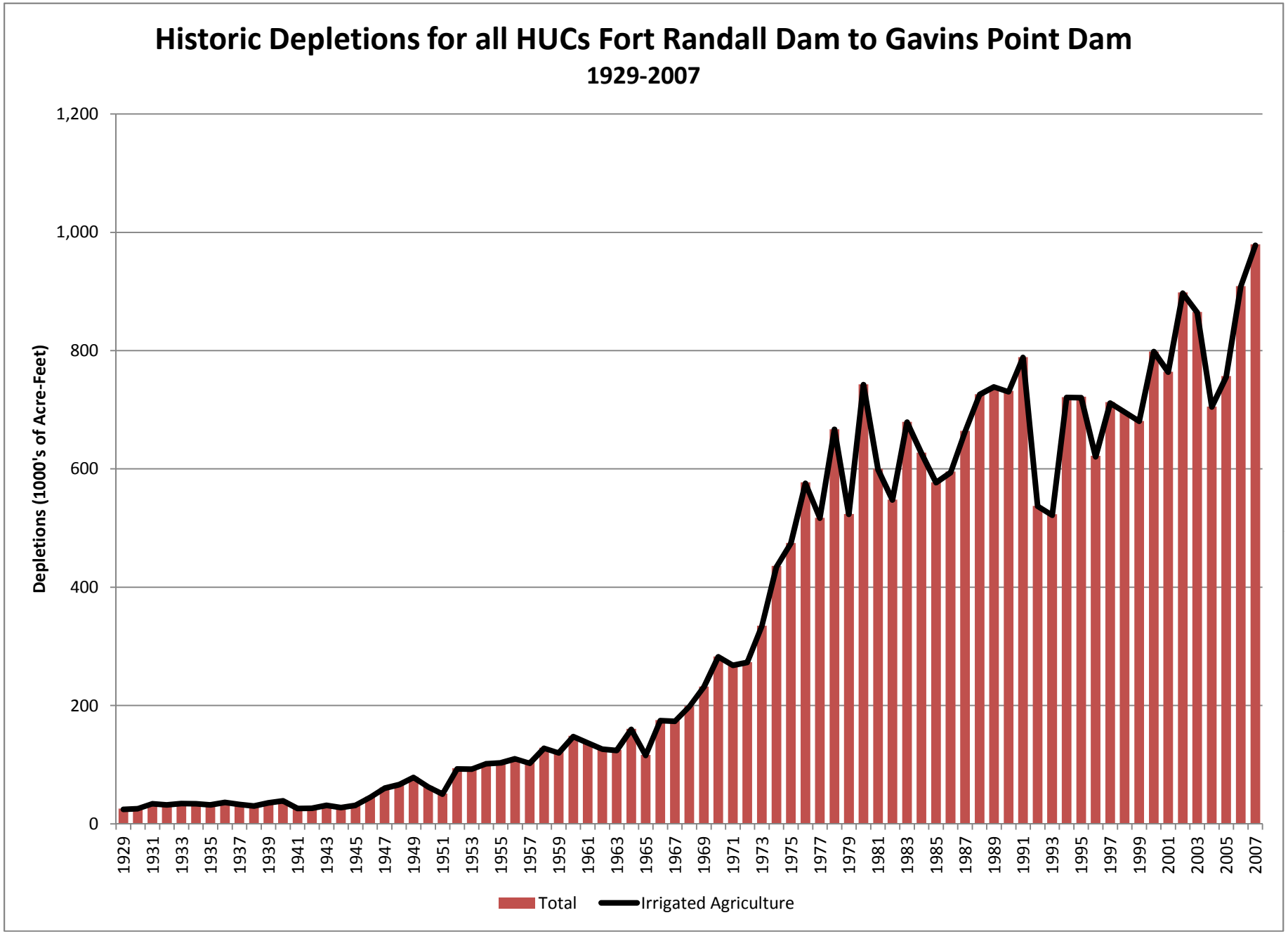
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	0	0	1	3	10	13	1	-1	-1	0	26
1930	0	0	0	0	0	6	12	7	4	-1	-1	0	27
1931	0	0	0	0	3	7	13	9	6	-1	-1	-1	35
1932	0	0	0	0	3	6	11	10	6	-1	-1	-1	33
1933	0	0	0	0	0	12	13	6	6	0	-1	-1	36
1934	0	0	0	0	7	4	11	10	4	0	-1	0	35
1935	0	0	0	0	0	6	11	13	6	0	-1	-1	33
1936	0	0	0	0	5	5	14	11	5	0	-1	0	38
1937	0	0	0	0	2	4	12	13	6	-1	-1	0	34
1938	0	0	0	0	1	5	9	14	4	1	-1	-1	31
1939	0	0	0	0	3	5	14	11	6	-1	-1	0	37
1940	0	0	0	0	6	8	13	11	5	-1	-1	0	40
1941	0	0	0	0	4	2	10	10	4	-1	-1	0	27
1942	0	0	0	0	0	3	12	12	3	-1	-1	0	28
1943	0	0	0	0	1	4	11	13	6	-1	-1	0	33
1944	0	0	0	0	2	2	8	12	7	0	-1	-1	29
1945	0	0	0	0	3	1	14	12	4	0	-1	-1	33
1946	0	0	0	1	0	5	20	18	5	-2	-1	-1	46
1947	0	0	0	0	1	3	22	29	11	-1	-2	-1	62
1948	-1	0	0	0	3	7	25	27	11	-2	-2	-1	68
1949	-1	0	0	0	2	9	31	30	14	-2	-2	-1	80
1950	-1	0	0	0	2	18	16	25	5	2	-2	-1	64
1951	-1	0	0	0	5	6	17	26	1	-1	-1	-1	51
1952	0	0	0	0	1	18	35	26	18	0	-2	-1	94
1953	-1	0	0	0	6	11	25	33	25	-1	-3	-2	94
1954	-1	-1	0	1	3	14	44	32	15	-1	-2	-1	102
1955	-1	-1	0	1	3	9	43	40	13	1	-2	-1	104
1956	-1	-1	0	0	8	21	33	28	26	2	-3	-2	111
1957	-1	-1	0	0	0	10	45	38	20	-3	-2	-1	104
1958	-1	-1	0	0	14	11	21	60	28	2	-3	-2	129
1959	-1	-1	0	1	1	16	47	56	10	-3	-2	-1	121
1960	-1	-1	0	0	3	22	59	45	26	0	-3	-2	149
1961	-1	-1	0	0	0	34	45	57	8	0	-3	-2	138
1962	-1	-1	0	2	1	8	35	64	27	-1	-3	-2	127
1963	-1	-1	0	0	4	12	53	44	15	2	-2	-2	125
1964	-1	-1	0	0	8	17	63	51	24	3	-2	-2	161
1965	-1	-1	0	1	2	8	47	65	-1	0	-2	-1	117
1966	-1	0	0	0	24	22	64	52	21	-2	-3	-2	176
1967	-1	-1	-1	1	1	6	61	76	38	1	-4	-2	174
1968	-1	-1	-1	0	3	21	77	64	46	-3	-4	-2	199
1969	-1	-1	-1	2	17	15	55	105	54	-6	-4	-2	232
1970	-2	-1	-1	-1	10	31	99	118	43	-7	-5	-3	283
1971	-2	-1	-1	-1	2	37	83	131	35	-6	-5	-3	270

Missouri River Fort Randall Dam to Gavins Point Dam

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Fort Randall Dam to Gavins Point Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-2	-1	-1	-1	4	29	69	135	54	-5	-5	-3	274
1973	-2	-1	-1	-1	10	78	101	172	-8	-6	-5	-3	335
1974	-2	-1	-1	0	16	69	175	118	69	3	-6	-4	436
1975	-2	-1	-1	0	21	42	181	165	79	2	-6	-4	475
1976	-2	-2	-1	-1	19	106	189	200	84	-1	-8	-5	577
1977	-3	-2	-1	0	14	96	174	173	85	-2	-9	-5	517
1978	-3	-2	-2	-1	10	135	161	227	154	6	-11	-7	667
1979	-4	-3	-2	1	14	55	166	194	130	-13	-10	-6	524
1980	-3	-2	-2	5	16	128	300	177	146	-6	-9	-6	743
1981	-4	-2	-2	7	6	135	163	177	148	-13	-10	-6	600
1982	-4	-2	-2	1	2	51	223	231	73	-12	-8	-5	548
1983	-3	-2	-1	-1	2	37	222	322	125	-4	-11	-7	680
1984	-4	-3	-2	-1	26	55	184	285	115	-11	-10	-6	627
1985	-4	-2	-2	2	41	92	254	207	7	-7	-7	-4	577
1986	-3	-2	-1	-1	20	80	244	268	14	-11	-7	-4	596
1987	-3	-2	-1	6	16	88	261	213	96	3	-9	-6	664
1988	-3	-2	-2	0	12	156	244	248	74	12	-8	-5	726
1989	-3	-2	-1	4	38	126	270	230	79	11	-7	-5	739
1990	-3	-2	-1	0	5	121	221	253	155	0	-11	-6	732
1991	-4	-3	-2	0	10	72	295	304	140	-7	-10	-6	789
1992	-4	-3	-2	4	45	49	143	183	133	2	-9	-5	537
1993	-3	-2	-1	0	33	48	155	247	69	-10	-8	-4	523
1994	-3	-2	-1	2	61	110	208	240	131	-11	-9	-5	721
1995	-3	-2	-2	0	0	87	277	313	78	-9	-10	-6	722
1996	-4	-2	-2	2	3	113	235	257	37	-4	-8	-5	622
1997	-3	-2	-1	0	14	134	222	274	105	-14	-10	-6	713
1998	-4	-2	-2	1	22	54	211	273	177	-16	-11	-7	697
1999	-4	-3	-2	-1	17	58	239	315	61	15	-8	-6	681
2000	-4	-3	-2	0	8	110	270	331	115	-10	-11	-6	799
2001	-4	-3	-2	-1	25	137	219	309	101	0	-10	-7	764
2002	-4	-3	-2	8	28	191	347	227	121	-2	-8	-5	898
2003	-3	-2	-2	0	21	69	337	361	101	3	-12	-7	865
2004	-5	-3	-2	1	17	90	241	324	66	-8	-10	-6	706
2005	-4	-2	-2	-1	14	63	314	282	115	-6	-11	-6	757
2006	-4	-3	-2	1	61	140	401	267	67	-2	-10	-7	909
2007	-5	-3	-2	-2	24	164	392	299	144	-15	-10	-7	980
Average	-2	-1	-1	1	11	49	122	131	51	-2	-5	-3	350


Historic Depletions for all HUCs Fort Randall Dam to Gavins Point Dam
1929-2007
Depletions (1000's of Acre-Feet)
1,200
1,000
800
600
400
200
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Gavins Point Dam to Sioux City

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Gavins Point Dam to Sioux City

Units - 1,000's of Acre-Feet

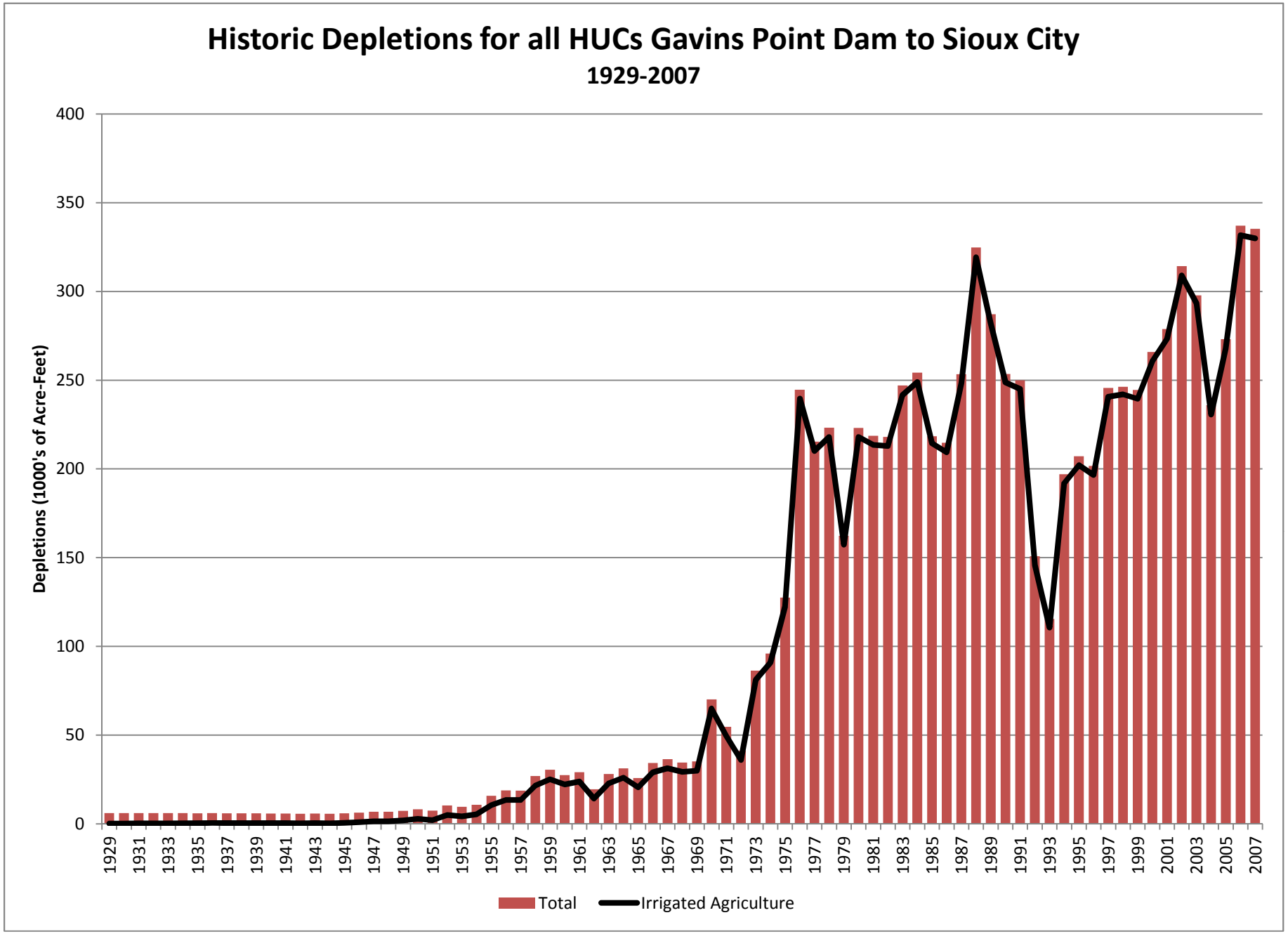
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	0	0	1	1	1	1	1	0	0	0	6
1930	0	0	0	0	1	1	1	1	1	0	0	0	6
1931	0	0	0	0	1	1	1	1	1	0	0	0	6
1932	0	0	0	0	1	1	1	1	1	0	0	0	6
1933	0	0	0	0	1	1	1	1	1	0	0	0	6
1934	0	0	0	0	1	1	1	1	1	0	0	0	6
1935	0	0	0	0	1	1	1	1	1	0	0	0	6
1936	0	0	0	0	1	1	1	1	1	0	0	0	6
1937	0	0	0	0	1	1	1	1	1	0	0	0	6
1938	0	0	0	0	1	1	1	1	1	0	0	0	6
1939	0	0	0	0	1	1	1	1	1	0	0	0	6
1940	0	0	0	0	1	1	1	1	1	0	0	0	6
1941	0	0	0	0	1	1	1	1	1	0	0	0	6
1942	0	0	0	0	1	1	1	1	1	0	0	0	6
1943	0	0	0	0	1	1	1	1	1	0	0	0	6
1944	0	0	0	0	1	1	1	1	1	0	0	0	6
1945	0	0	0	0	1	1	1	1	1	0	0	0	6
1946	0	0	0	0	1	1	1	1	1	0	0	0	6
1947	0	0	0	0	1	1	2	1	1	0	0	0	7
1948	0	0	0	0	1	1	2	1	1	0	0	0	7
1949	0	0	0	0	1	1	2	1	1	0	0	0	7
1950	0	0	0	0	1	2	2	2	1	0	0	0	8
1951	0	0	0	0	1	1	2	1	1	0	0	0	7
1952	0	0	0	0	1	2	3	2	1	0	0	0	10
1953	0	0	0	0	1	1	3	2	1	0	0	0	10
1954	0	0	0	0	1	2	4	2	1	0	0	0	11
1955	0	0	0	0	1	2	5	4	1	0	0	0	16
1956	0	0	0	0	1	6	5	4	2	0	0	0	19
1957	0	0	0	0	1	3	9	5	1	0	0	0	19
1958	0	0	0	0	3	6	7	9	2	0	0	0	27
1959	0	0	0	0	1	8	14	6	1	0	0	0	31
1960	0	0	0	0	1	4	15	5	1	0	0	0	27
1961	0	0	0	0	1	6	11	10	1	0	0	0	29
1962	0	0	0	0	1	2	7	8	1	0	0	0	19
1963	0	0	0	0	1	7	9	9	1	0	0	0	28
1964	0	0	0	0	2	7	13	6	1	0	0	0	31
1965	0	0	0	0	1	3	13	9	0	0	0	0	26
1966	0	0	0	0	3	8	15	6	1	0	0	0	34
1967	0	0	0	0	2	3	18	10	3	0	0	0	36
1968	0	0	0	0	2	6	16	10	1	0	0	0	35
1969	0	0	0	0	2	4	13	13	3	0	0	0	35
1970	0	0	0	0	2	15	29	23	2	-1	0	0	70
1971	0	0	0	0	2	9	21	19	3	0	0	0	55

Missouri River Gavins Point Dam to Sioux City

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Gavins Point Dam to Sioux City

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	0	0	0	0	1	11	11	15	4	0	0	0	41
1973	0	0	0	0	4	24	31	29	-1	-1	-1	0	86
1974	0	0	0	0	1	23	44	20	10	0	-1	0	96
1975	0	0	0	0	7	11	77	28	8	-1	-1	-1	127
1976	0	0	0	0	15	55	93	71	15	-2	-2	-1	245
1977	-1	0	0	1	14	63	104	43	-1	-3	-2	-1	215
1978	-1	0	0	0	5	57	78	71	18	-1	-2	-1	223
1979	-1	0	0	0	5	38	65	42	19	-2	-2	-1	162
1980	-1	0	0	1	13	46	112	34	23	-3	-2	-1	223
1981	-1	0	0	1	14	51	77	59	25	-3	-2	-1	219
1982	-1	0	0	0	1	52	92	74	7	-3	-2	-1	218
1983	-1	0	0	0	8	16	117	110	6	-4	-3	-2	247
1984	-1	-1	0	0	9	24	119	100	12	-4	-3	-2	254
1985	-1	-1	0	0	10	48	123	45	0	-2	-2	-1	218
1986	-1	0	0	0	7	54	101	63	-3	-3	-2	-1	215
1987	-1	0	0	2	11	70	96	71	11	-2	-2	-1	253
1988	-1	0	0	1	12	114	135	68	1	-1	-2	-1	325
1989	-1	0	0	0	17	62	124	80	11	-1	-2	-1	287
1990	-1	0	0	0	6	42	98	83	33	-3	-3	-1	253
1991	-1	-1	0	0	2	32	117	100	8	-4	-3	-1	250
1992	-1	-1	0	0	19	35	40	52	9	-1	-1	-1	151
1993	0	0	0	0	2	11	34	62	10	-1	-1	-1	115
1994	0	0	0	0	22	36	74	63	10	-3	-2	-1	197
1995	-1	0	0	0	0	51	88	67	8	-3	-2	-1	207
1996	-1	0	0	1	0	49	81	79	-1	-3	-2	-1	202
1997	-1	0	0	0	5	56	94	91	9	-4	-2	-1	246
1998	-1	-1	0	0	10	27	117	69	33	-4	-3	-2	246
1999	-1	-1	0	0	3	34	104	96	16	-3	-3	-2	245
2000	-1	-1	0	0	6	42	119	86	23	-4	-3	-2	266
2001	-1	-1	0	0	9	60	110	107	3	-3	-3	-2	279
2002	-1	-1	0	0	9	81	152	60	22	-4	-3	-2	314
2003	-1	-1	0	0	5	32	143	123	5	-3	-3	-2	298
2004	-1	-1	0	1	2	43	113	86	0	-3	-2	-1	236
2005	-1	0	0	0	4	38	148	87	4	-3	-3	-2	273
2006	-1	-1	0	0	15	72	193	69	-2	-3	-3	-2	337
2007	-1	-1	0	0	8	74	185	71	10	-5	-3	-2	335
Average	0	0	0	0	4	22	49	34	5	-1	-1	-1	112


Historic Depletions for all HUCs Gavins Point Dam to Sioux City
1929-2007
Depletions (1000's of Acre-Feet)
400
350
300
250
200
150
100
50
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Sioux City to Omaha

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Sioux City to Omaha

Units - 1,000's of Acre-Feet

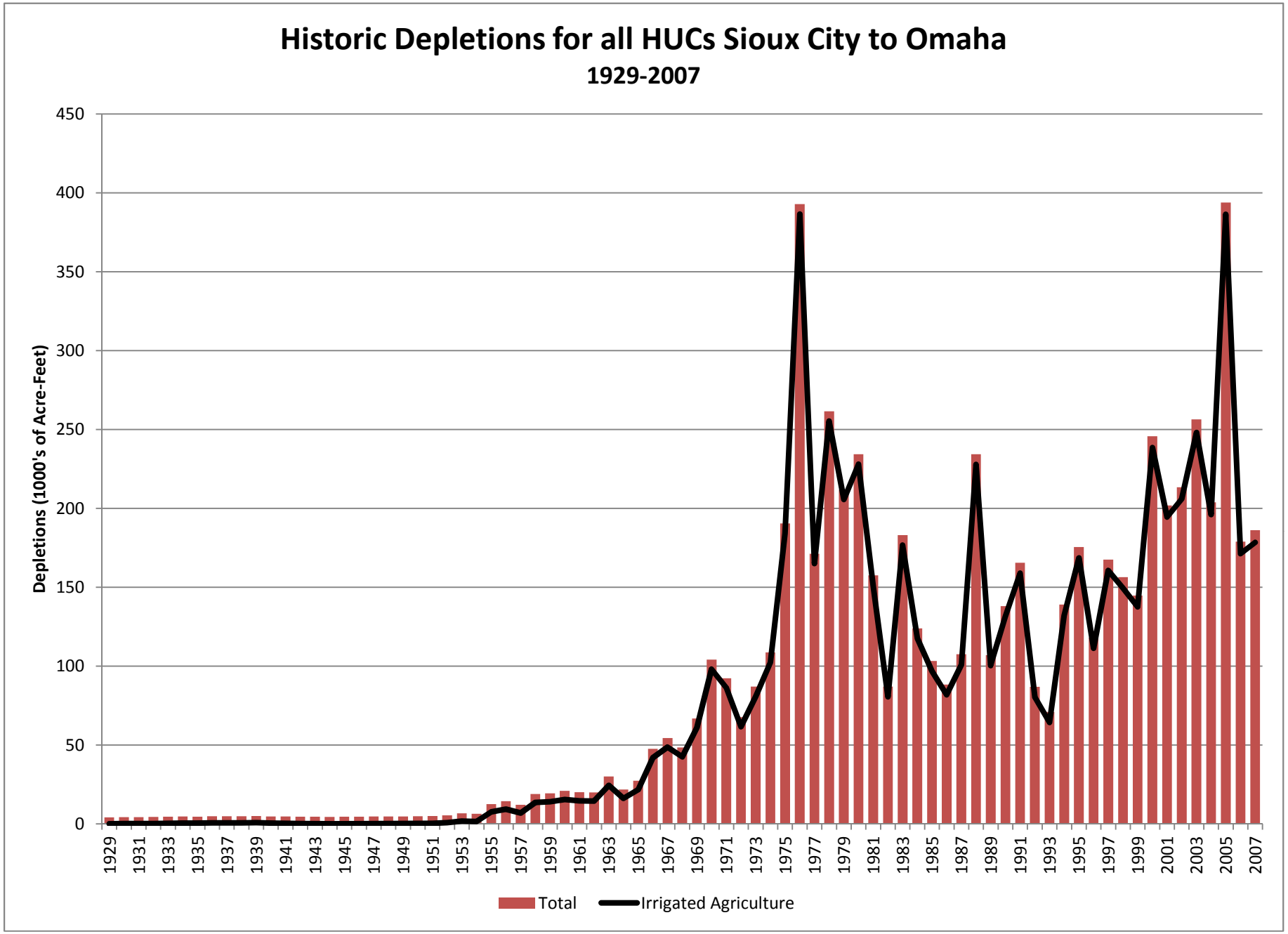
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	0	0	0	1	1	1	0	0	0	0	4
1930	0	0	0	0	0	1	1	1	0	0	0	0	4
1931	0	0	0	0	0	1	1	1	0	0	0	0	4
1932	0	0	0	0	0	1	1	1	0	0	0	0	4
1933	0	0	0	0	0	1	1	1	0	0	0	0	4
1934	0	0	0	0	0	1	1	1	0	0	0	0	5
1935	0	0	0	0	0	1	1	1	1	0	0	0	5
1936	0	0	0	0	0	1	1	1	1	0	0	0	5
1937	0	0	0	0	0	1	1	1	1	0	0	0	5
1938	0	0	0	0	0	1	1	1	1	0	0	0	5
1939	0	0	0	0	0	1	1	1	1	0	0	0	5
1940	0	0	0	0	0	1	1	1	1	0	0	0	5
1941	0	0	0	0	0	1	1	1	0	0	0	0	5
1942	0	0	0	0	0	1	1	1	0	0	0	0	5
1943	0	0	0	0	0	1	1	1	1	0	0	0	5
1944	0	0	0	0	0	1	1	1	0	0	0	0	4
1945	0	0	0	0	0	1	1	1	0	0	0	0	4
1946	0	0	0	0	0	1	1	1	0	0	0	0	5
1947	0	0	0	0	0	1	1	1	1	0	0	0	5
1948	0	0	0	0	0	1	1	1	1	0	0	0	5
1949	0	0	0	0	0	1	1	1	1	0	0	0	5
1950	0	0	0	0	0	1	1	1	1	0	0	0	5
1951	0	0	0	0	0	1	1	1	1	0	0	0	5
1952	0	0	0	0	0	1	1	1	1	0	0	0	5
1953	0	0	0	0	1	1	1	2	1	0	0	0	7
1954	0	0	0	0	0	1	1	1	1	0	0	0	6
1955	0	0	0	0	1	1	2	7	1	0	0	0	13
1956	0	0	0	0	1	2	2	6	2	1	0	0	14
1957	0	0	0	0	1	1	4	4	1	0	0	0	12
1958	0	0	0	0	1	3	2	7	4	2	0	0	19
1959	0	0	0	0	0	2	7	6	3	0	0	0	19
1960	0	0	0	0	1	2	7	5	4	2	0	0	21
1961	0	0	0	0	1	2	7	7	1	1	0	0	20
1962	0	0	0	0	1	2	5	6	4	2	0	0	20
1963	0	0	0	0	2	2	7	12	4	3	0	0	30
1964	0	0	0	0	1	2	7	5	3	3	0	0	22
1965	0	0	0	0	1	3	8	11	0	4	0	0	27
1966	0	0	0	0	1	3	15	16	8	4	-1	0	48
1967	0	0	0	0	1	1	19	22	9	2	0	0	54
1968	0	0	0	0	2	5	19	18	6	0	0	0	48
1969	0	0	0	0	2	4	21	22	18	0	0	0	67
1970	0	0	0	0	3	12	26	70	3	-5	-3	-2	104
1971	-1	-1	0	0	1	9	21	53	15	-2	-2	-1	92

Missouri River Sioux City to Omaha

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Sioux City to Omaha

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-1	0	0	0	1	18	15	28	8	0	-1	0	68
1973	0	0	0	0	1	16	21	45	1	4	-1	0	87
1974	0	0	0	0	1	14	49	20	20	7	-1	-1	109
1975	0	0	0	0	4	10	52	105	16	14	-6	-3	190
1976	-2	-1	-1	0	1	36	78	315	10	-15	-18	-9	393
1977	-7	-4	-2	-2	5	37	67	37	43	1	-2	-1	171
1978	-1	0	0	0	5	59	68	75	35	26	-3	-2	262
1979	-1	-1	0	0	8	26	67	80	41	-3	-2	-1	212
1980	-1	0	0	0	8	28	83	67	56	0	-4	-3	234
1981	-2	-1	0	0	4	22	50	40	38	9	-2	-1	158
1982	-1	0	0	0	0	13	29	32	10	5	-1	-1	87
1983	0	0	0	0	1	3	44	152	3	-9	-7	-4	183
1984	-3	-2	-1	-1	0	0	42	73	22	-4	-3	-1	124
1985	-1	-1	0	0	1	14	46	31	7	6	-1	-1	103
1986	0	0	0	0	2	8	36	34	11	-1	-1	0	88
1987	0	0	0	0	2	27	28	24	21	8	-2	-1	108
1988	-1	0	0	0	7	34	37	182	-6	-3	-10	-5	234
1989	-4	-2	-1	-1	6	14	36	47	1	12	-1	-1	107
1990	0	0	0	0	1	3	30	57	43	7	-2	-1	138
1991	-1	0	0	0	3	15	47	83	20	5	-4	-2	166
1992	-1	-1	0	0	3	19	13	45	12	0	-1	0	87
1993	0	0	0	0	1	1	9	35	18	8	-1	-1	71
1994	0	0	0	0	10	14	32	51	22	14	-2	-1	139
1995	-1	0	0	0	0	31	57	84	7	2	-3	-2	175
1996	-1	-1	0	0	0	17	36	35	18	17	-2	-1	118
1997	-1	0	0	0	4	15	66	60	24	2	-2	-1	168
1998	-1	0	0	0	2	1	36	57	64	0	-2	-1	156
1999	-1	0	0	0	4	6	52	26	38	23	-2	-1	145
2000	-1	0	0	0	11	7	54	142	43	0	-7	-4	246
2001	-2	-1	-1	0	0	19	74	95	15	9	-4	-2	202
2002	-1	-1	0	0	1	33	83	60	52	-7	-4	-2	213
2003	-2	-1	0	0	1	17	56	158	22	15	-7	-4	256
2004	-3	-2	-1	0	1	22	44	91	37	20	-4	-2	204
2005	-1	-1	0	0	1	21	79	297	30	-4	-17	-9	394
2006	-7	-4	-2	-2	8	47	93	32	3	14	-1	-1	179
2007	-1	0	0	0	1	49	81	20	36	3	-1	-1	186
Average	-1	0	0	0	2	10	25	39	12	3	-2	-1	88


Historic Depletions for all HUCs Sioux City to Omaha
1929-2007
Depletions (1000's of Acre-Feet)
450
400
350
300
250
200
150
100
50
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Omaha to Nebraska City

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Omaha to Nebraska City

Units - 1,000's of Acre-Feet

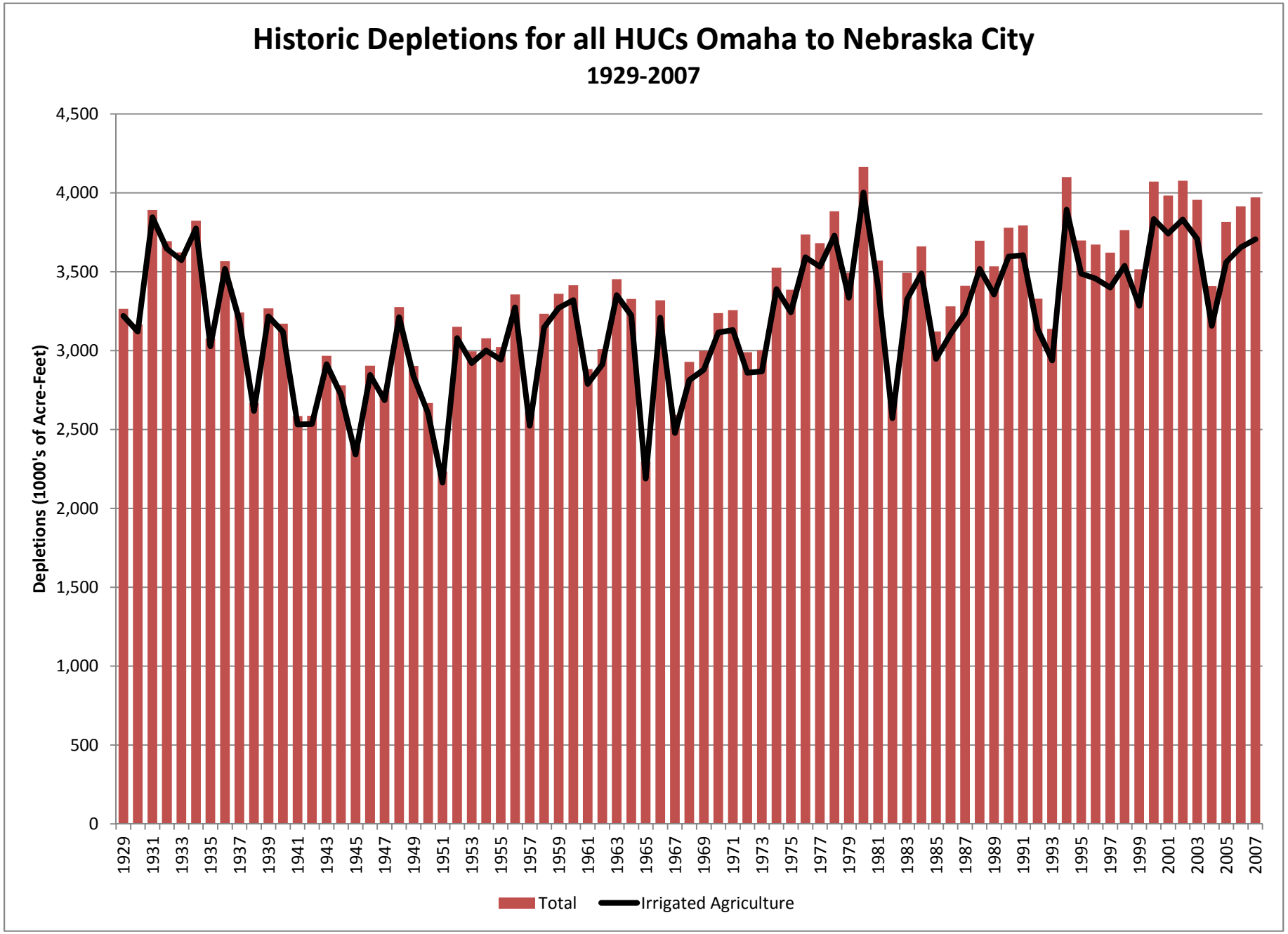
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-37	-25	-18	31	407	911	1,134	965	116	-68	-94	-58	3,265
1930	-37	-25	-18	83	254	920	1,155	655	401	-62	-98	-62	3,167
1931	-37	-25	-18	56	478	1,031	1,281	928	437	-62	-109	-67	3,892
1932	-42	-29	-21	68	711	707	1,112	1,010	447	-93	-111	-67	3,693
1933	-42	-30	-21	-2	294	1,306	1,247	672	333	39	-105	-69	3,622
1934	-42	-28	-11	91	851	781	1,173	958	220	-26	-89	-54	3,823
1935	-36	-25	-15	-1	31	750	1,229	1,017	279	-3	-93	-58	3,076
1936	-36	-23	-15	69	644	797	1,189	868	285	-71	-87	-53	3,567
1937	-34	-24	-17	42	498	470	1,032	1,081	413	-65	-97	-58	3,243
1938	-37	-25	-16	7	193	683	927	950	87	31	-81	-51	2,668
1939	-32	-21	-14	49	607	604	1,073	776	404	-41	-84	-53	3,268
1940	-34	-23	-16	28	605	853	929	855	156	-53	-81	-49	3,171
1941	-32	-22	-15	5	547	467	884	750	198	-77	-75	-45	2,585
1942	-29	-20	-13	3	259	489	1,053	848	201	-81	-77	-46	2,587
1943	-29	-19	-12	56	113	595	975	1,052	418	-34	-90	-56	2,968
1944	-34	-23	-14	-1	396	605	719	964	355	-43	-90	-54	2,780
1945	-34	-23	-15	-8	328	289	1,014	713	242	14	-75	-48	2,399
1946	-30	-19	-8	94	154	771	1,010	874	268	-72	-86	-52	2,905
1947	-32	-22	-14	22	219	258	1,026	1,090	418	-71	-91	-54	2,749
1948	-34	-22	-13	66	471	522	1,091	936	476	-55	-100	-61	3,277
1949	-38	-26	-17	58	256	374	1,092	1,033	401	-85	-91	-56	2,903
1950	-35	-23	-13	17	194	870	694	862	175	60	-82	-52	2,668
1951	-32	-21	-13	11	397	339	804	677	243	-69	-64	-38	2,234
1952	-24	-16	-9	34	243	878	988	774	425	-10	-82	-51	3,151
1953	-30	-20	-8	-4	317	657	912	805	517	4	-96	-59	2,995
1954	-36	-24	-14	82	370	678	1,061	747	391	-54	-77	-47	3,078
1955	-28	-19	-12	73	318	449	1,171	962	246	-4	-82	-51	3,022
1956	-32	-20	-12	37	502	913	794	832	515	-24	-93	-56	3,356
1957	-34	-24	-15	-8	51	584	1,061	890	304	-76	-78	-47	2,609
1958	-28	-18	-10	27	386	699	696	1,135	503	11	-105	-64	3,233
1959	-39	-26	-15	29	215	871	1,256	1,153	172	-112	-90	-54	3,360
1960	-34	-22	-13	56	316	724	1,082	1,086	436	-68	-93	-56	3,414
1961	-34	-23	-13	28	234	772	970	1,046	45	-16	-77	-47	2,884
1962	-30	-19	-11	76	353	434	848	1,170	403	-70	-92	-54	3,009
1963	-33	-22	-12	76	616	654	1,296	803	227	-7	-91	-56	3,452
1964	-35	-23	-15	22	426	599	1,247	912	336	1	-88	-54	3,328
1965	-34	-22	-13	52	260	346	846	1,001	-17	-30	-57	-35	2,297
1966	-22	-14	-6	35	732	549	1,069	819	340	-43	-87	-52	3,320
1967	-33	-22	-11	24	110	243	881	1,130	402	4	-86	-51	2,592
1968	-31	-19	-9	8	232	814	990	704	425	-47	-86	-53	2,929
1969	-31	-20	-11	73	316	309	1,125	1,059	448	-129	-89	-52	2,999
1970	-32	-20	-10	13	496	537	1,112	1,137	216	-84	-81	-47	3,237
1971	-30	-19	-9	9	233	825	1,019	1,193	255	-75	-91	-54	3,256

Missouri River Omaha to Nebraska City

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Omaha to Nebraska City

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-33	-21	-8	33	432	627	917	913	323	-59	-84	-50	2,990
1973	-30	-20	-10	-1	271	892	783	1,297	-12	-44	-78	-45	3,002
1974	-28	-18	-8	39	638	603	1,193	891	412	-66	-82	-49	3,526
1975	-30	-20	-10	7	152	613	1,193	1,146	433	50	-92	-56	3,385
1976	-34	-21	-9	29	346	837	1,220	1,243	328	-45	-99	-59	3,737
1977	-36	-23	-12	26	458	938	1,148	820	578	-53	-102	-62	3,681
1978	-36	-24	-12	40	128	963	1,273	1,091	666	-27	-111	-68	3,883
1979	-40	-26	-13	37	217	623	1,083	1,099	773	-85	-110	-65	3,493
1980	-38	-25	-12	28	253	992	1,451	1,145	605	-65	-106	-64	4,164
1981	-38	-24	-12	67	135	970	1,027	1,020	665	-71	-105	-63	3,571
1982	-36	-24	-11	44	167	373	1,061	1,026	318	-60	-76	-45	2,737
1983	-27	-16	-5	3	141	349	1,259	1,370	609	-25	-103	-61	3,493
1984	-36	-22	-9	4	549	597	1,147	1,235	471	-125	-96	-55	3,661
1985	-33	-22	-9	45	444	632	1,035	1,146	71	-69	-76	-44	3,121
1986	-28	-17	-2	25	362	666	1,181	1,110	204	-92	-82	-47	3,281
1987	-29	-18	-7	69	269	801	1,220	819	467	-31	-92	-56	3,411
1988	-33	-21	-9	50	267	959	1,199	1,166	233	27	-89	-54	3,696
1989	-32	-20	-7	68	457	648	1,243	1,101	227	-17	-83	-50	3,534
1990	-31	-19	-8	49	264	998	957	1,185	603	-56	-102	-61	3,779
1991	-35	-23	-10	47	298	681	1,242	1,302	506	-61	-97	-57	3,793
1992	-34	-21	-7	110	532	468	872	950	691	-76	-98	-57	3,330
1993	-33	-22	-9	37	487	507	1,001	1,089	292	-83	-81	-46	3,138
1994	-28	-18	-4	54	691	878	1,017	1,216	533	-99	-90	-51	4,100
1995	-30	-20	-8	7	45	474	1,431	1,603	383	-29	-99	-58	3,698
1996	-35	-20	-6	63	285	850	1,241	1,167	236	43	-95	-57	3,672
1997	-34	-21	-7	20	356	717	1,411	1,061	362	-98	-91	-53	3,622
1998	-31	-19	-6	42	456	532	1,005	1,275	801	-117	-111	-64	3,763
1999	-37	-24	-8	5	256	602	1,338	1,038	430	64	-92	-57	3,516
2000	-33	-19	-5	56	465	798	1,250	1,358	427	-87	-88	-50	4,071
2001	-30	-19	-4	40	305	1,001	1,259	1,315	328	-63	-94	-55	3,983
2002	-32	-20	-5	68	424	950	1,497	945	456	-81	-79	-46	4,077
2003	-26	-16	-3	36	371	532	1,529	1,426	298	-37	-97	-57	3,957
2004	-34	-20	-1	42	522	540	1,022	1,280	241	-50	-84	-47	3,411
2005	-29	-17	-3	27	316	467	1,473	1,124	735	-116	-102	-59	3,816
2006	-33	-20	-4	74	590	847	1,450	991	217	-70	-78	-47	3,915
2007	-28	-17	-2	27	345	848	1,408	1,129	477	-82	-84	-49	3,972
Average	-33	-21	-11	38	359	680	1,105	1,025	366	-48	-90	-54	3,317


Historic Depletions for all HUCs Omaha to Nebraska City
1929-2007
Depletions (1000's of Acre-Feet)
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Nebraska City to St. Joseph

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Nebraska City to St. Joseph

Units - 1,000's of Acre-Feet

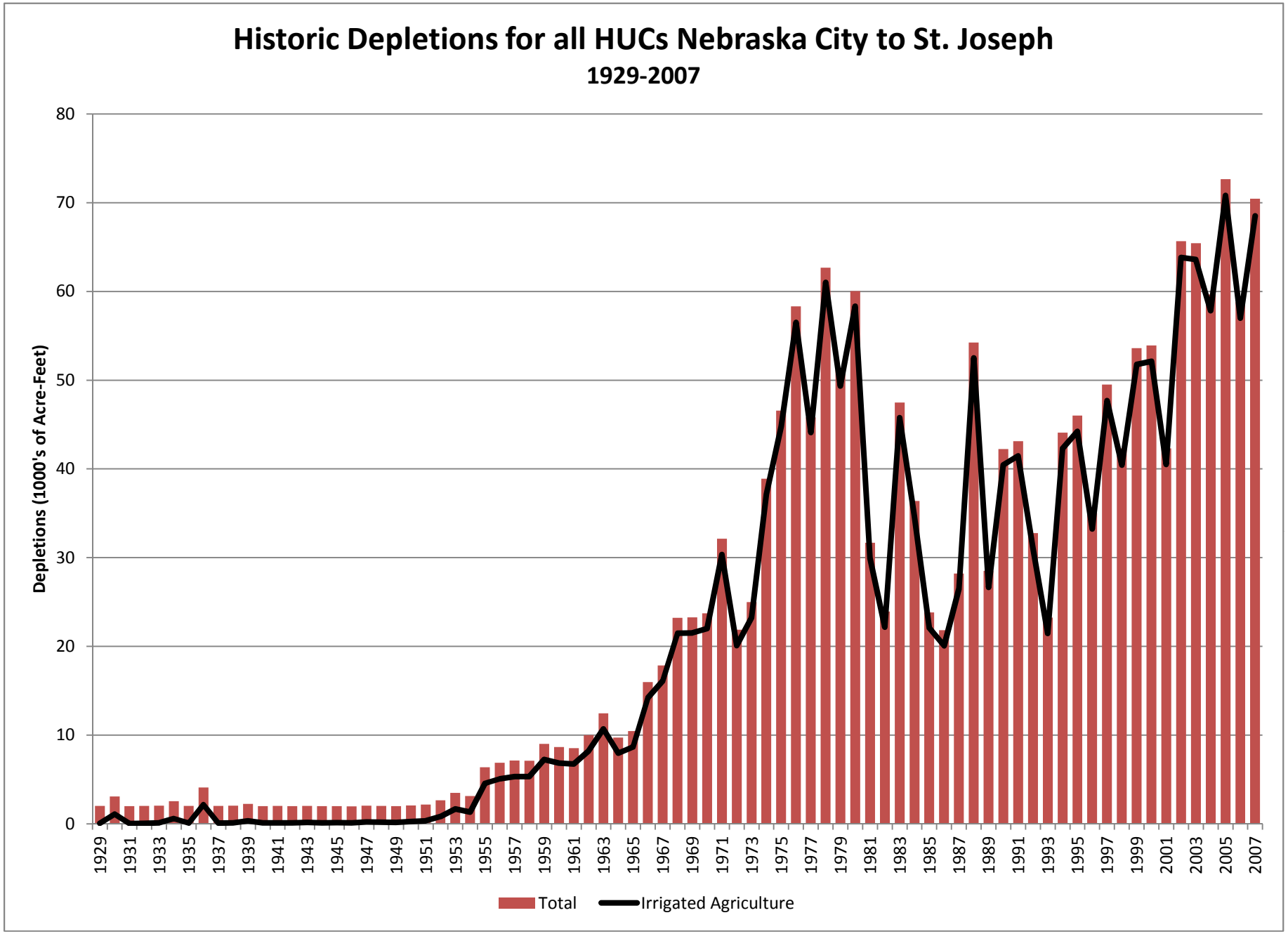
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	0	0	0	0	0	0	0	0	0	0	2
1930	0	0	2	0	0	0	0	0	0	0	0	0	3
1931	0	0	0	0	0	0	0	0	0	0	0	0	2
1932	0	0	0	0	0	0	0	0	0	0	0	0	2
1933	0	0	0	0	0	0	0	0	0	0	0	0	2
1934	0	0	1	0	0	0	0	0	0	0	0	0	3
1935	0	0	0	0	0	0	0	0	0	0	0	0	2
1936	0	0	4	0	0	0	0	0	0	0	0	0	4
1937	0	0	0	0	0	0	0	0	0	0	0	0	2
1938	0	0	0	0	0	0	0	0	0	0	0	0	2
1939	0	0	0	0	0	0	0	0	0	0	0	0	2
1940	0	0	0	0	0	0	0	0	0	0	0	0	2
1941	0	0	0	0	0	0	0	0	0	0	0	0	2
1942	0	0	0	0	0	0	0	0	0	0	0	0	2
1943	0	0	0	0	0	0	0	0	0	0	0	0	2
1944	0	0	0	0	0	0	0	0	0	0	0	0	2
1945	0	0	0	0	0	0	0	0	0	0	0	0	2
1946	0	0	0	0	0	0	0	0	0	0	0	0	2
1947	0	0	0	0	0	0	0	0	0	0	0	0	2
1948	0	0	0	0	0	0	0	0	0	0	0	0	2
1949	0	0	0	0	0	0	0	0	0	0	0	0	2
1950	0	0	0	0	0	0	0	0	0	0	0	0	2
1951	0	0	0	0	0	0	0	0	0	0	0	0	2
1952	0	0	0	0	0	0	1	0	0	0	0	0	3
1953	0	0	0	0	0	0	1	1	0	0	0	0	3
1954	0	0	0	0	0	0	1	0	1	0	0	0	3
1955	0	0	2	0	0	0	2	2	1	0	0	0	6
1956	0	0	1	0	0	1	1	2	1	0	0	0	7
1957	0	0	0	0	0	0	3	2	1	0	0	0	7
1958	0	0	0	0	0	1	1	3	0	1	0	0	7
1959	0	0	0	0	0	1	3	3	1	0	0	0	9
1960	0	0	0	0	0	1	4	2	1	0	0	0	9
1961	0	0	0	0	0	1	3	4	0	0	0	0	9
1962	0	0	0	0	0	2	2	4	1	0	0	0	10
1963	0	0	1	0	0	2	4	3	1	1	0	0	12
1964	0	0	0	0	0	1	4	2	1	1	0	0	10
1965	0	0	0	0	0	1	3	5	0	1	0	0	10
1966	0	0	0	0	1	1	6	5	2	1	0	0	16
1967	0	0	0	0	1	1	7	9	2	0	0	0	18
1968	0	0	0	0	1	4	7	8	3	0	0	0	23
1969	0	0	0	0	0	1	6	11	6	0	0	0	23
1970	0	0	0	0	1	3	10	9	2	0	0	0	24
1971	0	0	1	0	0	5	8	12	6	0	0	0	32

Missouri River Nebraska City to St. Joseph

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Nebraska City to St. Joseph

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	0	0	0	0	0	6	4	10	2	0	0	0	22
1973	0	0	0	0	0	7	5	12	0	0	0	0	25
1974	0	0	3	0	0	5	19	7	5	0	0	0	39
1975	0	0	0	0	1	3	20	16	2	5	-1	0	47
1976	0	0	1	0	1	8	18	25	7	0	0	0	58
1977	0	0	0	0	2	15	20	9	1	-1	0	0	46
1978	0	0	0	0	1	11	16	31	3	4	-1	-1	63
1979	0	0	0	0	2	7	12	21	12	-1	-1	0	51
1980	0	0	0	0	3	8	25	14	11	0	-1	0	60
1981	0	0	0	0	1	6	9	11	6	0	0	0	32
1982	0	0	0	0	0	2	13	5	3	0	0	0	24
1983	0	0	0	0	0	2	20	20	6	-1	0	0	47
1984	0	0	0	0	0	2	12	20	4	-1	0	0	36
1985	0	0	0	0	1	4	11	8	1	0	0	0	24
1986	0	0	0	0	1	5	9	8	0	0	0	0	22
1987	0	0	0	0	1	5	14	6	2	1	0	0	28
1988	0	0	1	0	2	14	12	22	3	2	-1	0	54
1989	0	0	0	0	2	3	13	12	0	0	0	0	29
1990	0	0	0	0	0	3	10	16	14	0	-1	0	42
1991	0	0	0	0	1	4	13	19	8	0	-1	0	43
1992	0	0	0	0	2	6	5	20	0	1	0	0	33
1993	0	0	0	0	0	2	4	17	0	1	0	0	23
1994	0	0	0	0	2	3	15	18	8	0	-1	0	44
1995	0	0	0	0	0	5	17	21	3	1	-1	0	46
1996	0	0	0	0	0	5	13	14	4	0	-1	0	35
1997	0	0	0	0	1	5	20	20	5	-1	-1	0	49
1998	0	0	0	0	2	3	12	20	8	-1	-1	0	42
1999	0	0	1	0	0	3	20	21	6	3	-1	0	54
2000	0	0	3	0	3	3	12	25	10	1	-1	-1	54
2001	0	0	0	0	1	4	16	23	0	0	-1	0	42
2002	0	0	0	0	1	16	25	16	10	-1	-1	0	66
2003	0	0	1	0	1	4	28	25	8	1	-1	0	65
2004	0	0	0	0	1	8	14	20	16	3	-1	-1	60
2005	0	0	2	0	1	5	20	25	22	0	-1	-1	73
2006	0	0	0	0	2	12	28	18	0	0	-1	0	59
2007	0	0	0	0	1	8	29	22	14	-2	-1	-1	70
Average	0	0	0	0	1	3	8	9	3	0	0	0	24


Historic Depletions for all HUCs Nebraska City to St. Joseph
1929-2007
Depletions (1000's of Acre-Feet)
80
70
60
50
40
30
20
10
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River St. Joseph to Kansas City

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs St. Joseph to Kansas City

Units - 1,000's of Acre-Feet

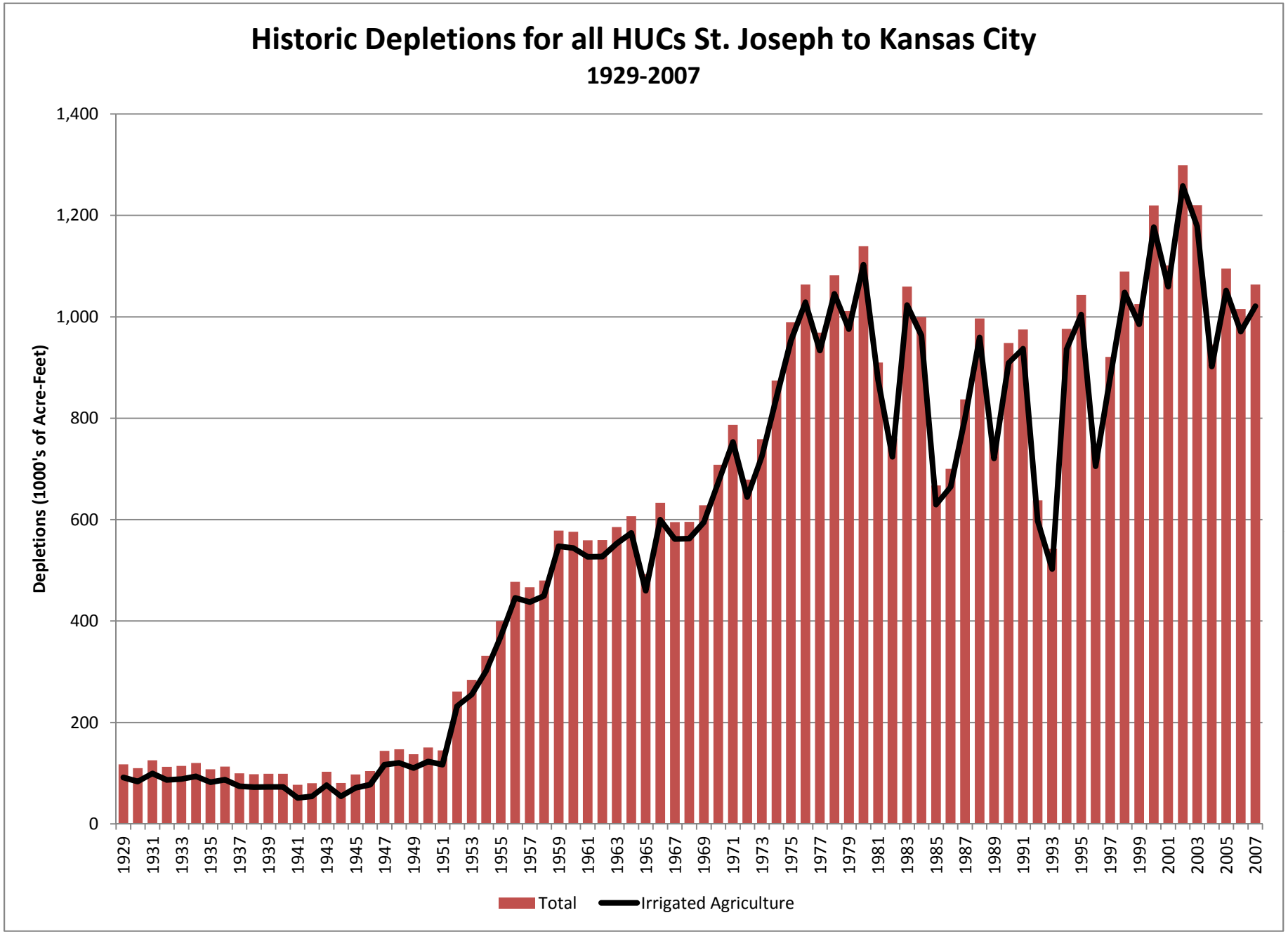
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	1	2	7	17	39	49	7	0	-2	-1	117
1930	0	0	1	2	4	16	37	33	22	-2	-2	-1	110
1931	0	0	1	3	11	20	38	29	24	4	-2	-1	125
1932	0	0	1	2	12	10	29	39	23	2	-3	-1	112
1933	-1	0	1	2	5	31	36	18	17	9	-2	-1	114
1934	-1	0	1	3	11	14	44	34	9	6	-2	-1	120
1935	0	0	1	2	3	11	45	32	14	4	-2	-1	108
1936	0	0	1	2	5	17	37	35	15	3	-2	-1	113
1937	0	0	1	2	6	7	31	37	16	1	-2	-1	100
1938	0	0	1	2	3	14	28	32	13	7	-2	-1	98
1939	0	0	1	2	6	8	31	27	22	4	-2	-1	99
1940	0	0	1	2	8	13	32	30	11	3	-1	0	99
1941	0	0	1	2	6	7	23	31	8	1	-1	0	77
1942	0	0	1	2	6	6	34	27	2	2	-1	0	80
1943	0	0	1	2	5	8	31	35	19	3	-1	0	103
1944	0	0	1	2	5	11	19	25	16	3	-1	0	81
1945	0	0	1	2	5	6	29	37	13	7	-1	-1	98
1946	0	0	1	3	4	13	38	37	10	0	-1	0	104
1947	0	0	1	2	4	7	38	61	28	6	-2	-1	144
1948	0	0	1	4	7	7	42	54	33	5	-3	-1	147
1949	-1	0	1	3	4	8	52	51	23	0	-2	-1	137
1950	0	0	1	3	6	39	25	46	27	9	-3	-1	151
1951	-1	0	1	2	6	8	45	75	8	4	-2	-1	145
1952	0	0	1	2	9	48	66	72	55	14	-5	-3	261
1953	-1	-1	1	2	11	37	78	100	60	6	-6	-3	284
1954	-2	-1	1	6	8	45	127	78	79	0	-6	-3	331
1955	-1	-1	1	6	14	15	146	177	35	20	-7	-4	400
1956	-2	-1	1	4	23	57	134	161	101	14	-9	-5	477
1957	-3	-2	0	2	6	17	201	184	87	-8	-11	-6	467
1958	-4	-2	0	3	17	50	84	222	91	42	-14	-9	480
1959	-5	-3	0	6	17	84	203	262	51	-16	-12	-7	578
1960	-4	-2	0	7	20	28	188	248	117	-2	-14	-8	576
1961	-5	-3	0	5	8	46	225	247	37	21	-13	-8	559
1962	-5	-3	0	11	33	21	150	271	90	14	-14	-8	560
1963	-4	-3	1	11	36	77	200	203	35	52	-13	-9	585
1964	-5	-3	0	5	32	42	247	183	87	42	-14	-9	607
1965	-6	-3	-1	13	29	16	186	268	-1	8	-10	-6	493
1966	-3	-2	2	8	71	54	195	214	90	29	-15	-9	633
1967	-6	-3	1	9	12	20	182	310	75	20	-15	-9	595
1968	-5	-3	2	8	17	90	211	181	117	1	-14	-9	596
1969	-5	-3	-1	8	19	58	184	246	168	-20	-16	-9	628
1970	-5	-3	-1	7	35	84	276	295	44	-2	-14	-8	708
1971	-5	-3	0	6	16	114	216	346	128	-3	-17	-10	787

Missouri River St. Joseph to Kansas City

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs St. Joseph to Kansas City

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-6	-4	1	9	16	77	218	247	143	6	-18	-10	679
1973	-6	-4	-1	4	30	155	189	425	-13	4	-15	-9	759
1974	-5	-3	1	7	45	70	383	225	175	4	-17	-11	874
1975	-6	-4	-1	8	24	36	341	392	166	72	-24	-15	989
1976	-9	-5	-1	4	33	167	350	463	95	-2	-20	-12	1,064
1977	-7	-4	1	5	28	160	395	236	162	31	-23	-15	969
1978	-8	-5	-1	11	21	181	301	365	218	36	-23	-14	1,082
1979	-9	-5	-2	9	32	76	225	408	340	-16	-29	-17	1,012
1980	-10	-6	-3	7	38	129	450	335	222	11	-21	-13	1,139
1981	-8	-5	-1	9	8	191	216	306	207	22	-22	-14	910
1982	-8	-5	-1	7	14	27	322	289	142	1	-18	-11	760
1983	-6	-4	-1	2	18	44	425	451	146	13	-18	-10	1,060
1984	-6	-4	-1	0	28	84	360	419	173	-23	-19	-11	1,000
1985	-7	-4	0	6	26	98	263	277	29	-3	-12	-7	667
1986	-4	-2	2	8	26	87	278	265	66	-5	-13	-8	700
1987	-5	-3	0	9	30	76	307	259	173	22	-19	-12	837
1988	-7	-4	-1	5	28	185	277	377	120	48	-19	-12	996
1989	-7	-4	-1	15	27	33	271	296	114	43	-18	-11	758
1990	-7	-4	-1	7	11	141	238	322	258	17	-22	-13	948
1991	-8	-5	-1	5	19	101	318	360	210	7	-20	-12	975
1992	-7	-4	0	13	48	41	135	242	194	2	-16	-9	638
1993	-5	-3	0	5	21	58	108	265	102	10	-12	-7	542
1994	-4	-2	2	5	60	114	226	406	210	-5	-22	-13	976
1995	-7	-5	-1	2	4	107	380	442	136	19	-20	-12	1,043
1996	-7	-4	-1	9	14	69	277	290	72	55	-17	-10	745
1997	-6	-3	1	5	31	79	363	339	162	-17	-20	-12	921
1998	-7	-4	-1	7	47	134	259	449	251	-5	-26	-15	1,089
1999	-9	-6	-2	1	27	50	382	336	214	73	-26	-17	1,025
2000	-10	-6	-2	9	62	111	342	546	230	-23	-25	-14	1,220
2001	-9	-5	-1	8	25	159	371	493	92	6	-24	-14	1,101
2002	-9	-5	-2	10	35	240	467	405	222	-29	-22	-13	1,299
2003	-8	-5	-1	5	30	49	539	479	131	44	-26	-16	1,220
2004	-10	-6	-1	7	52	76	262	446	137	18	-22	-13	945
2005	-8	-5	-1	7	36	65	399	374	285	-16	-26	-16	1,095
2006	-9	-6	-1	12	48	108	456	352	94	-8	-20	-12	1,015
2007	-7	-4	0	3	30	115	350	434	179	1	-24	-14	1,063
Average	-4	-2	0	5	21	63	199	230	98	9	-13	-8	599


Historic Depletions for all HUCs St. Joseph to Kansas City
1929-2007
Depletions (1000's of Acre-Feet)
1,400
1,200
1,000
800
600
400
200
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Kansas City to Boonville

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Kansas City to Boonville

Units - 1,000's of Acre-Feet

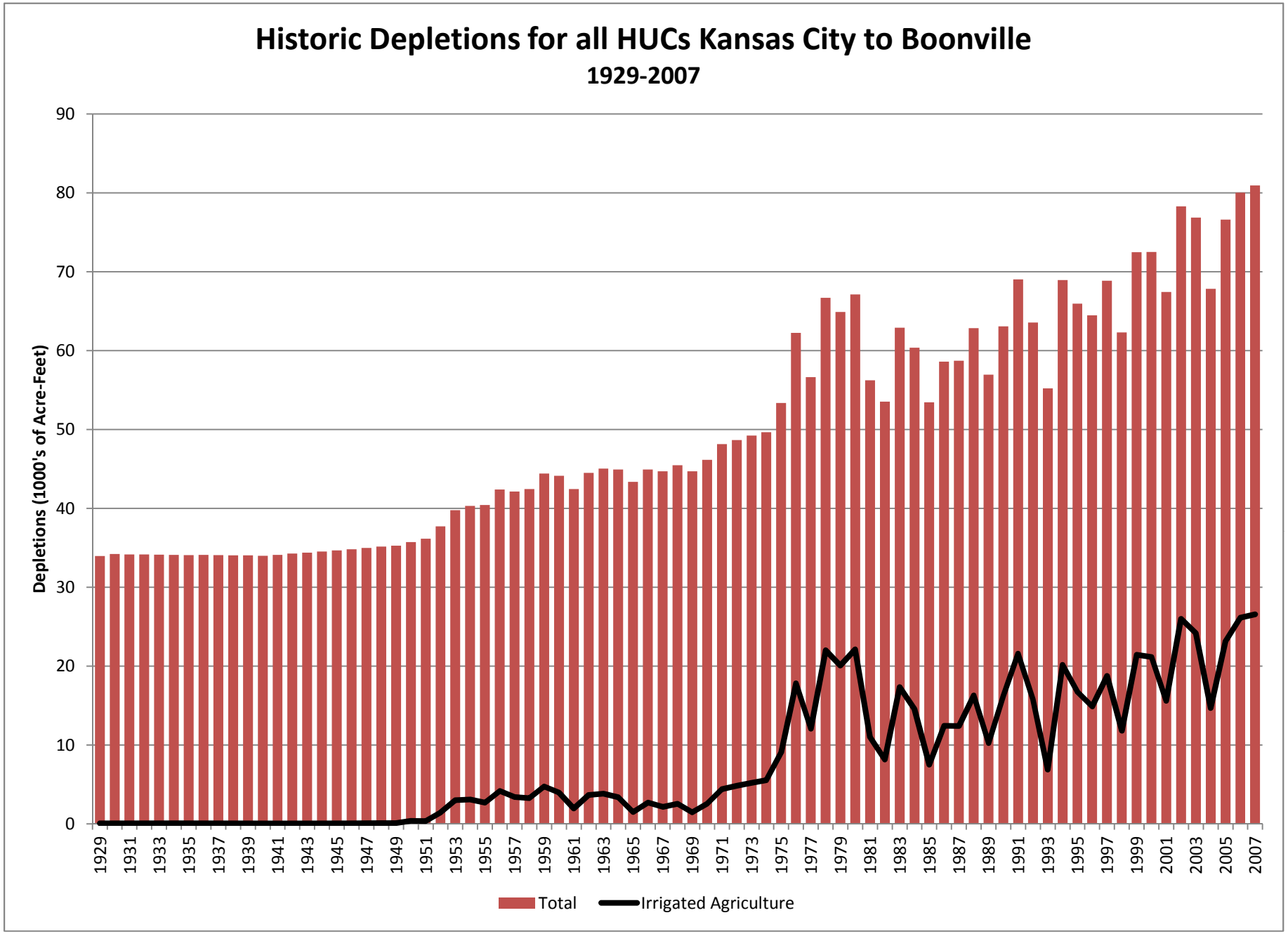
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	1	1	2	2	3	4	6	5	4	3	1	1	34
1930	1	1	2	2	3	4	6	5	4	3	1	1	34
1931	1	1	2	2	3	4	6	5	4	3	1	1	34
1932	1	1	2	2	3	4	6	5	4	3	1	1	34
1933	1	1	2	2	3	4	6	5	4	3	1	1	34
1934	1	1	2	2	3	4	6	5	4	3	1	1	34
1935	1	1	2	2	3	4	6	5	4	3	1	1	34
1936	1	1	2	2	3	4	6	5	4	3	1	1	34
1937	1	1	2	2	3	4	6	5	4	3	1	1	34
1938	1	1	2	2	3	4	6	5	4	3	1	1	34
1939	1	1	2	2	3	4	6	5	4	3	1	1	34
1940	1	1	2	2	3	4	6	5	4	3	1	1	34
1941	1	1	2	2	3	4	6	5	4	3	1	1	34
1942	1	1	2	2	3	4	6	5	4	3	1	1	34
1943	1	1	2	2	3	4	6	5	4	3	1	1	34
1944	1	1	2	2	3	4	6	5	4	3	1	1	35
1945	1	1	2	2	3	5	6	5	4	3	1	1	35
1946	1	1	2	2	3	5	6	5	4	3	1	1	35
1947	1	1	2	2	3	5	6	5	4	3	1	1	35
1948	1	1	2	2	4	5	6	5	4	3	1	1	35
1949	1	1	2	2	4	5	6	5	4	3	1	1	35
1950	1	1	2	2	4	5	6	5	4	3	1	1	36
1951	1	1	2	3	4	5	7	6	4	3	1	1	36
1952	1	1	2	3	4	5	7	6	4	3	1	1	38
1953	1	1	2	3	4	5	8	7	5	3	1	1	40
1954	1	1	2	3	4	5	8	6	5	3	1	1	40
1955	1	1	2	3	4	5	8	6	5	3	1	1	40
1956	1	1	2	3	4	6	7	7	5	3	1	1	42
1957	1	1	2	3	4	5	8	7	5	3	1	1	42
1958	1	1	2	3	4	5	7	8	5	3	1	1	42
1959	1	1	2	3	4	6	8	8	5	3	1	1	44
1960	1	1	2	3	4	5	8	8	6	3	1	1	44
1961	1	1	2	3	4	6	8	8	4	3	1	1	42
1962	1	1	2	3	4	6	8	8	5	3	1	1	45
1963	1	1	2	3	4	6	8	7	5	4	1	1	45
1964	1	1	2	3	4	5	9	8	5	4	1	1	45
1965	1	1	3	3	4	6	8	7	5	4	1	1	43
1966	1	1	3	3	4	6	9	7	5	3	1	1	45
1967	1	1	3	3	4	6	9	8	5	3	1	1	45
1968	1	1	3	3	4	6	8	7	5	4	1	1	45
1969	1	1	3	3	4	6	8	7	5	3	1	1	45
1970	1	1	3	3	4	6	10	7	5	3	1	1	46
1971	1	1	3	3	4	7	9	8	5	4	1	1	48

Missouri River Kansas City to Boonville

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Kansas City to Boonville

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	1	1	3	3	4	7	9	9	5	4	1	1	49
1973	1	1	3	3	4	7	9	10	5	4	1	1	49
1974	1	1	3	3	4	7	11	8	6	4	1	1	50
1975	1	1	3	3	4	7	13	10	5	4	1	1	53
1976	1	1	3	3	4	8	14	14	8	3	1	1	62
1977	1	1	3	3	5	7	14	12	6	3	1	1	57
1978	1	1	3	3	5	10	15	12	11	5	1	1	67
1979	1	1	3	3	5	7	14	14	12	4	1	1	65
1980	1	1	3	3	5	10	18	13	8	4	1	1	67
1981	1	1	3	3	4	6	9	15	9	3	1	1	56
1982	1	1	3	3	5	6	13	7	9	4	1	1	54
1983	1	1	3	3	5	7	14	15	8	3	1	1	63
1984	1	1	3	3	5	7	13	15	7	3	1	1	60
1985	1	1	3	3	5	6	12	9	7	4	1	1	53
1986	1	1	3	3	5	9	13	12	5	3	1	1	59
1987	1	1	3	3	5	9	12	10	8	4	1	1	59
1988	1	1	3	3	5	10	14	11	7	5	1	1	63
1989	1	1	3	3	5	8	13	11	6	4	1	1	57
1990	1	1	3	3	5	6	13	13	11	4	1	1	63
1991	1	1	3	3	5	10	15	16	8	4	1	1	69
1992	1	1	3	3	5	11	9	14	9	5	1	1	64
1993	1	1	3	3	5	7	9	13	5	5	1	1	55
1994	1	1	3	3	5	10	15	14	9	4	1	1	69
1995	1	1	3	3	5	8	14	15	8	5	1	1	66
1996	1	1	3	3	5	8	12	16	7	5	1	1	64
1997	1	1	3	3	5	8	17	14	9	4	1	1	69
1998	1	1	3	3	5	7	14	14	7	4	1	1	62
1999	1	1	3	4	5	8	18	17	7	6	1	1	72
2000	1	1	3	4	5	7	16	18	11	4	1	1	72
2001	1	1	3	4	5	7	14	17	9	4	1	1	67
2002	1	1	3	4	5	10	18	16	14	4	1	1	78
2003	1	1	3	4	5	9	21	18	6	6	1	1	77
2004	1	1	3	4	5	9	15	10	13	4	1	1	68
2005	1	1	3	4	6	10	20	13	12	5	1	1	77
2006	1	1	3	4	6	11	20	16	11	4	1	1	80
2007	1	2	3	4	5	8	20	19	12	4	1	1	81
Average	1	1	2	3	4	6	10	9	6	4	1	1	50


Historic Depletions for all HUCs Kansas City to Boonville
1929-2007
Depletions (1000's of Acre-Feet)
0
10
20
30
40
50
60
70
80
90
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Boonville to Hermann

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Boonville to Hermann

Units - 1,000's of Acre-Feet

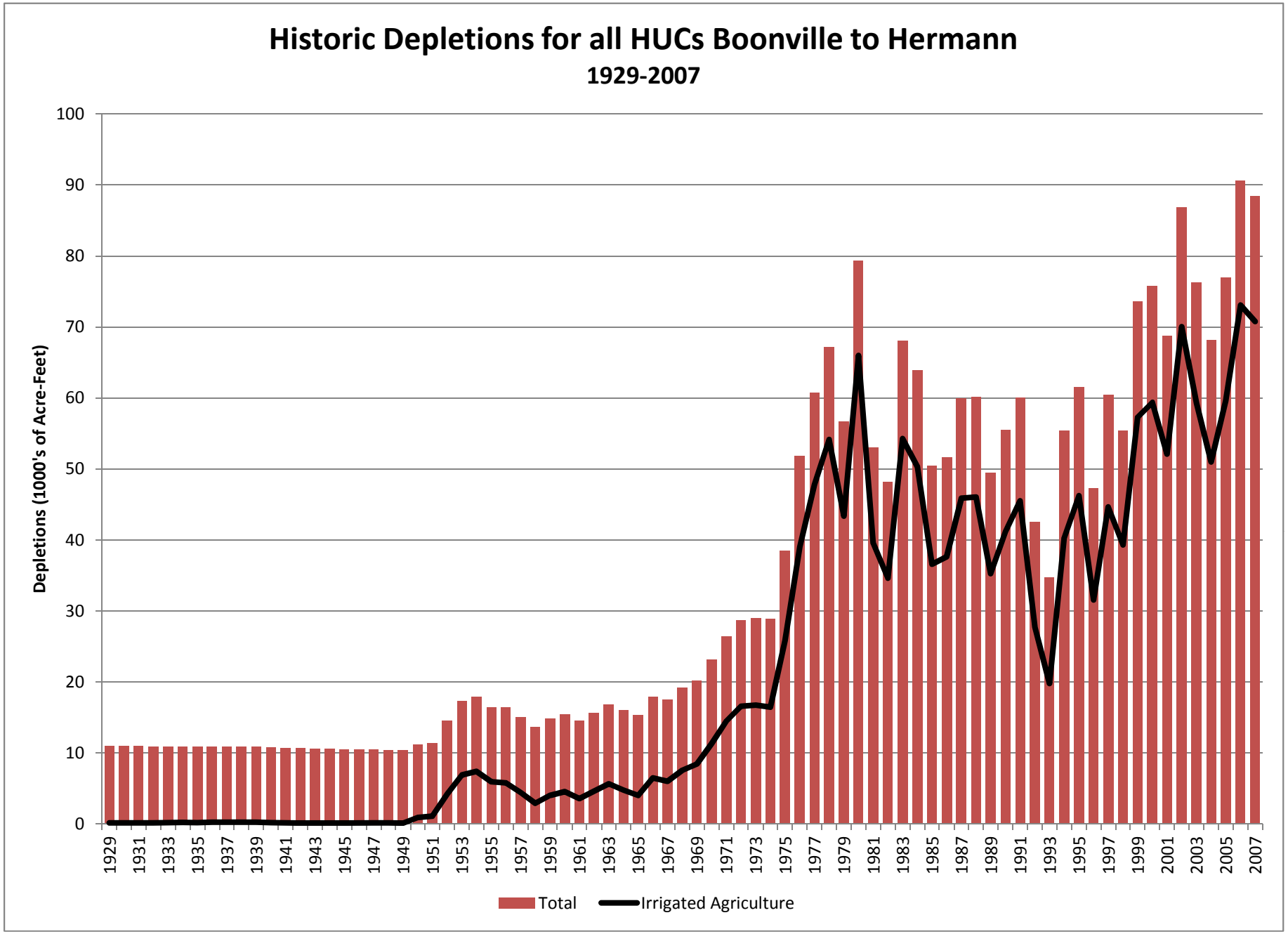
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	1	1	1	1	2	2	1	1	0	0	11
1930	0	0	1	1	1	1	2	2	1	1	0	0	11
1931	0	0	1	1	1	1	2	2	1	1	0	0	11
1932	0	0	1	1	1	1	2	2	1	1	0	0	11
1933	0	0	1	1	1	1	2	2	1	1	0	0	11
1934	0	0	1	1	1	1	2	2	1	1	0	0	11
1935	0	0	1	1	1	1	2	2	1	1	0	0	11
1936	0	0	1	1	1	1	2	2	1	1	0	0	11
1937	0	0	1	1	1	1	2	2	1	1	0	0	11
1938	0	0	1	1	1	1	2	2	1	1	0	0	11
1939	0	0	1	1	1	1	2	2	1	1	0	0	11
1940	0	0	1	1	1	1	2	2	1	1	0	0	11
1941	0	0	1	1	1	1	2	2	1	1	0	0	11
1942	0	0	1	1	1	1	2	2	1	1	0	0	11
1943	0	0	1	1	1	1	2	2	1	1	0	0	11
1944	0	0	1	1	1	1	2	2	1	1	0	0	11
1945	0	0	1	1	1	1	2	2	1	1	0	0	10
1946	0	0	1	1	1	1	2	2	1	1	0	0	10
1947	0	0	1	1	1	1	2	2	1	1	0	0	10
1948	0	0	1	1	1	1	2	2	1	1	0	0	10
1949	0	0	1	1	1	1	2	2	1	1	0	0	10
1950	0	0	1	1	1	1	2	2	1	1	0	0	11
1951	0	0	1	1	1	1	2	2	1	1	0	0	11
1952	0	0	1	1	1	3	3	2	2	1	0	0	15
1953	0	0	1	1	1	3	4	4	2	1	0	0	17
1954	0	0	1	1	1	3	5	4	3	1	0	0	18
1955	0	0	1	1	1	2	4	4	2	1	0	0	16
1956	0	0	1	1	1	2	3	4	3	1	0	0	16
1957	0	0	1	1	1	2	4	4	2	1	0	0	15
1958	0	0	1	1	1	2	2	3	1	1	0	0	14
1959	0	0	1	1	1	2	3	3	2	1	0	0	15
1960	0	0	1	1	1	2	3	3	2	1	0	0	15
1961	0	0	1	1	1	2	3	3	1	1	0	0	15
1962	0	0	1	1	2	2	4	4	1	1	0	0	16
1963	0	0	1	1	1	2	4	4	2	1	0	0	17
1964	0	0	1	1	2	2	4	3	2	1	0	0	16
1965	0	0	1	1	2	2	4	3	1	2	0	0	15
1966	0	0	1	1	2	3	5	3	2	1	0	0	18
1967	0	0	1	1	1	2	4	5	2	1	0	0	18
1968	0	0	1	1	1	3	4	4	3	1	0	0	19
1969	0	0	1	1	2	2	5	6	2	1	0	0	20
1970	0	0	1	1	2	2	8	7	1	1	0	0	23
1971	0	0	1	1	2	4	5	8	3	2	0	0	26

Missouri River Boonville to Hermann

Total Historic Irrigation and Public Surface Water Supply Depletions for HUCs Boonville to Hermann

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	0	0	1	1	2	6	7	8	3	1	0	0	29
1973	0	0	1	1	2	4	6	12	2	1	0	0	29
1974	0	0	1	1	2	4	12	5	2	1	0	0	29
1975	0	0	1	1	3	4	15	8	4	2	0	0	38
1976	0	0	1	1	2	7	15	16	10	1	0	0	52
1977	0	0	1	2	4	2	25	22	5	1	-1	0	61
1978	0	0	1	1	2	10	19	17	15	3	-1	0	67
1979	0	0	1	1	2	5	14	21	13	1	-1	0	57
1980	0	0	1	2	4	10	27	22	14	0	-1	0	79
1981	0	0	1	2	1	2	17	18	14	-1	-1	0	53
1982	0	0	1	1	2	5	19	6	12	3	-1	0	48
1983	0	0	1	1	3	8	21	26	10	0	-1	0	68
1984	0	0	1	1	4	8	19	25	8	-1	-1	0	64
1985	0	0	1	2	3	2	23	8	11	1	-1	0	50
1986	0	0	1	2	3	13	18	14	0	0	0	0	52
1987	0	0	1	2	3	9	16	17	11	2	-1	0	60
1988	0	0	1	1	4	13	13	20	7	3	-1	0	60
1989	0	0	1	3	2	7	13	12	10	4	-1	0	49
1990	0	0	1	1	1	5	14	19	14	1	-1	0	56
1991	0	0	1	1	2	13	15	19	6	2	-1	0	60
1992	0	0	1	1	4	5	7	15	5	4	0	0	42
1993	0	0	1	1	2	4	6	17	1	3	0	0	35
1994	0	0	1	1	4	8	15	16	10	1	-1	0	55
1995	0	0	1	1	1	6	17	21	11	4	-1	0	62
1996	0	0	1	1	3	9	11	17	3	2	0	0	47
1997	0	0	1	1	2	7	23	14	11	2	-1	0	60
1998	0	0	1	2	6	6	11	25	6	0	-1	0	55
1999	0	0	1	1	2	7	28	21	9	5	-1	0	74
2000	0	0	1	3	4	3	19	32	13	3	-1	0	76
2001	0	0	1	3	3	5	19	28	12	0	-1	0	69
2002	0	0	1	2	2	15	23	27	18	1	-1	0	87
2003	0	0	1	2	3	8	30	24	4	5	-1	0	76
2004	0	0	1	2	5	10	13	17	21	1	-1	0	68
2005	0	0	1	2	6	8	29	15	12	5	-1	-1	77
2006	0	0	1	2	4	17	23	27	17	2	-1	-1	91
2007	0	0	1	1	4	4	22	38	17	3	-1	-1	88
Average	0	0	1	1	2	4	9	10	5	1	0	0	34


Historic Depletions for all HUCs Boonville to Hermann
1929-2007
Depletions (1000's of Acre-Feet)
100
90
80
70
60
50
40
30
20
10
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

PRESENT

LEVEL

DEPLETIONS

Missouri River above Fort Peck Reservoir

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs above Fort Peck

Units - 1,000's of Acre-Feet

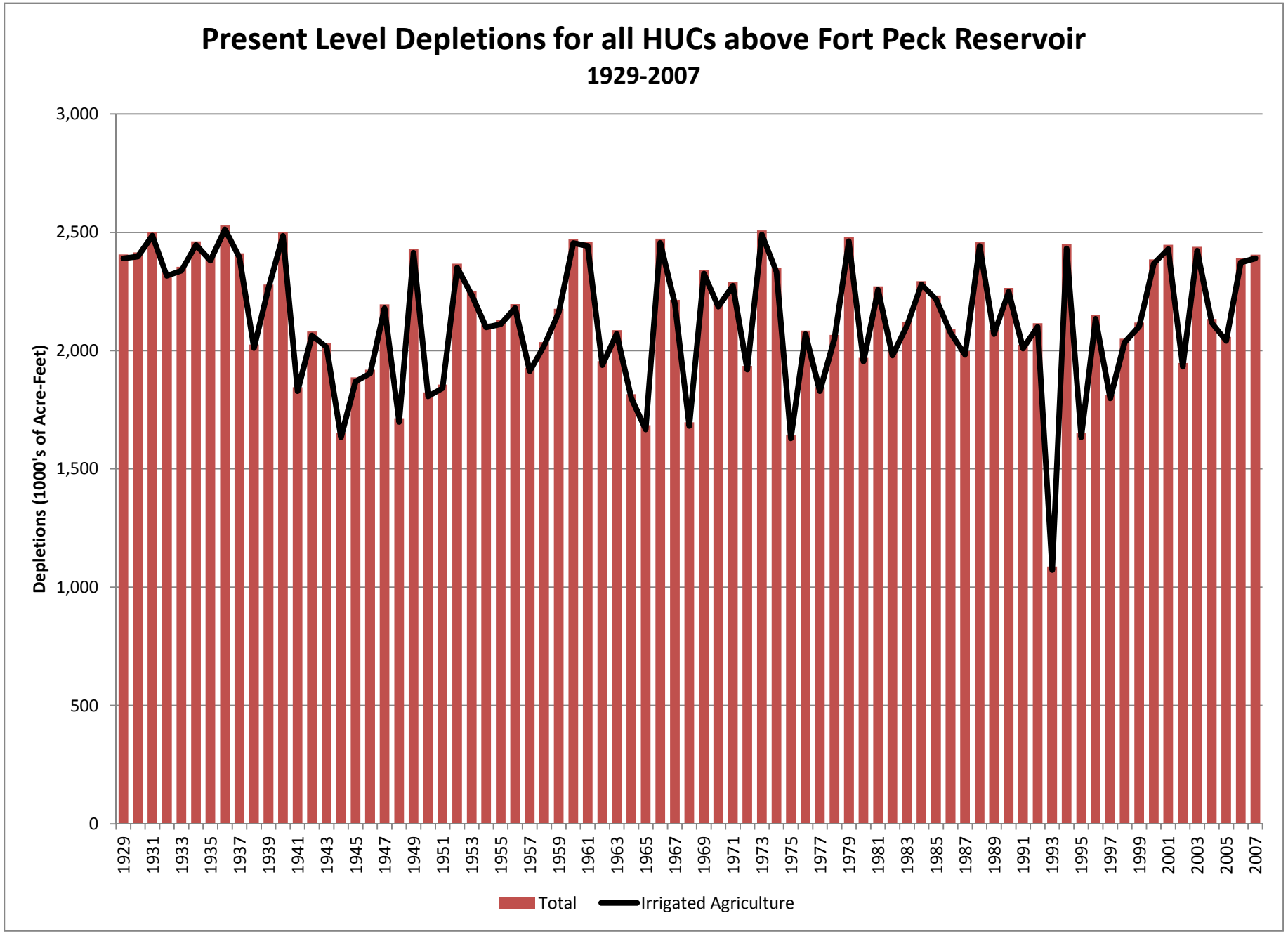
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-45	-38	-33	-10	190	628	1,020	775	65	-54	-52	-40	2,406
1930	-32	-27	-23	-6	234	864	847	566	161	-75	-53	-41	2,415
1931	-33	-27	-23	-1	266	813	779	736	124	-40	-53	-40	2,501
1932	-32	-27	-23	-7	311	522	858	583	337	-80	-62	-47	2,334
1933	-38	-32	-27	-21	51	923	1,109	325	223	-62	-55	-42	2,355
1934	-34	-29	-24	16	523	344	977	746	115	-70	-57	-45	2,462
1935	-37	-31	-26	-22	96	700	895	669	313	-66	-54	-41	2,396
1936	-33	-27	-23	-11	405	610	1,017	539	202	-55	-54	-42	2,529
1937	-34	-29	-24	1	500	370	876	755	167	-56	-65	-49	2,411
1938	-40	-34	-28	-15	13	431	781	697	402	-82	-57	-42	2,026
1939	-33	-28	-23	7	229	325	1,058	708	224	-81	-61	-46	2,279
1940	-38	-32	-27	-19	419	735	798	792	48	-69	-60	-46	2,501
1941	-39	-33	-28	-12	128	507	973	501	-31	-42	-45	-35	1,845
1942	-29	-25	-21	-4	-6	386	997	713	221	-58	-54	-40	2,080
1943	-33	-27	-23	2	84	256	971	647	319	-67	-56	-41	2,032
1944	-30	-25	-21	36	75	55	888	529	253	-31	-45	-32	1,651
1945	-24	-20	-16	-12	48	124	1,117	680	118	-42	-50	-37	1,887
1946	-28	-24	-20	30	49	551	837	598	80	-70	-47	-36	1,919
1947	-29	-24	-20	1	349	237	1,100	629	99	-50	-55	-42	2,196
1948	-33	-28	-23	-4	22	184	769	658	296	-42	-49	-35	1,714
1949	-27	-23	-19	16	122	742	903	708	202	-84	-62	-48	2,431
1950	-39	-33	-28	-22	226	355	760	563	173	-46	-50	-37	1,823
1951	-30	-26	-21	-16	190	479	863	392	178	-67	-48	-37	1,857
1952	-30	-25	-21	36	92	668	896	587	335	-61	-63	-47	2,367
1953	-38	-32	-27	-22	2	375	1,162	659	303	-41	-52	-38	2,251
1954	-31	-26	-21	-17	293	419	1,043	414	196	-56	-57	-43	2,114
1955	-35	-29	-25	-19	72	569	652	875	231	-59	-59	-44	2,129
1956	-35	-29	-25	-17	111	745	842	464	311	-67	-59	-45	2,197
1957	-36	-31	-26	-20	44	380	984	572	229	-78	-51	-39	1,928
1958	-31	-26	-22	-11	497	178	548	770	283	-47	-59	-44	2,036
1959	-35	-30	-25	-20	28	622	1,097	586	109	-65	-52	-39	2,176
1960	-32	-27	-23	-18	116	846	1,060	416	269	-50	-50	-38	2,470
1961	-31	-26	-22	-17	81	1,084	853	669	6	-49	-50	-39	2,459
1962	-32	-27	-23	-1	-7	661	701	533	300	-57	-53	-39	1,955
1963	-32	-26	-22	-11	148	238	973	713	265	-58	-58	-43	2,087
1964	-35	-29	-24	-18	22	209	1,082	486	249	-39	-51	-37	1,815
1965	-30	-25	-21	-17	103	387	895	505	-15	-23	-43	-32	1,684
1966	-26	-22	-18	-13	316	526	1,003	598	291	-73	-62	-47	2,473
1967	-39	-32	-27	-23	34	264	1,040	856	315	-74	-57	-42	2,215
1968	-34	-28	-23	-16	60	340	1,081	364	70	-38	-44	-34	1,697
1969	-28	-23	-20	15	308	207	955	826	298	-88	-63	-47	2,341
1970	-39	-33	-28	-23	60	653	798	820	162	-65	-59	-44	2,202
1971	-37	-31	-26	-18	88	630	992	686	173	-65	-58	-45	2,289

Missouri River above Fort Peck Reservoir

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs above Fort Peck

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-37	-31	-27	-14	127	762	657	457	196	-60	-54	-41	1,935
1973	-34	-29	-24	-17	368	641	1,032	586	140	-58	-54	-42	2,508
1974	-35	-30	-25	-12	26	1,010	958	344	268	-51	-60	-45	2,350
1975	-34	-29	-24	-21	6	274	787	485	360	-78	-47	-35	1,645
1976	-26	-22	-18	-11	330	402	859	502	225	-59	-56	-42	2,085
1977	-33	-28	-23	24	91	746	755	389	44	-37	-48	-37	1,845
1978	-29	-24	-20	-12	25	777	718	655	122	-47	-56	-43	2,066
1979	-35	-29	-25	-21	237	698	861	604	340	-58	-54	-40	2,478
1980	-33	-27	-23	7	44	545	963	476	167	-62	-50	-38	1,970
1981	-31	-26	-22	6	-9	552	920	739	332	-84	-61	-45	2,272
1982	-37	-31	-26	-14	16	488	887	720	141	-53	-54	-40	1,998
1983	-33	-28	-23	-6	145	608	744	711	149	-51	-54	-40	2,122
1984	-33	-28	-23	-15	270	509	996	647	143	-75	-56	-43	2,294
1985	-36	-30	-26	3	223	921	1,069	290	-25	-60	-54	-43	2,232
1986	-36	-31	-26	-18	194	779	791	616	-34	-51	-52	-41	2,091
1987	-34	-29	-24	29	60	825	571	424	324	-49	-57	-43	1,998
1988	-34	-29	-24	4	140	885	928	591	140	-50	-53	-41	2,458
1989	-33	-28	-24	-18	92	788	872	324	281	-69	-56	-42	2,087
1990	-34	-29	-24	-12	23	700	898	471	453	-73	-62	-46	2,265
1991	-37	-31	-26	-21	15	277	1,119	683	197	-58	-53	-40	2,025
1992	-32	-27	-22	-5	363	543	605	624	246	-77	-58	-44	2,116
1993	-36	-30	-25	-14	145	316	248	325	253	-34	-35	-25	1,088
1994	-20	-17	-14	-7	156	692	819	661	355	-77	-57	-43	2,449
1995	-34	-29	-24	-17	14	370	628	694	191	-63	-46	-34	1,650
1996	-27	-23	-19	-9	5	695	817	720	143	-58	-54	-41	2,150
1997	-33	-28	-23	-19	55	420	744	562	282	-59	-50	-37	1,814
1998	-31	-26	-22	-9	102	250	920	710	314	-62	-56	-41	2,050
1999	-34	-28	-23	-16	111	526	985	531	220	-55	-56	-42	2,119
2000	-35	-29	-24	-4	135	644	983	702	194	-79	-58	-44	2,385
2001	-36	-31	-26	-13	427	435	865	773	242	-73	-66	-50	2,447
2002	-42	-35	-30	-19	115	429	1,018	456	215	-64	-54	-41	1,947
2003	-34	-28	-24	-12	172	611	1,034	663	196	-50	-51	-39	2,439
2004	-32	-27	-22	2	43	625	994	499	207	-62	-53	-40	2,134
2005	-33	-28	-23	-17	101	281	1,116	604	220	-69	-54	-41	2,058
2006	-33	-28	-23	2	188	567	1,063	628	195	-70	-56	-42	2,390
2007	-35	-29	-24	-10	80	668	1,126	642	140	-62	-51	-39	2,406
Average	-33	-28	-24	-8	147	537	901	600	206	-60	-54	-41	2,143


Present Level Depletions for all HUCs above Fort Peck Reservoir
1929-2007
Depletions (1000's of Acre-Feet)
3,000
2,500
2,000
1,500
1,000
500
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Fort Peck Dam to Garrison Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Fort Peck Dam to Garrison Dam

Units - 1,000's of Acre-Feet

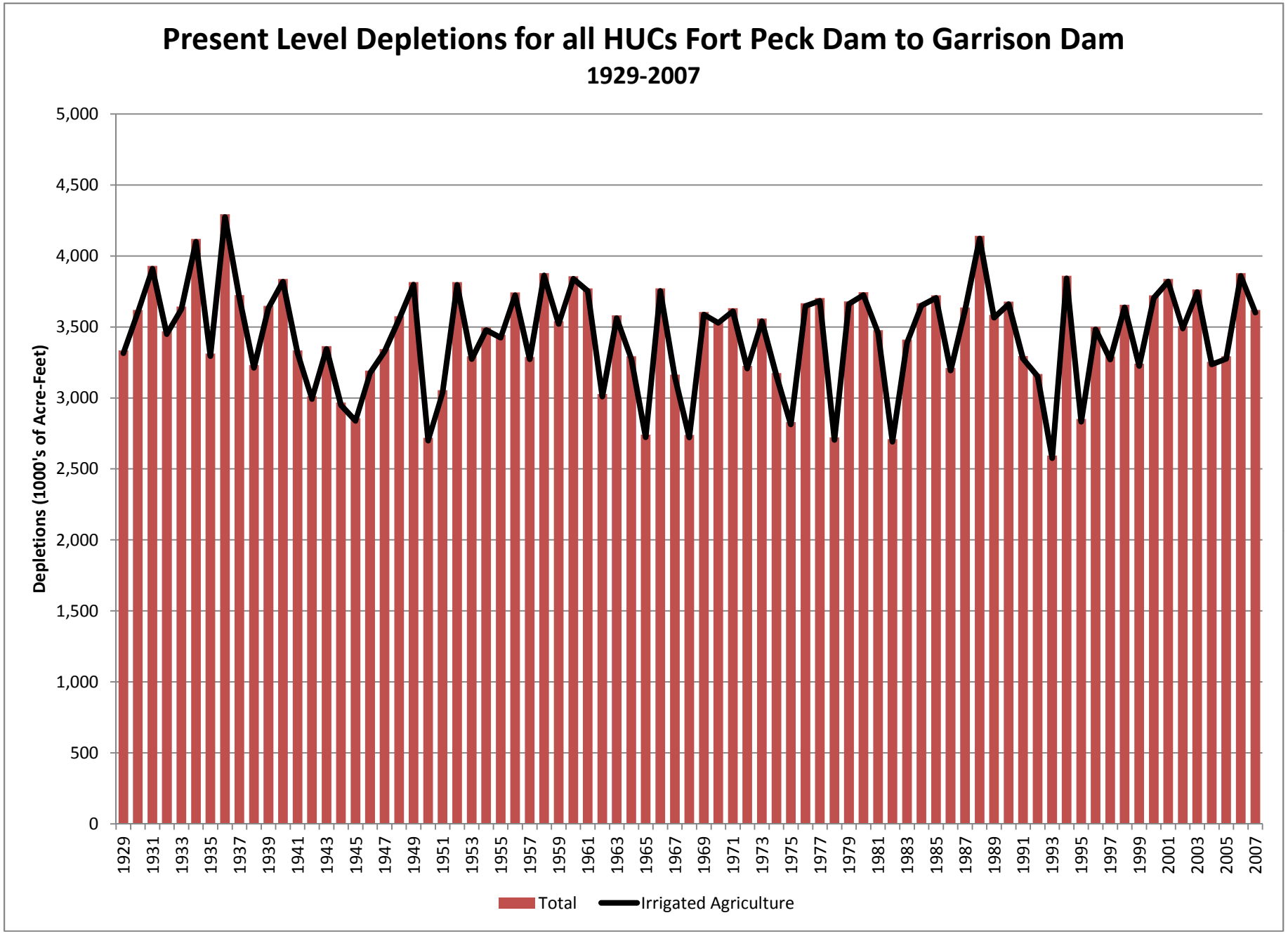
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-41	-30	-24	42	602	919	1,173	837	90	-83	-92	-59	3,334
1930	-39	-29	-23	269	861	966	1,021	611	247	-113	-91	-59	3,621
1931	-40	-31	-25	159	1,107	1,208	924	676	205	-88	-100	-65	3,930
1932	-44	-34	-28	109	1,069	676	1,088	637	284	-125	-99	-63	3,470
1933	-43	-33	-27	23	665	1,350	1,218	419	300	-70	-96	-64	3,643
1934	-42	-32	-26	262	1,718	756	951	644	103	-63	-92	-60	4,120
1935	-43	-35	-29	3	512	1,045	1,084	671	350	-80	-100	-65	3,312
1936	-42	-31	-25	124	1,532	1,000	1,156	598	222	-87	-92	-60	4,294
1937	-42	-33	-28	145	1,275	683	935	779	267	-90	-101	-64	3,725
1938	-45	-34	-28	125	573	902	890	663	430	-76	-102	-66	3,232
1939	-44	-33	-26	264	1,077	473	1,212	658	321	-83	-104	-67	3,649
1940	-47	-35	-29	46	1,265	832	992	780	293	-89	-103	-66	3,839
1941	-47	-36	-30	100	1,212	775	1,010	609	-25	-93	-86	-56	3,334
1942	-41	-32	-27	159	473	736	1,085	691	196	-86	-87	-56	3,012
1943	-39	-29	-23	263	758	511	1,129	697	334	-73	-99	-65	3,364
1944	-46	-35	-28	155	1,063	230	940	636	227	-27	-90	-59	2,967
1945	-38	-28	-22	14	660	487	1,181	672	112	-42	-84	-55	2,857
1946	-36	-26	-20	323	587	787	1,050	689	94	-115	-85	-55	3,193
1947	-37	-28	-22	90	1,019	438	1,205	660	232	-55	-96	-62	3,344
1948	-42	-31	-25	177	1,123	731	784	725	362	-58	-105	-68	3,575
1949	-45	-35	-28	310	1,054	877	953	818	210	-133	-101	-65	3,816
1950	-44	-34	-28	20	646	689	881	648	99	-26	-80	-52	2,718
1951	-35	-25	-20	60	1,120	608	931	519	129	-96	-83	-54	3,055
1952	-37	-29	-24	279	920	1,071	852	657	373	-63	-111	-73	3,816
1953	-48	-37	-30	-2	415	934	1,216	718	349	-62	-98	-63	3,293
1954	-40	-29	-23	100	886	820	1,241	550	229	-83	-94	-61	3,497
1955	-41	-31	-25	78	613	909	1,035	898	252	-73	-103	-67	3,445
1956	-45	-34	-27	68	944	1,313	914	522	321	-62	-104	-68	3,743
1957	-46	-36	-29	40	831	666	1,221	686	217	-102	-96	-62	3,290
1958	-44	-33	-27	149	1,699	633	621	790	354	-76	-115	-73	3,879
1959	-52	-41	-34	55	717	1,111	1,144	739	172	-108	-99	-64	3,540
1960	-43	-32	-26	116	1,055	965	1,199	536	318	-71	-97	-63	3,857
1961	-43	-33	-28	66	927	1,341	1,014	820	-49	-99	-88	-56	3,771
1962	-39	-30	-25	268	533	911	717	622	263	-42	-90	-59	3,028
1963	-39	-30	-24	58	988	660	1,058	759	374	-38	-112	-72	3,582
1964	-49	-36	-29	71	906	538	1,269	543	299	-55	-99	-65	3,294
1965	-44	-32	-26	95	640	711	970	579	-2	-26	-74	-48	2,742
1966	-33	-24	-20	64	1,241	841	1,105	520	312	-76	-96	-62	3,771
1967	-43	-33	-27	26	722	452	1,164	856	276	-67	-99	-64	3,164
1968	-44	-32	-25	48	692	568	1,075	388	243	-37	-83	-55	2,739
1969	-38	-27	-22	203	1,183	386	902	930	400	-134	-109	-68	3,605
1970	-48	-37	-29	10	743	1,067	1,128	875	115	-110	-101	-65	3,547
1971	-45	-34	-27	107	864	1,083	985	866	122	-132	-95	-60	3,633

Missouri River Fort Peck Dam to Garrison Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Fort Peck Dam to Garrison Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-42	-32	-26	117	815	1,092	769	581	196	-97	-90	-58	3,225
1973	-40	-31	-25	9	1,077	1,009	1,012	743	34	-70	-97	-63	3,559
1974	-45	-34	-28	133	494	1,188	1,063	420	214	-84	-88	-58	3,174
1975	-37	-28	-23	-11	424	696	1,110	624	322	-102	-88	-57	2,830
1976	-37	-27	-21	165	1,289	569	1,081	629	283	-95	-103	-66	3,667
1977	-45	-34	-28	274	936	1,250	941	453	186	-70	-96	-63	3,703
1978	-42	-33	-28	116	207	1,087	801	700	70	-26	-79	-52	2,722
1979	-36	-26	-21	59	744	1,126	992	662	425	-74	-105	-68	3,680
1980	-45	-34	-27	287	1,051	986	1,107	459	230	-102	-101	-67	3,745
1981	-47	-37	-31	265	531	888	1,005	809	382	-114	-106	-69	3,477
1982	-47	-35	-28	35	485	689	935	752	125	-67	-81	-52	2,710
1983	-35	-26	-20	62	625	974	953	934	178	-73	-98	-63	3,411
1984	-43	-32	-25	98	1,096	840	1,110	782	97	-105	-93	-59	3,668
1985	-41	-31	-26	284	1,292	978	1,036	456	22	-95	-92	-60	3,723
1986	-43	-34	-29	106	693	1,179	870	695	-13	-71	-86	-56	3,211
1987	-39	-30	-24	392	954	1,171	645	469	326	-56	-103	-68	3,637
1988	-46	-36	-30	212	1,001	1,405	1,035	664	140	-62	-86	-56	4,142
1989	-39	-31	-26	102	792	1,015	1,169	588	284	-101	-102	-67	3,585
1990	-45	-34	-28	101	846	1,057	898	714	440	-92	-108	-70	3,679
1991	-46	-35	-28	60	760	716	1,106	878	135	-96	-95	-61	3,295
1992	-42	-31	-25	200	1,103	722	558	601	303	-62	-96	-62	3,169
1993	-42	-33	-26	135	1,135	558	283	522	263	-74	-78	-49	2,594
1994	-34	-27	-22	168	1,264	899	868	744	272	-119	-94	-60	3,860
1995	-41	-32	-26	13	541	703	883	801	244	-87	-90	-58	2,852
1996	-38	-28	-22	112	447	1,224	1,105	828	123	-90	-96	-63	3,502
1997	-42	-31	-25	20	919	947	735	654	373	-91	-102	-66	3,292
1998	-44	-33	-27	183	1,308	393	1,036	723	402	-108	-108	-69	3,656
1999	-48	-37	-30	46	690	901	1,052	715	165	-58	-94	-61	3,242
2000	-41	-30	-24	181	932	899	1,026	824	208	-90	-98	-63	3,722
2001	-44	-33	-27	169	1,357	614	883	852	310	-80	-99	-63	3,838
2002	-45	-35	-28	34	836	1,053	1,167	516	285	-115	-99	-64	3,506
2003	-43	-33	-27	202	748	820	1,234	867	234	-77	-98	-63	3,764
2004	-44	-33	-26	208	834	833	882	591	253	-93	-93	-60	3,253
2005	-41	-32	-26	100	521	802	1,233	667	330	-97	-99	-64	3,294
2006	-43	-32	-25	177	1,052	1,056	1,162	675	88	-101	-79	-51	3,879
2007	-37	-29	-24	104	589	989	1,270	737	275	-98	-95	-62	3,620
Average	-42	-32	-26	127	885	861	1,008	677	231	-82	-95	-62	3,450


Present Level Depletions for all HUCs Fort Peck Dam to Garrison Dam
1929-2007
Depletions (1000's of Acre-Feet)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1929
1931
1933
1935
1937
1939
1941
1943
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1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Garrison Dam to Oahe Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Garrison Dam to Oahe Dam

Units - 1,000's of Acre-Feet

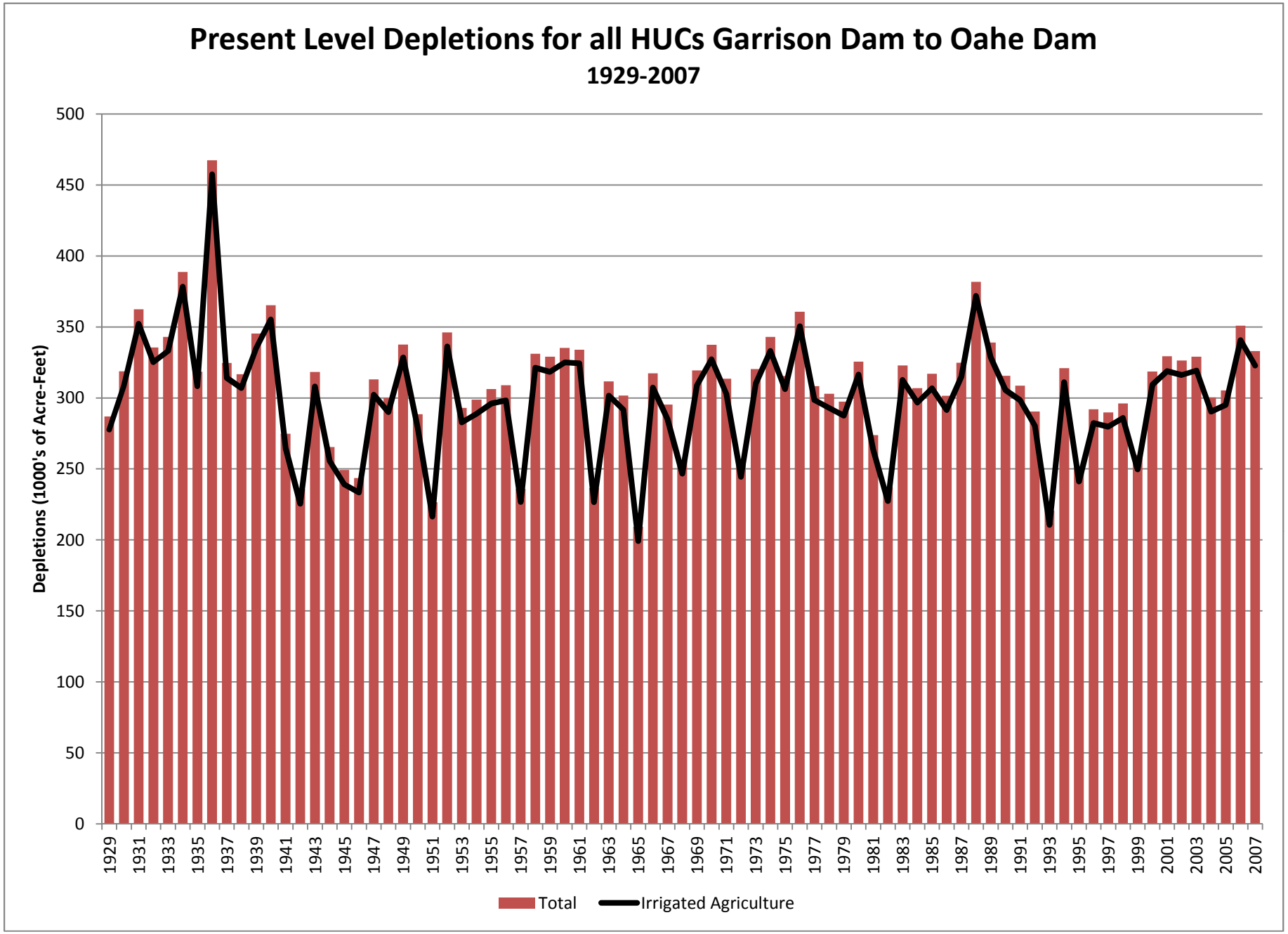
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-2	-2	-1	0	18	75	112	87	15	-5	-6	-3	287
1930	-2	-1	-1	1	43	71	113	79	35	-8	-7	-4	319
1931	-2	-2	-1	4	65	106	102	75	30	-4	-7	-4	362
1932	-2	-2	-1	-1	48	76	115	81	43	-9	-8	-5	335
1933	-3	-2	-1	0	15	114	121	69	43	-3	-6	-4	343
1934	-2	-1	-1	3	140	56	109	82	17	-3	-6	-4	389
1935	-2	-2	-1	0	5	66	133	89	47	-3	-8	-5	318
1936	-3	-2	-1	1	114	109	148	87	33	-6	-7	-4	467
1937	-3	-2	-1	3	64	48	92	107	33	-4	-7	-4	325
1938	-3	-2	-1	1	22	79	100	100	36	-2	-8	-5	317
1939	-3	-2	-1	5	84	47	120	75	38	-6	-7	-4	345
1940	-3	-2	-1	-1	93	74	98	86	36	-4	-6	-4	365
1941	-2	-2	-1	-1	71	37	110	71	7	-6	-6	-3	275
1942	-2	-2	-1	-1	5	50	105	78	14	-2	-6	-3	236
1943	-2	-1	-1	6	48	36	110	92	49	-6	-8	-5	318
1944	-4	-3	-2	0	51	35	99	64	39	-2	-7	-4	265
1945	-2	-1	-1	3	39	25	111	74	12	0	-6	-3	249
1946	-2	-1	0	3	5	45	123	78	11	-8	-5	-3	244
1947	-2	-1	0	0	63	14	120	106	30	-5	-7	-4	313
1948	-2	-2	-1	0	62	43	90	77	51	-5	-8	-5	300
1949	-3	-2	-1	2	54	81	109	88	30	-9	-7	-4	338
1950	-2	-1	-1	0	43	88	90	70	13	-2	-7	-4	289
1951	-2	-1	-1	2	62	30	89	44	17	-5	-5	-3	226
1952	-2	-1	-1	13	44	80	98	79	51	-3	-8	-5	346
1953	-3	-2	-1	-1	35	52	113	66	48	-2	-7	-5	293
1954	-3	-2	-1	5	37	49	125	75	32	-7	-7	-4	299
1955	-2	-2	-1	1	48	51	111	92	23	-3	-7	-4	306
1956	-3	-2	-1	3	44	106	79	58	40	-3	-8	-5	309
1957	-3	-2	-1	0	14	38	108	66	31	-7	-6	-3	236
1958	-2	-1	-1	0	104	36	60	100	53	-4	-9	-5	331
1959	-3	-2	-1	3	32	81	125	102	10	-6	-7	-4	329
1960	-2	-1	-1	5	48	61	130	64	47	-3	-8	-5	335
1961	-3	-2	-1	0	57	110	81	101	5	-5	-6	-4	334
1962	-2	-2	-1	5	7	38	74	93	37	-3	-6	-4	237
1963	-2	-1	-1	0	57	58	100	88	27	-2	-7	-4	312
1964	-3	-2	-1	0	48	36	122	74	42	-3	-8	-5	302
1965	-3	-2	-1	1	8	38	95	78	1	1	-5	-3	209
1966	-2	-1	0	0	90	70	98	50	28	-5	-7	-4	317
1967	-2	-2	-1	-1	32	39	125	98	23	-4	-7	-4	295
1968	-2	-2	-1	2	39	38	101	62	31	-2	-6	-4	256
1969	-2	-1	-1	2	61	32	90	113	49	-10	-8	-5	319
1970	-3	-2	-1	-1	38	94	114	95	20	-6	-7	-4	337
1971	-3	-2	-1	-1	33	69	114	109	15	-10	-7	-4	313

Missouri River Garrison Dam to Oahe Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Garrison Dam to Oahe Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-3	-2	-1	0	25	53	79	79	43	-7	-6	-4	255
1973	-2	-1	-1	0	52	94	105	82	7	-5	-6	-4	320
1974	-2	-2	-1	0	46	104	114	62	39	-4	-7	-5	343
1975	-2	-2	-1	-1	44	47	132	82	32	-5	-7	-4	315
1976	-2	-1	-1	0	60	68	114	97	44	-6	-8	-5	361
1977	-2	-2	-1	6	72	88	95	53	17	-8	-7	-4	308
1978	-3	-2	-1	-1	25	86	87	83	46	-3	-8	-5	303
1979	-3	-2	-1	1	53	67	77	63	59	-5	-8	-5	297
1980	-3	-2	-1	7	75	77	117	44	31	-8	-7	-4	326
1981	-3	-2	-1	10	36	66	80	73	33	-6	-7	-4	274
1982	-2	-2	-1	2	7	48	101	77	24	-8	-5	-3	237
1983	-2	-1	-1	1	42	74	109	90	30	-7	-7	-4	323
1984	-3	-2	-1	-1	66	46	105	86	28	-7	-7	-4	307
1985	-3	-2	-1	5	79	61	118	61	16	-6	-7	-4	317
1986	-3	-2	-1	13	78	60	96	81	-5	-7	-6	-3	301
1987	-2	-2	-1	10	33	105	95	67	36	-4	-8	-5	325
1988	-3	-2	-1	8	59	111	116	76	30	-3	-6	-4	382
1989	-2	-2	-1	0	69	85	107	80	21	-7	-7	-4	339
1990	-2	-2	-1	1	40	84	82	91	41	-6	-8	-5	316
1991	-3	-2	-1	-1	25	62	121	94	31	-7	-7	-4	309
1992	-2	-2	-1	4	80	66	49	71	41	-4	-7	-4	290
1993	-3	-2	-1	-1	44	37	48	78	33	-1	-6	-4	221
1994	-2	-1	-1	1	93	71	70	76	36	-10	-7	-4	321
1995	-3	-2	-1	-1	9	55	87	90	35	-8	-6	-4	251
1996	-2	-1	-1	1	11	102	96	87	18	-8	-7	-4	292
1997	-2	-2	-1	-1	33	78	78	84	39	-6	-7	-4	290
1998	-2	-2	-1	5	73	31	103	72	39	-10	-7	-4	296
1999	-2	-2	-1	0	37	43	103	72	23	-2	-6	-4	260
2000	-2	-1	-1	0	51	58	105	91	37	-7	-7	-4	319
2001	-3	-2	-1	0	74	54	84	104	40	-7	-8	-5	329
2002	-3	-2	-1	5	58	85	112	63	25	-6	-6	-4	326
2003	-2	-2	-1	3	43	53	130	103	18	-4	-7	-5	329
2004	-3	-2	-1	5	49	84	89	76	23	-7	-7	-4	300
2005	-3	-2	-1	2	21	62	121	82	43	-7	-8	-5	305
2006	-3	-2	-1	5	56	99	128	74	14	-8	-7	-4	351
2007	-3	-2	-1	1	42	71	135	71	37	-5	-8	-5	333
Average	-2	-2	-1	2	49	65	103	80	30	-5	-7	-4	308


Present Level Depletions for all HUCs Garrison Dam to Oahe Dam
1929-2007
Depletions (1000's of Acre-Feet)
500
450
400
350
300
250
200
150
100
50
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Oahe Dam to Big Bend Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Oahe Dam to Big Bend Dam

Units - 1,000's of Acre-Feet

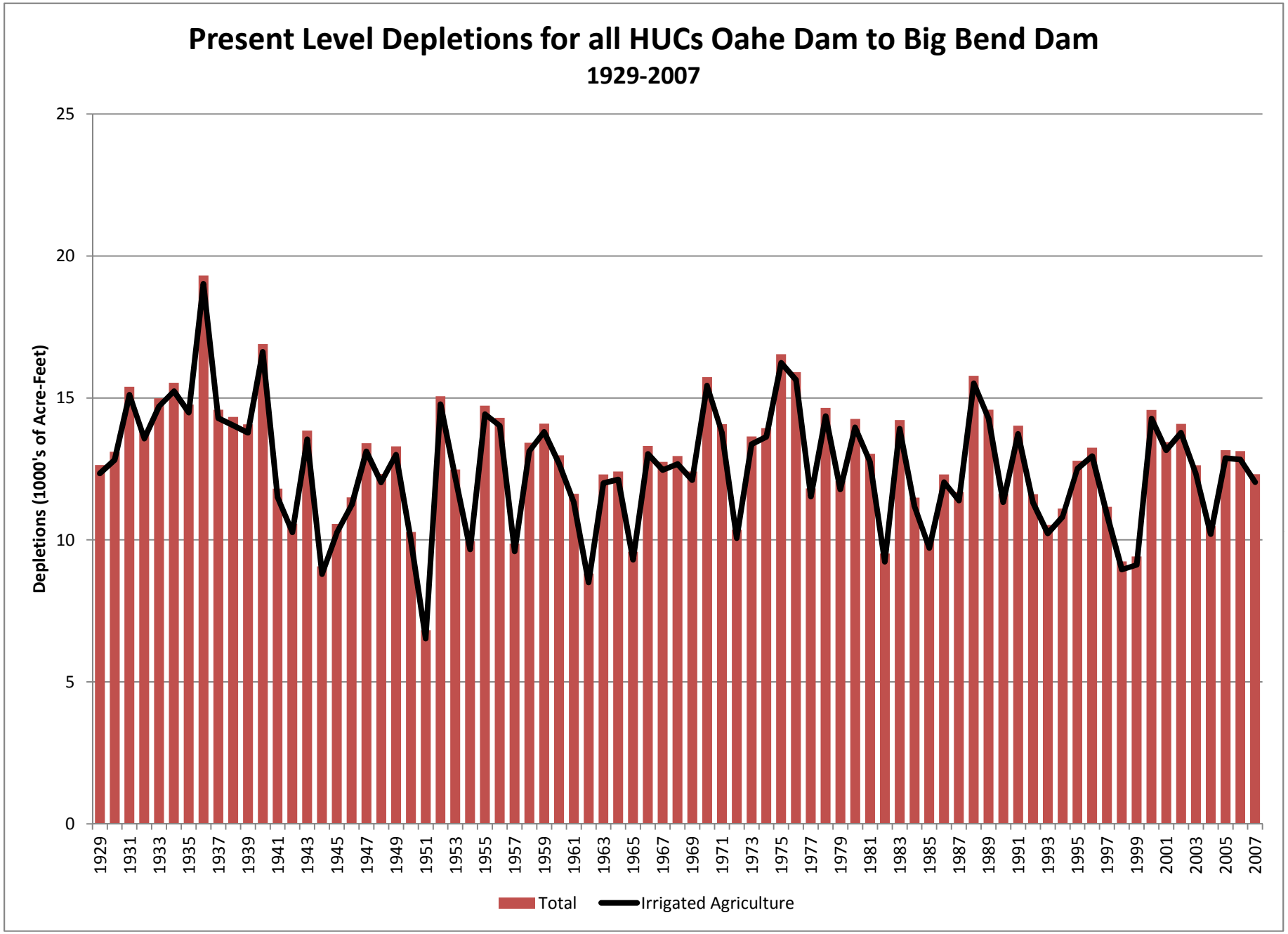
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	0	0	1	2	5	6	0	0	0	0	13
1930	0	0	0	0	1	2	7	3	1	0	0	0	13
1931	0	0	0	0	1	3	6	5	1	0	0	0	15
1932	0	0	0	0	1	3	7	4	1	0	0	0	14
1933	0	0	0	0	0	6	5	2	2	0	0	0	15
1934	0	0	0	0	4	3	6	4	0	0	0	0	16
1935	0	0	0	0	0	2	7	5	1	0	0	0	15
1936	0	0	0	0	1	4	8	5	1	0	0	0	19
1937	0	0	0	0	1	2	6	5	1	0	0	0	15
1938	0	0	0	0	0	3	5	5	1	0	0	0	14
1939	0	0	0	0	1	3	5	5	1	0	0	0	14
1940	0	0	0	0	3	3	7	3	2	0	0	0	17
1941	0	0	0	0	1	2	6	3	0	0	0	0	12
1942	0	0	0	0	0	1	6	4	0	0	0	0	11
1943	0	0	0	0	0	2	6	4	2	0	0	0	14
1944	0	0	0	0	0	1	5	2	1	0	0	0	9
1945	0	0	0	0	0	0	6	3	1	0	0	0	11
1946	0	0	0	0	0	2	6	3	0	0	0	0	11
1947	0	0	0	0	1	1	6	6	1	0	0	0	13
1948	0	0	0	0	1	1	5	5	2	0	0	0	12
1949	0	0	0	0	1	5	5	4	0	0	0	0	13
1950	0	0	0	0	1	4	3	3	0	0	0	0	10
1951	0	0	0	0	0	1	4	3	0	0	0	0	7
1952	0	0	0	0	1	4	6	3	2	0	0	0	15
1953	0	0	0	0	1	2	6	3	2	0	0	0	12
1954	0	0	0	0	1	1	6	2	1	0	0	0	10
1955	0	0	0	0	1	1	7	5	1	0	0	0	15
1956	0	0	0	0	1	6	4	2	1	0	0	0	14
1957	0	0	0	0	0	1	5	4	0	0	0	0	10
1958	0	0	0	0	1	2	3	5	2	0	0	0	13
1959	0	0	0	0	0	4	6	5	0	0	0	0	14
1960	0	0	0	0	0	3	7	3	1	0	0	0	13
1961	0	0	0	0	0	4	4	4	0	0	0	0	12
1962	0	0	0	0	0	1	4	4	1	0	0	0	9
1963	0	0	0	0	1	2	4	5	0	0	0	0	12
1964	0	0	0	0	1	2	5	5	1	0	0	0	12
1965	0	0	0	0	0	1	5	5	0	0	0	0	10
1966	0	0	0	0	2	4	6	2	1	0	0	0	13
1967	0	0	0	0	1	1	7	4	1	0	0	0	13
1968	0	0	0	0	0	2	7	4	1	0	0	0	13
1969	0	0	0	0	1	3	5	5	0	0	0	0	12
1970	0	0	0	0	1	3	7	5	1	0	0	0	16
1971	0	0	0	0	0	4	5	5	1	0	0	0	14

Missouri River Oahe Dam to Big Bend Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Oahe Dam to Big Bend Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	0	0	0	0	0	1	4	5	2	0	0	0	10
1973	0	0	0	0	0	4	5	5	0	0	0	0	14
1974	0	0	0	0	0	2	6	4	2	0	0	0	14
1975	0	0	0	0	2	2	7	5	1	0	0	0	17
1976	0	0	0	0	1	5	6	5	0	0	0	0	16
1977	0	0	0	0	1	5	5	3	0	0	0	0	12
1978	0	0	0	0	0	4	4	5	2	0	0	0	15
1979	0	0	0	0	1	3	4	3	2	0	0	0	12
1980	0	0	0	0	1	4	7	2	1	0	0	0	14
1981	0	0	0	0	0	3	4	4	2	0	0	0	13
1982	0	0	0	0	0	2	4	4	0	0	0	0	10
1983	0	0	0	0	0	1	6	6	2	0	0	0	14
1984	0	0	0	0	1	3	5	3	1	0	0	0	11
1985	0	0	0	0	1	3	5	2	0	0	0	0	10
1986	0	0	0	0	1	3	6	4	0	0	0	0	12
1987	0	0	0	0	1	3	4	3	1	0	0	0	12
1988	0	0	0	0	0	6	6	4	0	0	0	0	16
1989	0	0	0	0	2	4	5	4	1	0	0	0	15
1990	0	0	0	0	0	3	4	3	2	0	0	0	12
1991	0	0	0	0	0	3	7	4	1	0	0	0	14
1992	0	0	0	0	3	4	2	3	1	0	0	0	12
1993	0	0	0	0	0	2	4	5	0	0	0	0	11
1994	0	0	0	0	2	3	4	3	1	0	0	0	11
1995	0	0	0	0	0	4	6	3	0	0	0	0	13
1996	0	0	0	0	0	4	5	5	0	0	0	0	13
1997	0	0	0	0	0	3	4	4	0	0	0	0	11
1998	0	0	0	0	1	1	5	3	0	0	0	0	9
1999	0	0	0	0	0	1	5	3	0	0	0	0	9
2000	0	0	0	0	1	3	6	5	2	0	0	0	15
2001	0	0	0	0	0	4	4	6	0	0	0	0	13
2002	0	0	0	0	1	4	6	3	1	0	0	0	14
2003	0	0	0	0	0	2	6	4	2	0	0	0	13
2004	0	0	0	0	0	1	5	4	0	0	0	0	10
2005	0	0	0	0	0	2	7	5	1	0	0	0	13
2006	0	0	0	0	1	3	6	3	0	0	0	0	13
2007	0	0	0	0	0	2	7	3	1	0	0	0	12
Average	0	0	0	0	1	3	5	4	1	0	0	0	13


Present Level Depletions for all HUCs Oahe Dam to Big Bend Dam
1929-2007
Depletions (1000's of Acre-Feet)
25
20
15
10
5
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Big Bend Dam to Fort Randall Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Big Bend Dam to Fort Randall Dam

Units - 1,000's of Acre-Feet

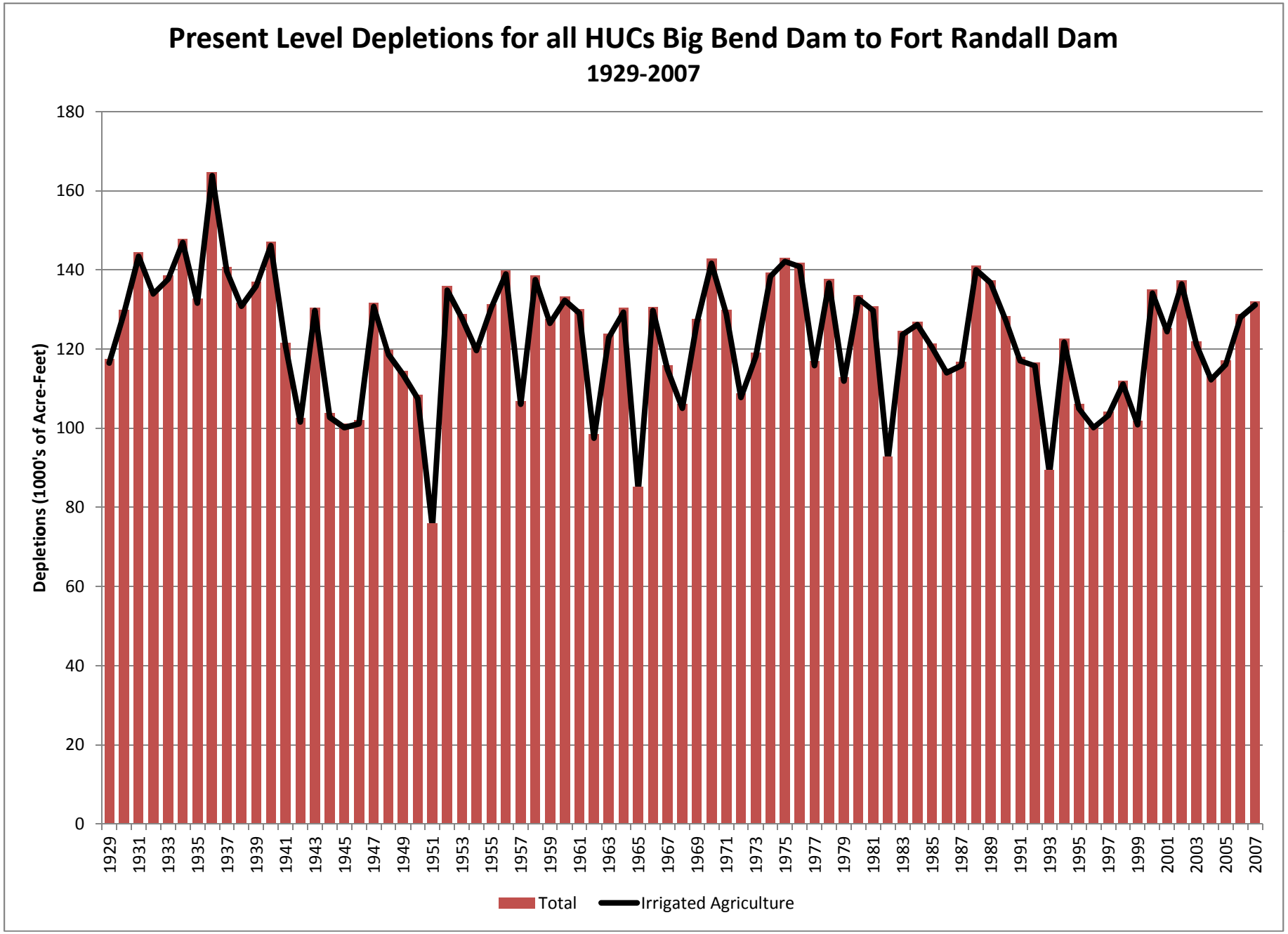
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-1	-1	0	0	12	21	46	40	9	-4	-3	-2	117
1930	-1	-1	0	0	10	22	59	34	16	-4	-3	-2	130
1931	-1	-1	-1	3	14	33	52	35	16	-2	-3	-2	144
1932	-1	-1	0	0	12	26	52	37	17	-3	-3	-2	135
1933	-1	-1	0	0	4	48	47	25	21	0	-2	-1	139
1934	-1	-1	0	2	38	29	44	33	9	-1	-2	-1	148
1935	-1	-1	-1	0	0	19	60	42	20	-1	-3	-2	133
1936	-1	-1	-1	0	24	31	66	42	10	-2	-3	-2	165
1937	-1	-1	-1	1	12	21	53	43	18	-1	-2	-1	141
1938	-1	-1	0	0	2	31	44	46	17	0	-3	-2	132
1939	-1	-1	-1	1	15	23	56	37	17	-3	-3	-2	137
1940	-1	-1	-1	-1	28	29	51	31	17	-1	-2	-1	147
1941	-1	-1	-1	0	23	16	46	39	8	-3	-3	-2	122
1942	-1	-1	-1	-1	0	18	47	39	8	-3	-2	-1	103
1943	-1	-1	0	0	5	19	52	46	19	-3	-3	-2	131
1944	-3	-2	-1	-1	7	20	37	33	20	-1	-3	-2	104
1945	-1	0	0	1	11	6	46	33	11	0	-2	-2	101
1946	-1	0	0	1	0	20	54	34	1	-3	-2	-1	102
1947	-1	0	0	0	10	8	56	54	13	-2	-3	-2	132
1948	-1	-1	0	0	10	14	47	40	18	-2	-3	-2	120
1949	-1	-1	-1	0	8	28	43	36	10	-3	-3	-2	115
1950	-1	-1	0	0	10	37	32	33	3	0	-2	-1	108
1951	-1	-1	0	1	9	9	32	27	4	-1	-2	-1	76
1952	-1	0	0	3	7	28	52	30	23	-1	-3	-2	136
1953	-1	-1	0	0	10	21	48	33	26	-1	-3	-2	129
1954	-1	-1	-1	1	7	17	55	36	15	-3	-3	-2	121
1955	-1	-1	0	1	10	20	59	38	11	-1	-3	-2	131
1956	-1	-1	-1	0	13	50	37	30	20	-1	-3	-2	140
1957	-1	-1	-1	-1	1	19	45	39	13	-3	-3	-2	107
1958	-1	-1	0	0	28	20	27	50	23	-1	-4	-2	139
1959	-1	-1	-1	0	4	33	51	46	3	-2	-3	-2	128
1960	-1	-1	0	0	10	22	58	36	17	-1	-3	-2	133
1961	-1	-1	-1	1	5	39	41	46	8	-2	-3	-2	130
1962	-1	-1	-1	2	1	10	35	42	18	-2	-3	-2	99
1963	-1	-1	0	0	16	21	40	47	8	0	-3	-2	124
1964	-2	-1	-1	-1	14	20	50	39	18	-1	-3	-2	130
1965	-1	-1	-1	0	5	11	35	41	-2	1	-2	-1	85
1966	-1	0	0	0	30	31	46	22	10	-3	-3	-2	131
1967	-1	-1	-1	0	5	8	52	44	16	-1	-3	-2	116
1968	-1	-1	0	0	6	15	50	33	11	-1	-3	-2	106
1969	-1	-1	0	2	16	19	37	46	20	-4	-3	-2	128
1970	-1	-1	-1	0	13	27	53	46	14	-3	-3	-2	143
1971	-1	-1	-1	-1	6	35	44	51	5	-3	-3	-2	130

Missouri River Big Bend Dam to Fort Randall Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Big Bend Dam to Fort Randall Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-1	-1	-1	0	5	24	31	41	18	-2	-3	-2	109
1973	-1	-1	0	0	11	37	38	43	-2	-1	-2	-1	119
1974	-1	-1	0	0	14	32	49	35	18	-1	-3	-2	139
1975	-1	-1	0	0	15	19	59	42	17	-2	-3	-2	143
1976	-1	-1	-1	0	12	36	47	40	15	-1	-2	-1	142
1977	-1	-1	0	0	13	39	40	24	8	-1	-3	-2	117
1978	-1	-1	0	0	7	37	39	38	26	-2	-4	-2	138
1979	-1	-1	-1	1	13	24	34	24	27	-2	-3	-2	113
1980	-1	-1	-1	3	15	31	53	20	21	-3	-3	-2	134
1981	-1	-1	-1	2	9	29	41	37	24	-3	-3	-2	131
1982	-1	-1	-1	1	0	17	43	34	8	-3	-2	-1	93
1983	-1	-1	0	0	4	16	46	52	18	-3	-3	-2	125
1984	-1	-1	-1	0	14	26	43	38	16	-3	-3	-2	127
1985	-1	-1	-1	2	22	25	48	30	3	-2	-3	-2	121
1986	-1	-1	-1	0	17	23	46	38	-1	-2	-2	-1	115
1987	-1	-1	0	2	13	30	38	29	13	-2	-3	-2	117
1988	-1	-1	-1	1	6	42	49	41	9	-1	-2	-1	141
1989	-1	-1	0	0	18	32	48	37	10	0	-3	-2	137
1990	-1	-1	0	0	7	31	39	39	23	-2	-3	-2	128
1991	-1	-1	-1	0	2	20	49	42	15	-3	-3	-2	118
1992	-1	-1	0	2	32	24	21	28	17	-1	-3	-2	117
1993	-1	-1	-1	0	16	10	24	41	5	-1	-2	-1	89
1994	-1	-1	0	1	19	29	37	31	17	-3	-3	-2	123
1995	-1	-1	-1	0	0	24	48	34	11	-4	-2	-2	106
1996	-1	-1	0	0	0	30	39	33	8	-2	-2	-1	101
1997	-1	-1	0	0	5	22	36	36	15	-3	-3	-2	104
1998	-1	-1	0	2	14	15	42	33	17	-4	-3	-2	112
1999	-1	-1	0	0	6	16	47	36	3	0	-2	-1	102
2000	-1	-1	0	0	8	32	46	42	16	-2	-3	-2	135
2001	-1	-1	-1	0	12	26	39	48	10	-2	-3	-2	125
2002	-1	-1	-1	0	11	40	57	32	8	-3	-3	-2	137
2003	-1	-1	-1	0	8	16	54	41	13	-1	-3	-2	122
2004	-1	-1	-1	2	13	25	42	36	4	-2	-2	-1	113
2005	-1	-1	0	0	4	17	49	38	18	-2	-3	-2	117
2006	-1	-1	0	0	18	30	55	32	3	-2	-3	-2	129
2007	-1	-1	-1	0	12	26	57	33	16	-4	-3	-2	132
Average	-1	-1	0	0	11	25	46	37	13	-2	-3	-2	123


Present Level Depletions for all HUCs Big Bend Dam to Fort Randall Dam
1929-2007
Depletions (1000's of Acre-Feet)
180
160
140
120
100
80
60
40
20
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Fort Randall Dam to Gavins Point Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Fort Randall Dam to Gavins Point Dam

Units - 1,000's of Acre-Feet

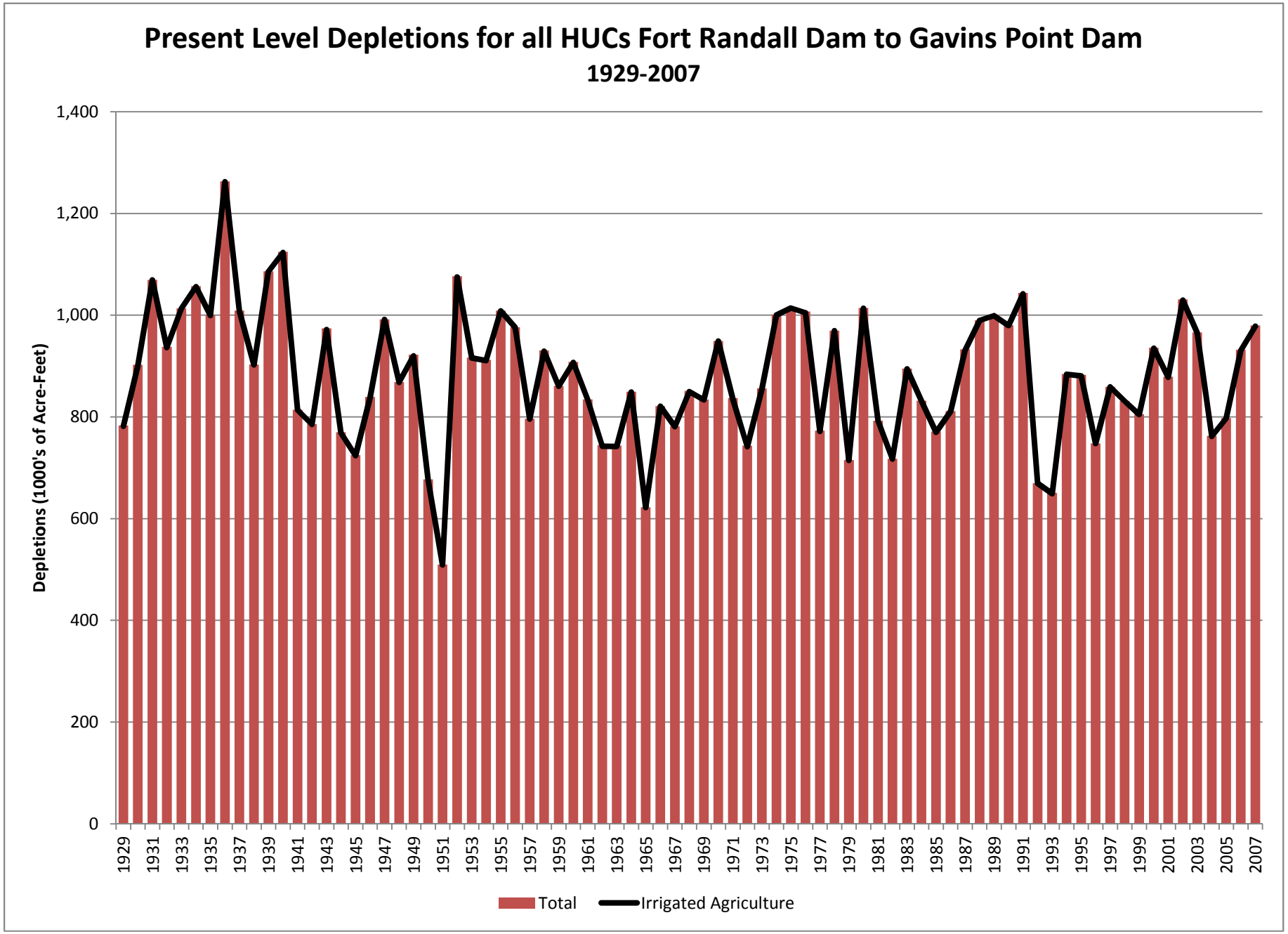
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-4	-2	-2	-1	19	77	317	404	6	-15	-10	-6	783
1930	-3	-2	-1	-1	6	143	449	217	132	-18	-12	-7	903
1931	-4	-2	-2	5	40	209	380	321	153	-11	-12	-7	1,070
1932	-4	-3	-2	0	40	124	347	290	181	-15	-13	-8	938
1933	-4	-3	-2	0	8	305	339	200	169	22	-12	-8	1,014
1934	-5	-3	-2	6	104	130	378	356	94	14	-9	-6	1,057
1935	-4	-3	-2	-2	0	93	399	345	187	8	-14	-8	1,000
1936	-5	-3	-2	0	57	167	511	387	165	4	-11	-7	1,263
1937	-4	-3	-2	2	31	98	359	371	182	-9	-10	-6	1,009
1938	-4	-2	-2	-1	4	130	251	428	96	24	-13	-8	903
1939	-5	-3	-2	3	49	120	413	331	201	-3	-10	-7	1,086
1940	-5	-3	-2	-2	98	169	381	340	174	-9	-11	-6	1,125
1941	-4	-3	-2	-2	59	62	316	335	86	-16	-11	-6	814
1942	-4	-3	-2	1	2	63	346	343	66	-9	-11	-6	786
1943	-4	-3	-2	2	28	95	357	374	162	-14	-12	-8	974
1944	-10	-6	-4	-3	28	66	233	308	177	2	-12	-8	770
1945	-2	-1	-1	0	22	32	331	246	96	19	-10	-7	725
1946	-3	-2	-1	9	4	118	355	343	49	-16	-10	-6	839
1947	-3	-2	-1	1	17	39	375	432	150	3	-12	-7	992
1948	-3	-2	-1	3	42	66	311	331	148	-5	-13	-8	869
1949	-4	-3	-2	2	10	114	374	346	116	-14	-11	-7	922
1950	-3	-2	-1	1	11	143	203	263	65	13	-9	-6	677
1951	-3	-2	-1	0	23	45	205	229	31	-7	-6	-4	510
1952	-2	-1	-1	2	8	209	394	268	201	16	-10	-6	1,076
1953	-3	-2	-2	-1	28	110	238	339	230	3	-15	-9	916
1954	-5	-3	-2	1	23	90	429	291	116	-9	-12	-7	912
1955	-3	-2	-2	5	36	64	424	377	114	14	-11	-7	1,009
1956	-4	-2	-2	0	52	181	306	258	198	8	-12	-8	976
1957	-4	-3	-2	-2	2	69	341	312	116	-16	-11	-7	797
1958	-4	-2	-2	-1	57	100	156	434	191	25	-15	-9	931
1959	-5	-3	-2	2	5	130	344	339	82	-14	-11	-6	861
1960	-4	-3	-2	0	10	104	395	281	139	8	-12	-8	908
1961	-5	-3	-2	2	2	175	290	348	43	0	-10	-6	834
1962	-4	-3	-2	6	4	41	204	384	132	-1	-11	-7	745
1963	-4	-3	-2	1	25	77	285	283	77	21	-10	-7	743
1964	-4	-3	-2	-2	46	96	336	263	113	23	-10	-7	850
1965	-3	-2	-2	1	7	42	278	325	-8	-4	-7	-5	623
1966	-3	-2	-1	1	96	105	343	225	78	-4	-10	-6	821
1967	-4	-2	-2	2	5	25	297	315	163	2	-12	-7	781
1968	-4	-3	-2	0	17	107	346	261	156	-9	-11	-7	851
1969	-4	-3	-2	5	52	59	220	372	171	-18	-12	-7	834
1970	-4	-3	-2	-1	25	109	357	379	123	-16	-11	-7	949
1971	-4	-3	-2	-2	6	105	255	410	103	-14	-11	-7	837

Missouri River Fort Randall Dam to Gavins Point Dam

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Fort Randall Dam to Gavins Point Dam

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-4	-3	-2	-1	8	79	193	365	137	-10	-12	-7	743
1973	-4	-3	-2	-1	20	184	267	440	-17	-13	-10	-6	856
1974	-4	-2	-2	1	29	149	423	264	152	9	-11	-7	1,001
1975	-4	-3	-2	0	38	81	404	349	164	6	-12	-7	1,015
1976	-4	-2	-2	-1	27	179	337	348	144	0	-12	-7	1,007
1977	-4	-3	-2	0	19	138	265	262	116	-1	-11	-7	773
1978	-4	-3	-2	-1	14	197	234	331	216	9	-13	-8	970
1979	-5	-3	-2	2	18	77	228	262	171	-15	-11	-7	715
1980	-4	-3	-2	6	20	179	413	235	194	-6	-11	-7	1,014
1981	-4	-3	-2	9	8	172	221	236	189	-15	-12	-7	793
1982	-4	-3	-2	1	2	68	297	299	90	-15	-10	-6	718
1983	-4	-3	-2	-1	4	45	302	427	154	-6	-14	-8	895
1984	-5	-3	-2	-2	30	72	251	379	148	-15	-13	-7	832
1985	-5	-3	-2	2	51	122	355	265	9	-8	-9	-5	771
1986	-4	-2	-2	-2	25	111	337	364	15	-15	-10	-6	812
1987	-4	-3	-2	8	25	129	373	295	127	4	-12	-8	933
1988	-5	-3	-2	1	17	223	337	336	89	15	-11	-7	990
1989	-4	-3	-2	6	50	168	365	311	113	12	-10	-7	1,000
1990	-4	-3	-2	0	7	167	302	331	206	-2	-14	-8	980
1991	-5	-3	-2	0	12	98	396	402	178	-11	-13	-8	1,044
1992	-5	-3	-2	5	55	66	181	229	160	1	-11	-6	670
1993	-4	-3	-2	-1	37	61	194	311	83	-12	-9	-5	651
1994	-3	-2	-2	2	78	132	256	302	151	-13	-10	-6	884
1995	-4	-3	-2	-1	0	116	346	373	87	-12	-12	-7	882
1996	-5	-3	-2	2	4	136	283	312	41	-4	-10	-6	748
1997	-4	-2	-2	-1	16	165	273	331	118	-16	-12	-7	859
1998	-4	-3	-2	1	26	63	258	323	210	-19	-13	-8	831
1999	-5	-3	-2	-2	19	68	278	375	76	18	-10	-7	805
2000	-5	-3	-2	0	9	126	319	389	134	-12	-12	-7	936
2001	-4	-3	-2	-2	27	159	253	356	114	0	-12	-7	879
2002	-5	-3	-2	9	32	219	403	258	138	-3	-9	-6	1,031
2003	-4	-2	-2	0	23	77	374	406	114	2	-14	-8	966
2004	-5	-3	-2	1	18	96	262	351	71	-9	-10	-6	763
2005	-4	-3	-2	-1	15	66	332	298	119	-6	-11	-7	798
2006	-4	-3	-2	1	63	144	412	273	68	-2	-11	-7	932
2007	-5	-3	-2	-2	24	164	392	299	144	-15	-10	-7	980
Average	-4	-3	-2	1	26	115	320	325	125	-3	-11	-7	883


Present Level Depletions for all HUCs Fort Randall Dam to Gavins Point Dam
1929-2007
Depletions (1000's of Acre-Feet)
1,400
1,200
1,000
800
600
400
200
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Gavins Point Dam to Sioux City

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Gavins Point Dam to Sioux City

Units - 1,000's of Acre-Feet

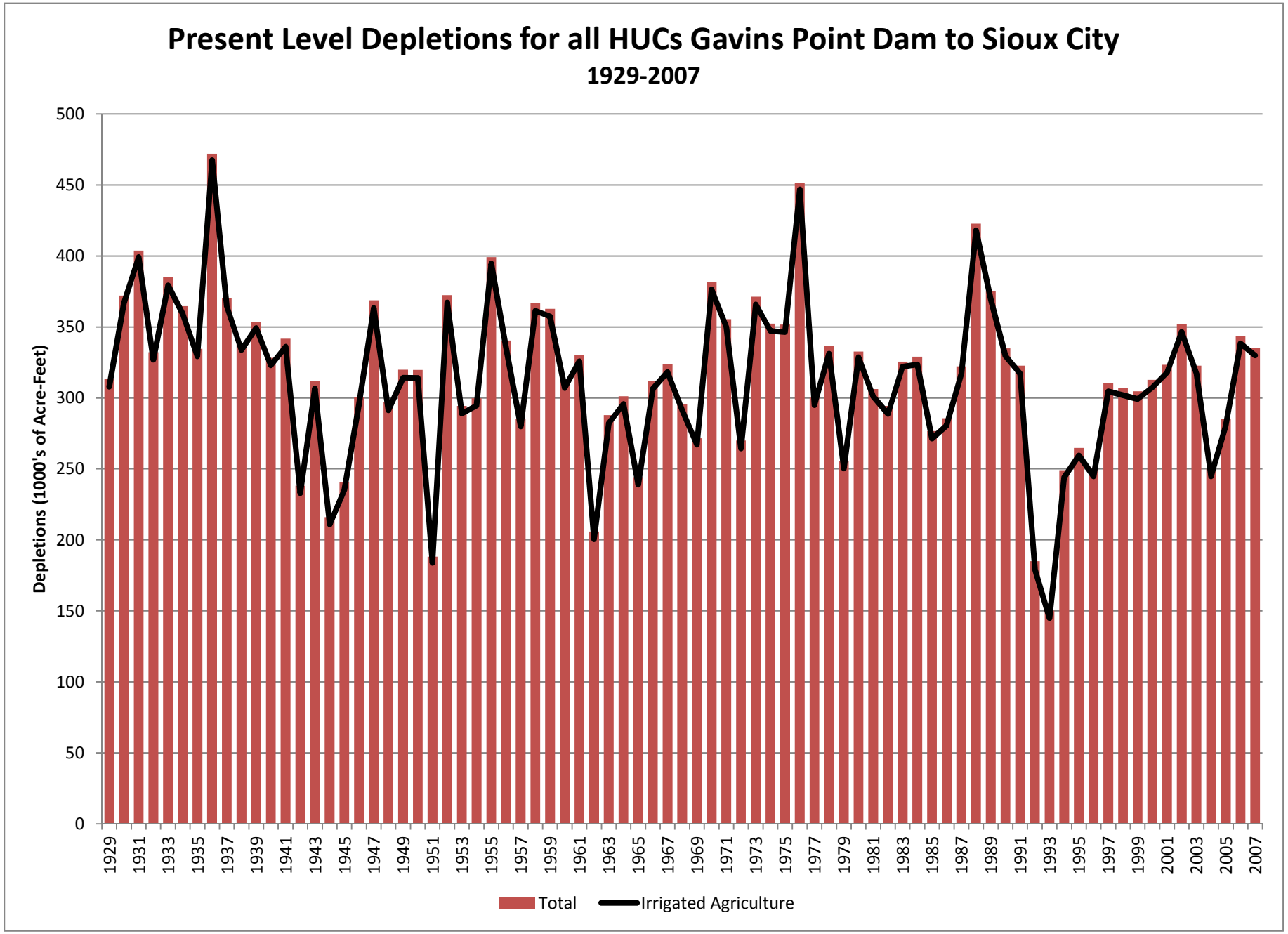
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-1	-1	0	0	6	66	136	117	0	-5	-3	-2	313
1930	-1	-1	0	0	4	46	220	102	10	-5	-3	-2	372
1931	-1	0	0	0	13	90	179	113	19	-4	-3	-2	404
1932	-1	-1	0	0	8	72	170	78	15	-5	-3	-2	332
1933	-1	-1	0	0	8	143	128	89	25	-1	-3	-2	385
1934	-1	-1	0	1	54	61	139	119	1	-3	-3	-1	365
1935	-1	-1	0	0	4	38	184	81	38	-3	-3	-2	335
1936	-1	-1	0	0	15	96	244	110	17	-3	-3	-2	472
1937	-1	-1	0	0	12	59	174	108	28	-3	-3	-2	370
1938	-1	-1	0	0	2	69	127	146	4	-2	-3	-2	338
1939	-1	-1	0	0	18	37	167	103	40	-4	-4	-2	354
1940	-1	-1	0	0	34	49	148	70	41	-5	-4	-2	328
1941	-1	-1	0	0	21	31	171	134	-1	-5	-3	-2	342
1942	-1	-1	0	0	1	27	125	96	-1	-3	-2	-1	238
1943	-1	-1	0	0	7	30	148	102	35	-4	-3	-2	312
1944	-5	-3	-2	-2	6	43	112	57	15	-1	-2	-1	216
1945	0	0	0	0	3	16	134	83	9	0	-3	-2	241
1946	0	0	0	1	5	50	155	104	-4	-5	-3	-2	301
1947	-1	0	0	0	13	18	176	156	16	-4	-3	-2	369
1948	-1	0	0	1	19	24	129	105	31	-4	-3	-2	297
1949	-1	-1	0	1	9	67	127	121	6	-4	-3	-2	320
1950	-1	0	0	0	2	92	114	113	9	-4	-3	-2	320
1951	-1	-1	0	0	6	18	106	59	7	-3	-2	-1	188
1952	-1	0	0	2	16	79	155	80	48	-1	-3	-2	372
1953	-1	-1	0	0	4	42	138	85	34	-2	-3	-2	294
1954	-1	-1	0	0	8	35	167	95	5	-4	-3	-2	300
1955	0	0	0	1	22	42	169	137	35	-2	-3	-2	399
1956	-1	0	0	0	12	112	99	87	39	-3	-3	-2	341
1957	-1	-1	0	0	1	35	164	91	5	-5	-3	-2	285
1958	-1	0	0	0	28	70	92	150	33	0	-3	-2	367
1959	-1	-1	0	0	3	87	183	92	8	-4	-3	-2	363
1960	-1	-1	0	0	5	40	190	72	16	-3	-3	-2	312
1961	-1	-1	0	0	3	74	134	129	1	-4	-3	-2	330
1962	-1	-1	0	0	2	21	80	108	3	-2	-2	-1	206
1963	-1	0	0	0	9	60	107	112	8	-2	-3	-2	288
1964	-1	-1	0	0	16	68	150	67	9	-1	-3	-2	301
1965	-1	-1	0	0	3	23	136	97	-6	-3	-2	-1	244
1966	-1	0	0	0	22	64	165	61	9	-3	-3	-2	312
1967	-1	-1	0	0	13	19	168	105	30	-4	-3	-2	324
1968	-1	-1	0	0	11	50	151	92	1	-4	-3	-2	296
1969	-1	-1	0	0	8	21	112	119	23	-4	-3	-2	272
1970	-1	0	0	0	6	75	164	138	9	-5	-3	-2	382
1971	-1	-1	0	0	12	55	141	139	22	-5	-3	-2	356

Missouri River Gavins Point Dam to Sioux City

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Gavins Point Dam to Sioux City

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-1	-1	0	0	1	71	82	107	21	-4	-3	-2	270
1973	-1	0	0	0	13	97	137	141	-6	-5	-3	-2	371
1974	-1	-1	0	0	2	80	173	73	34	-3	-3	-2	352
1975	-1	0	0	0	15	29	217	79	22	-3	-3	-2	352
1976	-1	0	0	0	23	100	174	135	29	-3	-3	-2	451
1977	-1	0	0	1	16	85	147	64	-2	-4	-3	-2	300
1978	-1	-1	0	0	6	88	115	108	30	-2	-3	-2	337
1979	-1	-1	0	0	6	57	103	71	29	-3	-2	-1	256
1980	-1	0	0	2	16	71	170	51	34	-4	-3	-2	333
1981	-1	-1	0	1	17	68	108	88	36	-4	-3	-2	306
1982	-1	-1	0	0	1	66	128	102	9	-5	-3	-2	294
1983	-1	-1	0	0	9	18	158	148	6	-5	-4	-2	326
1984	-1	-1	0	0	10	31	155	132	15	-6	-4	-2	329
1985	-1	-1	0	0	11	57	163	55	-1	-3	-2	-1	277
1986	-1	-1	0	0	8	69	139	85	-5	-4	-3	-2	286
1987	-1	-1	0	2	13	84	125	96	11	-3	-3	-2	322
1988	-1	-1	0	1	15	150	175	90	1	-2	-2	-1	423
1989	-1	-1	0	0	21	81	164	105	13	-2	-3	-2	375
1990	-1	-1	0	0	6	59	130	109	42	-4	-3	-2	335
1991	-1	-1	0	0	3	43	151	129	11	-5	-3	-2	323
1992	-1	-1	0	0	22	47	52	62	9	-2	-2	-1	185
1993	-1	0	0	0	3	15	48	80	11	-1	-2	-1	150
1994	-1	0	0	0	28	43	97	81	10	-3	-2	-1	249
1995	-1	-1	0	0	0	67	118	82	7	-4	-3	-2	265
1996	-1	-1	0	1	0	61	102	96	-1	-3	-2	-1	250
1997	-1	-1	0	0	6	72	121	114	9	-5	-3	-2	310
1998	-1	-1	0	0	12	34	146	87	42	-5	-4	-2	307
1999	-1	-1	0	0	4	42	129	120	22	-4	-4	-2	305
2000	-1	-1	0	0	7	50	142	100	27	-5	-3	-2	313
2001	-1	-1	0	0	10	72	126	124	3	-4	-3	-2	323
2002	-1	-1	0	0	10	92	172	65	25	-4	-3	-2	352
2003	-1	-1	0	0	6	35	156	133	5	-4	-3	-2	323
2004	-1	-1	0	1	3	46	121	90	-1	-3	-2	-1	250
2005	-1	0	0	0	4	40	155	91	3	-3	-3	-2	285
2006	-1	-1	0	0	15	74	197	70	-2	-4	-3	-2	344
2007	-1	-1	0	0	8	74	185	71	10	-5	-3	-2	335
Average	-1	-1	0	0	10	58	144	99	15	-3	-3	-2	317


Present Level Depletions for all HUCs Gavins Point Dam to Sioux City
1929-2007
Depletions (1000's of Acre-Feet)
500
450
400
350
300
250
200
150
100
50
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Sioux City to Omaha

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Sioux City to Omaha

Units - 1,000's of Acre-Feet

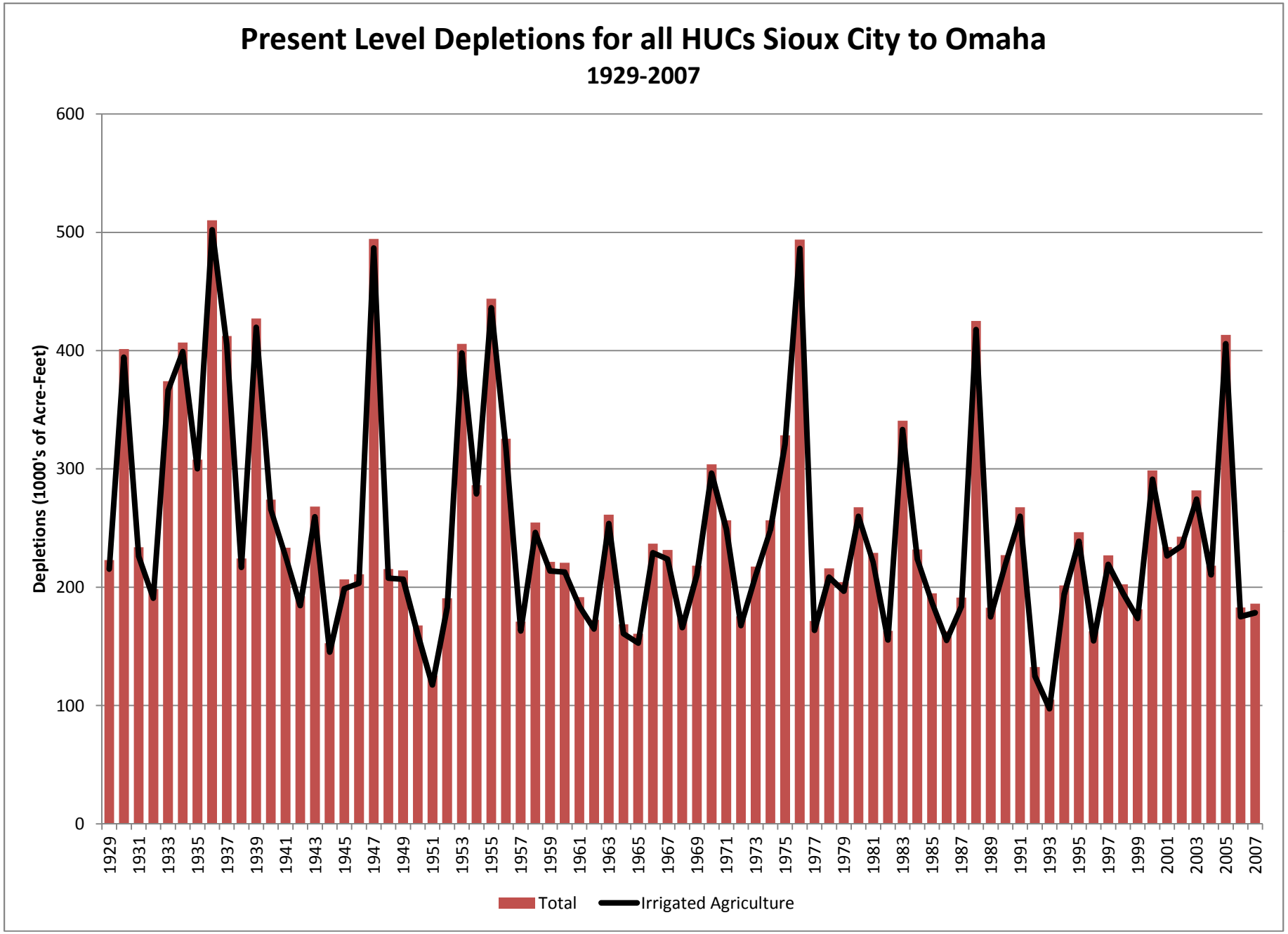
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-1	-1	0	0	10	29	69	89	25	6	-2	-2	223
1930	-1	0	0	0	2	26	111	270	24	-6	-16	-8	401
1931	-6	-4	-2	-1	0	35	81	95	29	14	-4	-2	234
1932	-1	-1	0	0	2	11	88	51	39	12	-2	-2	198
1933	-1	0	0	0	16	78	56	241	1	3	-13	-7	374
1934	-5	-3	-1	-1	22	28	89	318	-6	-7	-17	-9	407
1935	-6	-4	-2	-2	-1	14	91	213	36	-14	-11	-6	308
1936	-4	-3	-1	-1	13	36	139	364	9	-10	-21	-11	510
1937	-8	-5	-2	-2	3	14	71	362	35	-23	-21	-11	412
1938	-8	-5	-2	-2	-1	24	58	121	8	39	-5	-3	224
1939	-2	-1	0	0	15	29	73	294	51	-4	-17	-9	427
1940	-7	-4	-2	-2	12	18	84	116	64	8	-8	-4	274
1941	-3	-2	-1	0	15	5	95	112	18	-1	-2	-2	233
1942	-1	-1	0	0	4	4	57	92	18	23	-2	-2	192
1943	-1	-1	0	0	3	12	63	131	51	20	-6	-3	268
1944	-12	-8	-5	-3	-1	0	57	44	60	25	-3	-2	153
1945	-1	0	0	0	1	4	48	98	29	32	-2	-2	207
1946	-1	-1	0	0	1	12	97	76	32	-1	-2	-1	211
1947	-1	0	0	0	1	1	89	464	3	-23	-26	-13	494
1948	-7	-5	-2	-2	12	10	64	77	63	12	-3	-2	215
1949	-1	-1	0	0	4	31	69	87	11	16	-1	-2	214
1950	0	0	0	0	1	21	21	51	58	19	-2	-2	168
1951	-1	0	0	0	1	5	57	26	31	8	-1	-1	125
1952	0	0	0	0	2	19	45	37	67	25	-3	-2	191
1953	-1	0	0	0	8	34	88	255	37	10	-15	-8	406
1954	-5	-3	-1	-1	1	19	105	154	38	-7	-8	-5	286
1955	-1	0	0	0	14	25	77	357	6	-3	-20	-11	444
1956	-4	-3	-1	-1	7	39	53	203	37	13	-12	-6	326
1957	-3	-2	-1	0	4	3	76	78	22	-2	-2	-1	171
1958	0	0	0	0	12	37	16	104	61	32	-4	-3	255
1959	-1	-1	0	0	0	16	92	75	43	2	-3	-2	221
1960	-1	0	0	0	1	15	85	60	43	22	-2	-2	221
1961	-1	-1	0	0	4	24	72	76	13	7	-2	-1	192
1962	-1	0	0	0	1	16	44	57	34	24	-2	-2	172
1963	-1	0	0	0	12	9	70	108	41	31	-5	-4	261
1964	-2	-1	-1	0	2	17	63	42	23	29	-2	-2	169
1965	-1	0	0	0	1	15	49	72	-2	30	-1	-1	161
1966	-1	0	0	0	6	13	81	80	41	23	-4	-3	237
1967	-1	-1	0	0	4	0	85	100	41	9	-2	-2	232
1968	-1	0	0	0	6	16	73	65	20	-3	-1	-1	174
1969	0	0	0	0	6	14	74	72	58	-2	-2	-2	218
1970	-1	0	0	0	10	34	79	201	10	-14	-9	-5	304
1971	-3	-2	-1	0	1	27	61	146	43	-5	-6	-3	257

Missouri River Sioux City to Omaha

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Sioux City to Omaha

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-2	-1	0	0	1	47	38	75	22	0	-2	-1	175
1973	-1	0	0	0	2	39	53	117	3	8	-2	-1	217
1974	-1	0	0	0	1	33	117	45	50	17	-3	-2	257
1975	-1	-1	0	0	7	19	83	194	25	21	-12	-6	328
1976	-3	-2	-1	0	2	45	98	396	12	-18	-23	-12	494
1977	-7	-4	-2	-2	5	38	67	34	44	2	-2	-1	171
1978	-1	0	0	0	4	49	59	60	27	22	-2	-2	216
1979	-1	-1	0	0	8	24	65	77	39	-3	-2	-1	204
1980	-1	-1	0	0	9	32	96	72	67	0	-4	-3	268
1981	-2	-1	-1	0	6	34	73	57	56	13	-3	-2	229
1982	-2	-1	0	0	0	24	56	61	18	11	-2	-1	163
1983	-1	0	0	0	1	6	84	281	6	-17	-13	-7	341
1984	-5	-3	-1	-1	-1	0	81	135	42	-7	-5	-3	232
1985	-2	-1	0	0	2	27	88	60	13	12	-2	-1	195
1986	-1	0	0	0	4	13	68	63	21	-1	-2	-1	163
1987	-1	0	0	0	4	50	49	39	39	15	-3	-2	191
1988	-1	-1	0	0	12	60	65	338	-12	-7	-20	-10	425
1989	-7	-5	-2	-2	10	24	63	81	3	20	-2	-1	183
1990	-1	0	0	0	1	4	50	95	71	12	-3	-2	227
1991	-1	-1	0	0	4	23	77	137	31	7	-6	-3	268
1992	-2	-1	0	0	4	29	19	69	19	-1	-2	-1	133
1993	0	0	0	0	1	2	14	53	27	12	-1	-1	105
1994	0	0	0	0	14	20	46	75	31	20	-2	-2	202
1995	-1	-1	0	0	0	44	80	116	10	3	-4	-2	246
1996	-1	-1	0	0	0	23	49	48	25	23	-2	-1	163
1997	-1	0	0	0	5	20	90	81	33	3	-2	-2	227
1998	-1	0	0	0	2	2	48	74	83	-1	-3	-2	203
1999	-1	-1	0	0	5	7	66	33	48	28	-2	-2	181
2000	-1	0	0	0	13	8	65	175	51	0	-8	-4	299
2001	-3	-2	-1	0	0	23	86	109	18	11	-4	-2	234
2002	-2	-1	0	0	1	37	93	72	58	-8	-5	-3	243
2003	-2	-1	0	0	1	19	61	175	24	17	-7	-4	282
2004	-3	-2	-1	0	1	24	47	98	40	21	-4	-2	218
2005	-1	-1	0	0	1	21	82	313	31	-5	-18	-10	413
2006	-7	-4	-2	-2	8	48	95	32	3	14	-1	-1	183
2007	-1	0	0	0	1	49	81	20	36	3	-1	-1	186
Average	-2	-1	0	0	5	23	70	128	31	8	-6	-3	251


Present Level Depletions for all HUCs Sioux City to Omaha
1929-2007
Depletions (1000's of Acre-Feet)
600
500
400
300
200
100
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Omaha to Nebraska City

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Omaha to Nebraska City

Units - 1,000's of Acre-Feet

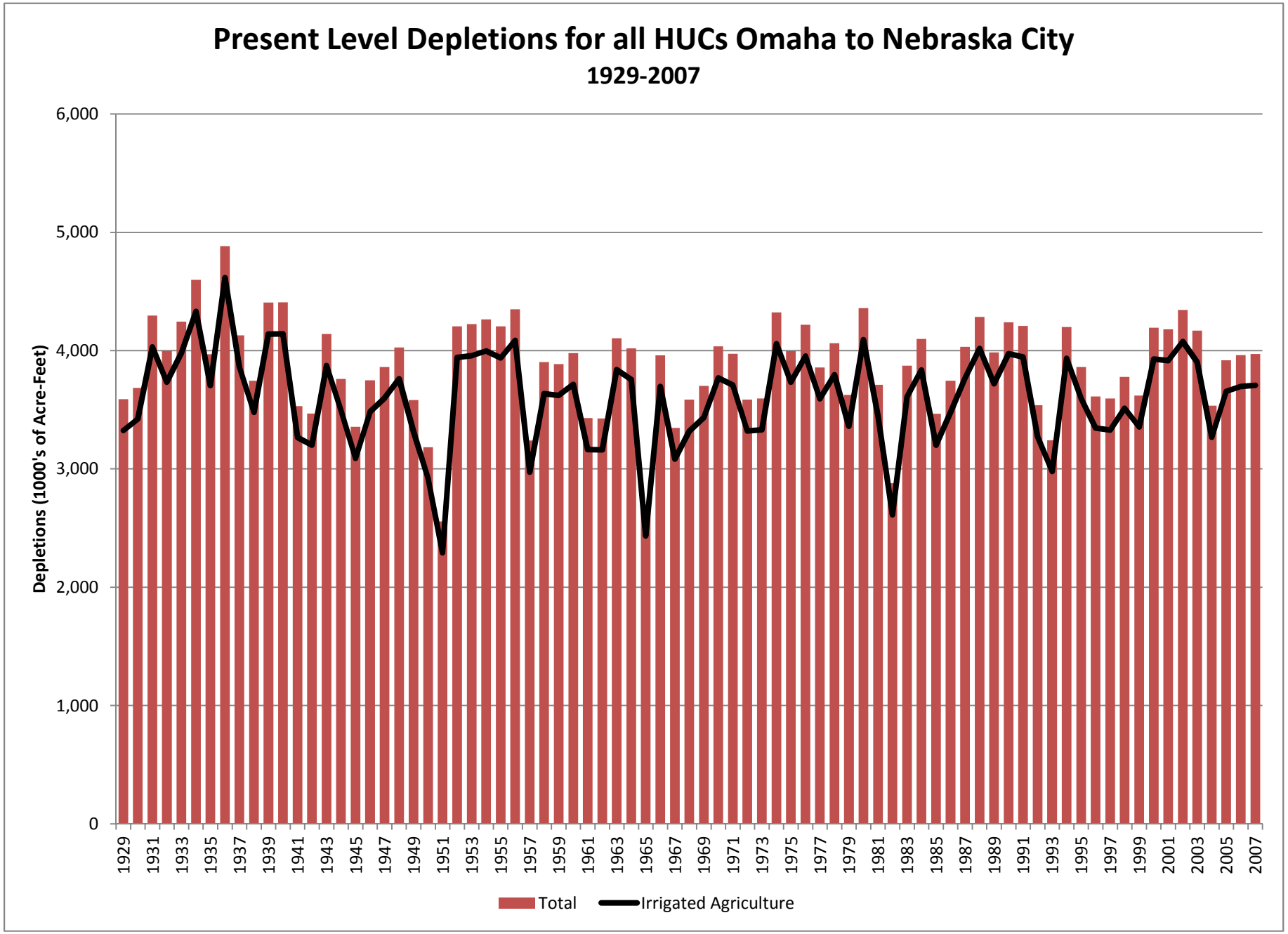
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-28	-16	-2	21	247	725	1,318	1,420	115	-83	-82	-46	3,589
1930	-24	-14	0	51	146	761	1,508	912	572	-84	-91	-53	3,685
1931	-28	-16	-2	41	335	984	1,487	1,166	511	-34	-93	-55	4,296
1932	-30	-18	-4	40	498	616	1,280	1,285	567	-73	-103	-59	3,998
1933	-34	-21	-5	9	218	1,391	1,422	836	466	135	-104	-67	4,245
1934	-37	-22	-5	69	728	790	1,562	1,373	279	-2	-87	-50	4,598
1935	-30	-19	-4	9	32	647	1,722	1,261	497	2	-92	-55	3,969
1936	-31	-17	-3	45	522	877	1,796	1,367	499	-20	-96	-56	4,883
1937	-33	-20	-6	39	380	467	1,352	1,620	564	-79	-99	-56	4,129
1938	-34	-20	-4	16	172	668	1,221	1,448	304	121	-92	-55	3,745
1939	-33	-18	-3	49	548	568	1,437	1,214	791	20	-104	-63	4,406
1940	-36	-22	-6	27	635	931	1,388	1,248	449	-62	-92	-53	4,408
1941	-31	-19	-5	14	519	449	1,242	1,333	237	-77	-84	-47	3,530
1942	-28	-17	-2	14	207	502	1,543	1,226	170	-15	-83	-49	3,468
1943	-29	-16	-2	53	143	603	1,288	1,609	689	-32	-104	-62	4,140
1944	-38	-23	-5	10	382	598	1,062	1,375	591	-29	-104	-60	3,760
1945	-32	-20	-4	5	303	280	1,301	1,203	365	100	-90	-55	3,356
1946	-31	-17	2	87	129	818	1,484	1,219	288	-88	-90	-52	3,750
1947	-29	-17	-2	28	214	270	1,305	1,736	586	-67	-104	-59	3,861
1948	-33	-19	-3	70	435	484	1,318	1,276	696	-22	-111	-65	4,027
1949	-36	-22	-6	52	221	389	1,386	1,369	457	-81	-93	-55	3,581
1950	-32	-19	-3	25	162	945	760	1,072	326	82	-85	-51	3,183
1951	-29	-17	-2	17	350	329	881	910	272	-59	-62	-34	2,557
1952	-20	-11	2	43	236	1,014	1,292	1,069	685	47	-95	-57	4,206
1953	-32	-20	-2	6	349	739	1,291	1,248	791	40	-117	-70	4,224
1954	-40	-25	-8	81	370	802	1,599	1,051	660	-71	-97	-57	4,265
1955	-30	-18	-4	69	336	474	1,593	1,543	358	40	-99	-58	4,204
1956	-33	-19	-3	39	493	979	1,111	1,195	747	6	-105	-62	4,349
1957	-33	-21	-6	3	71	586	1,334	1,177	341	-83	-82	-47	3,240
1958	-25	-14	0	29	394	702	756	1,456	706	83	-116	-69	3,902
1959	-38	-23	-6	32	187	863	1,495	1,377	253	-111	-91	-52	3,886
1960	-31	-18	-3	51	296	694	1,301	1,334	550	-40	-98	-57	3,979
1961	-33	-20	-4	30	212	792	1,155	1,319	105	4	-81	-47	3,431
1962	-28	-16	-2	79	302	428	945	1,438	485	-57	-94	-53	3,427
1963	-31	-19	-3	71	561	741	1,561	1,079	255	45	-97	-59	4,104
1964	-36	-21	-7	24	443	616	1,533	1,145	416	60	-96	-58	4,019
1965	-34	-20	-5	56	238	359	978	1,271	-27	-29	-58	-33	2,698
1966	-20	-10	3	39	750	561	1,291	1,048	470	-19	-96	-56	3,960
1967	-33	-20	-5	29	111	267	1,133	1,490	526	0	-96	-56	3,347
1968	-32	-18	-2	15	218	858	1,245	953	555	-57	-94	-55	3,586
1969	-31	-18	-4	74	335	342	1,341	1,355	601	-138	-99	-56	3,702
1970	-32	-19	-4	18	494	642	1,422	1,475	265	-89	-87	-49	4,036
1971	-29	-17	-3	16	218	866	1,220	1,569	385	-91	-102	-58	3,973

Missouri River Omaha to Nebraska City

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Omaha to Nebraska City

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-34	-20	-2	34	421	711	1,095	1,203	385	-65	-91	-52	3,585
1973	-30	-18	-4	6	299	1,000	923	1,623	-27	-49	-83	-46	3,595
1974	-28	-17	-2	43	636	699	1,536	1,108	556	-65	-91	-53	4,324
1975	-29	-18	-4	13	166	639	1,392	1,386	522	82	-97	-58	3,996
1976	-32	-18	-3	32	337	887	1,376	1,452	379	-33	-101	-58	4,219
1977	-32	-19	-4	30	433	941	1,232	867	608	-42	-98	-58	3,858
1978	-32	-20	-5	42	127	964	1,312	1,147	704	-10	-105	-63	4,062
1979	-35	-21	-6	41	216	602	1,087	1,180	810	-81	-105	-61	3,627
1980	-34	-21	-5	33	254	963	1,537	1,202	653	-60	-103	-61	4,359
1981	-35	-21	-6	64	134	966	1,066	1,062	707	-65	-101	-60	3,712
1982	-33	-21	-5	43	168	366	1,119	1,064	348	-56	-73	-41	2,879
1983	-24	-14	1	9	143	351	1,404	1,544	658	-34	-104	-60	3,873
1984	-36	-21	-4	9	536	601	1,282	1,457	562	-129	-101	-57	4,099
1985	-35	-22	-5	47	447	650	1,189	1,318	68	-69	-79	-44	3,466
1986	-28	-16	2	28	369	717	1,374	1,320	214	-99	-87	-49	3,746
1987	-30	-18	-3	72	283	879	1,473	990	579	-26	-104	-62	4,032
1988	-35	-21	-6	51	280	1,050	1,394	1,412	264	54	-99	-59	4,285
1989	-34	-20	-3	71	460	675	1,418	1,304	258	-1	-89	-53	3,986
1990	-31	-19	-4	50	260	1,014	1,085	1,385	730	-58	-109	-64	4,239
1991	-35	-22	-6	45	273	698	1,395	1,496	585	-62	-100	-58	4,209
1992	-33	-20	-3	107	513	479	903	1,057	773	-80	-100	-58	3,538
1993	-32	-20	-5	36	457	481	1,019	1,187	324	-79	-80	-45	3,243
1994	-26	-15	0	53	661	846	1,033	1,305	580	-97	-90	-50	4,199
1995	-29	-18	-4	10	45	481	1,485	1,667	408	-31	-97	-56	3,861
1996	-32	-18	-2	58	250	783	1,225	1,187	236	71	-91	-54	3,613
1997	-31	-18	-3	22	311	659	1,436	1,093	356	-94	-86	-50	3,595
1998	-29	-17	-3	40	409	493	1,022	1,306	839	-112	-108	-62	3,778
1999	-36	-23	-6	7	241	572	1,381	1,082	474	77	-92	-57	3,621
2000	-34	-19	-3	53	448	797	1,280	1,440	464	-90	-90	-51	4,195
2001	-31	-19	-4	38	311	1,031	1,333	1,393	347	-65	-98	-56	4,180
2002	-34	-21	-5	66	434	1,009	1,605	1,013	496	-88	-83	-49	4,343
2003	-27	-17	-3	35	373	553	1,615	1,524	314	-39	-102	-59	4,168
2004	-35	-21	-1	41	529	558	1,061	1,341	247	-51	-87	-49	3,534
2005	-29	-18	-2	26	317	475	1,517	1,158	758	-119	-104	-60	3,919
2006	-34	-21	-4	74	594	855	1,472	1,006	218	-71	-79	-48	3,962
2007	-28	-17	-2	27	345	848	1,408	1,129	477	-82	-84	-49	3,972
Average	-31	-19	-3	39	337	693	1,306	1,272	459	-34	-94	-55	3,868


Present Level Depletions for all HUCs Omaha to Nebraska City
1929-2007
Depletions (1000's of Acre-Feet)
6,000
5,000
4,000
3,000
2,000
1,000
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Nebraska City to St. Joseph

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Nebraska City to St. Joseph

Units - 1,000's of Acre-Feet

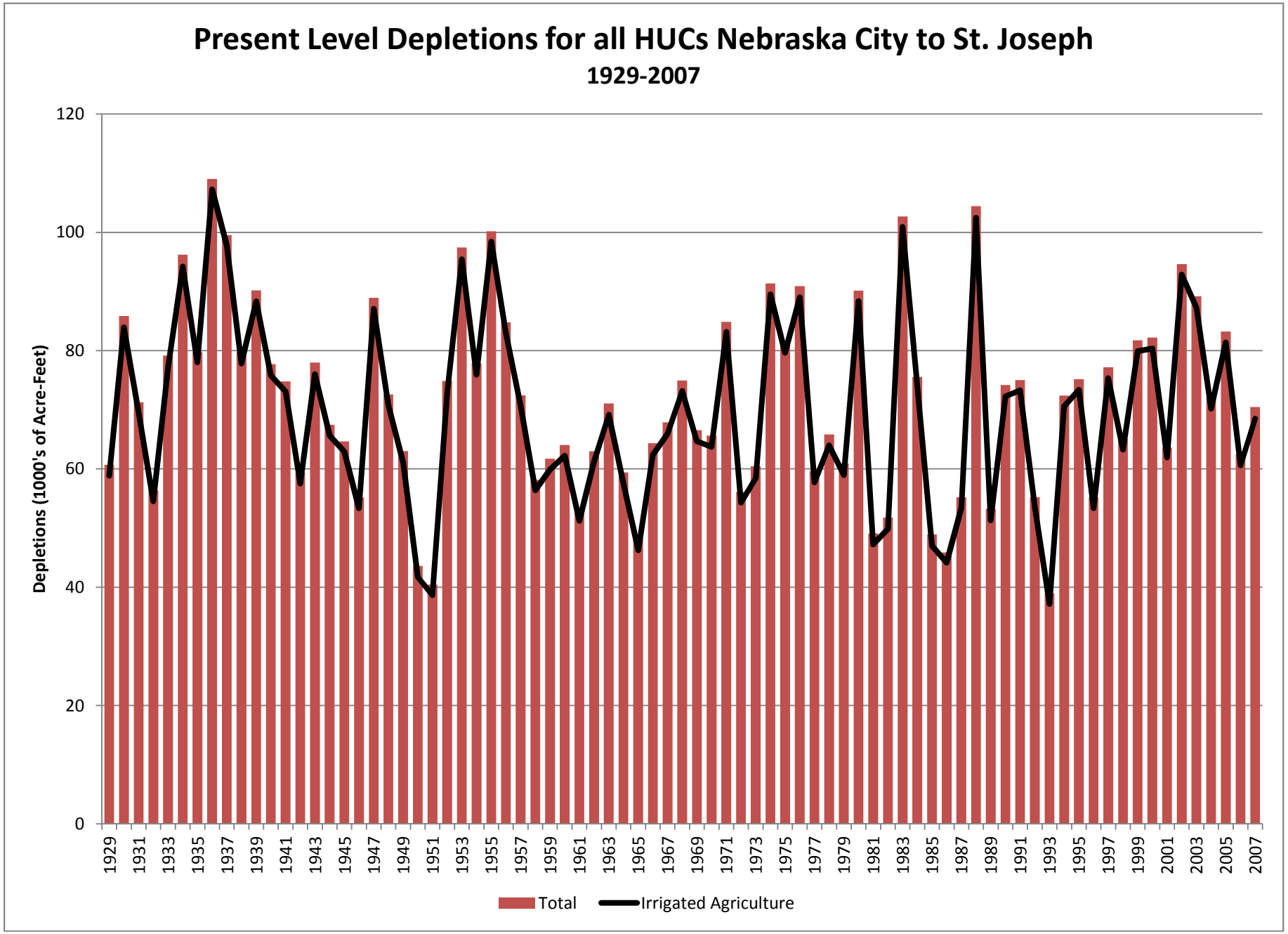
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	0	0	1	5	15	38	5	-1	-1	0	61
1930	0	0	4	0	0	6	41	21	15	2	-1	-1	86
1931	0	0	0	0	1	10	31	25	6	0	-1	-1	71
1932	0	0	0	0	2	6	25	16	9	1	-1	0	56
1933	0	0	0	0	2	21	35	16	5	2	-1	-1	79
1934	0	0	2	0	4	11	45	35	1	1	-1	0	96
1935	0	0	0	0	0	3	44	32	4	-1	-1	0	80
1936	0	0	7	-1	1	15	54	34	0	1	-1	-1	109
1937	0	0	0	0	3	12	24	44	18	1	-1	-1	100
1938	0	0	0	0	0	10	27	25	13	8	-1	-1	80
1939	0	0	1	0	4	6	37	22	22	1	-1	-1	90
1940	0	0	0	0	3	9	32	15	19	2	-1	-1	78
1941	0	0	0	0	2	4	33	38	1	-1	-1	0	75
1942	0	0	0	0	0	4	32	22	1	1	-1	0	59
1943	0	0	0	0	1	6	28	36	8	2	-1	-1	78
1944	-1	0	0	0	2	6	31	19	12	0	-1	-1	67
1945	0	0	0	0	0	3	24	32	3	5	-1	-1	65
1946	0	0	0	0	1	5	26	23	1	0	-1	0	55
1947	0	0	0	0	1	3	25	45	17	1	-1	-1	89
1948	0	0	0	0	3	6	23	31	12	0	-1	-1	73
1949	0	0	0	0	2	4	27	27	4	0	-1	-1	63
1950	0	0	0	0	1	10	10	14	9	1	-1	0	44
1951	0	0	0	0	1	2	16	18	3	1	0	0	40
1952	0	0	0	0	1	9	28	16	18	5	-1	-1	75
1953	0	0	1	0	2	14	30	32	17	5	-1	-1	97
1954	0	0	0	0	0	7	40	14	20	-1	-1	-1	78
1955	0	0	4	0	2	3	39	42	11	1	-1	-1	100
1956	0	0	2	0	2	9	24	30	18	2	-1	-1	85
1957	0	0	0	0	1	4	39	28	5	-1	-1	-1	72
1958	0	0	0	0	2	10	8	31	2	7	-1	-1	58
1959	0	0	0	0	1	8	27	27	1	-1	-1	0	62
1960	0	0	0	0	1	4	32	20	8	0	-1	-1	64
1961	0	0	0	0	1	5	21	28	-1	0	-1	0	53
1962	0	0	0	0	1	9	18	29	7	0	-1	-1	63
1963	0	0	3	0	1	13	26	20	7	4	-1	-1	71
1964	0	0	0	0	2	4	31	16	5	4	-1	-1	59
1965	0	0	0	0	2	3	13	31	-1	2	-1	0	48
1966	0	0	0	0	2	5	28	22	7	2	-1	-1	64
1967	0	0	0	0	1	3	27	36	4	-1	-1	-1	68
1968	0	0	0	0	1	17	25	26	10	-1	-1	-1	75
1969	0	0	0	0	1	3	18	34	15	-2	-1	-1	67
1970	0	0	0	0	2	7	32	27	1	-1	-1	0	66
1971	0	0	2	0	1	15	20	36	14	-1	-1	-1	85

Missouri River Nebraska City to St. Joseph

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Nebraska City to St. Joseph

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	0	0	0	0	1	14	13	24	6	-1	-1	0	56
1973	0	0	0	0	1	16	16	31	-1	-1	-1	0	60
1974	0	0	6	-1	1	9	48	20	12	-1	-1	-1	91
1975	0	0	0	0	1	5	36	34	1	6	-1	-1	81
1976	0	0	3	0	1	14	29	39	8	0	-1	-1	91
1977	0	0	0	0	2	20	28	13	0	-1	-1	0	60
1978	0	0	0	0	1	9	18	34	4	3	-1	-1	66
1979	0	0	0	0	3	7	15	26	13	-1	-1	-1	61
1980	0	0	0	0	3	15	39	23	13	-1	-1	-1	90
1981	0	0	0	0	1	10	15	18	8	0	-1	0	49
1982	0	0	0	0	0	5	29	12	7	1	-1	0	52
1983	0	0	0	0	1	3	43	44	14	-1	-1	-1	103
1984	0	0	0	0	1	4	23	42	10	-1	-1	-1	76
1985	0	0	0	0	3	7	22	18	1	0	0	0	49
1986	0	0	0	0	1	10	20	17	0	0	0	0	46
1987	0	0	0	0	1	8	29	14	4	1	-1	0	55
1988	0	0	2	0	3	25	25	42	6	3	-1	-1	104
1989	0	0	0	0	3	5	25	21	0	0	-1	0	53
1990	0	0	0	0	0	6	18	29	24	0	-1	-1	74
1991	0	0	0	0	1	8	22	32	15	-1	-1	-1	75
1992	0	0	0	0	4	9	9	34	0	2	-1	0	55
1993	0	0	0	0	0	3	7	29	0	1	-1	0	39
1994	0	0	0	0	3	5	25	29	12	-1	-1	-1	72
1995	0	0	0	0	0	9	27	34	6	2	-1	-1	75
1996	0	0	0	0	1	8	21	22	6	0	-1	0	55
1997	0	0	0	0	1	8	31	33	8	-2	-1	-1	77
1998	0	0	0	0	3	4	17	32	13	-1	-1	-1	65
1999	0	0	2	0	0	4	30	32	10	5	-1	-1	82
2000	0	0	6	-1	3	4	18	37	15	2	-1	-1	82
2001	0	0	0	0	1	5	23	36	1	0	-1	0	64
2002	0	0	0	0	1	23	37	23	15	-1	-1	-1	95
2003	0	0	2	0	1	5	37	34	11	2	-1	-1	89
2004	0	0	0	0	1	9	17	24	20	3	-1	-1	72
2005	0	0	2	0	1	6	23	29	25	0	-1	-1	83
2006	0	0	0	0	2	13	30	19	0	0	-1	0	62
2007	0	0	0	0	1	8	29	22	14	-2	-1	-1	70
Average	0	0	1	0	1	8	27	28	8	1	-1	-1	71


Present Level Depletions for all HUCs Nebraska City to St. Joseph
1929-2007
Depletions (1000's of Acre-Feet)
120
100
80
60
40
20
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
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1961
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1973
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1977
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1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River St. Joseph to Kansas City

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs St. Joseph to Kansas City

Units - 1,000's of Acre-Feet

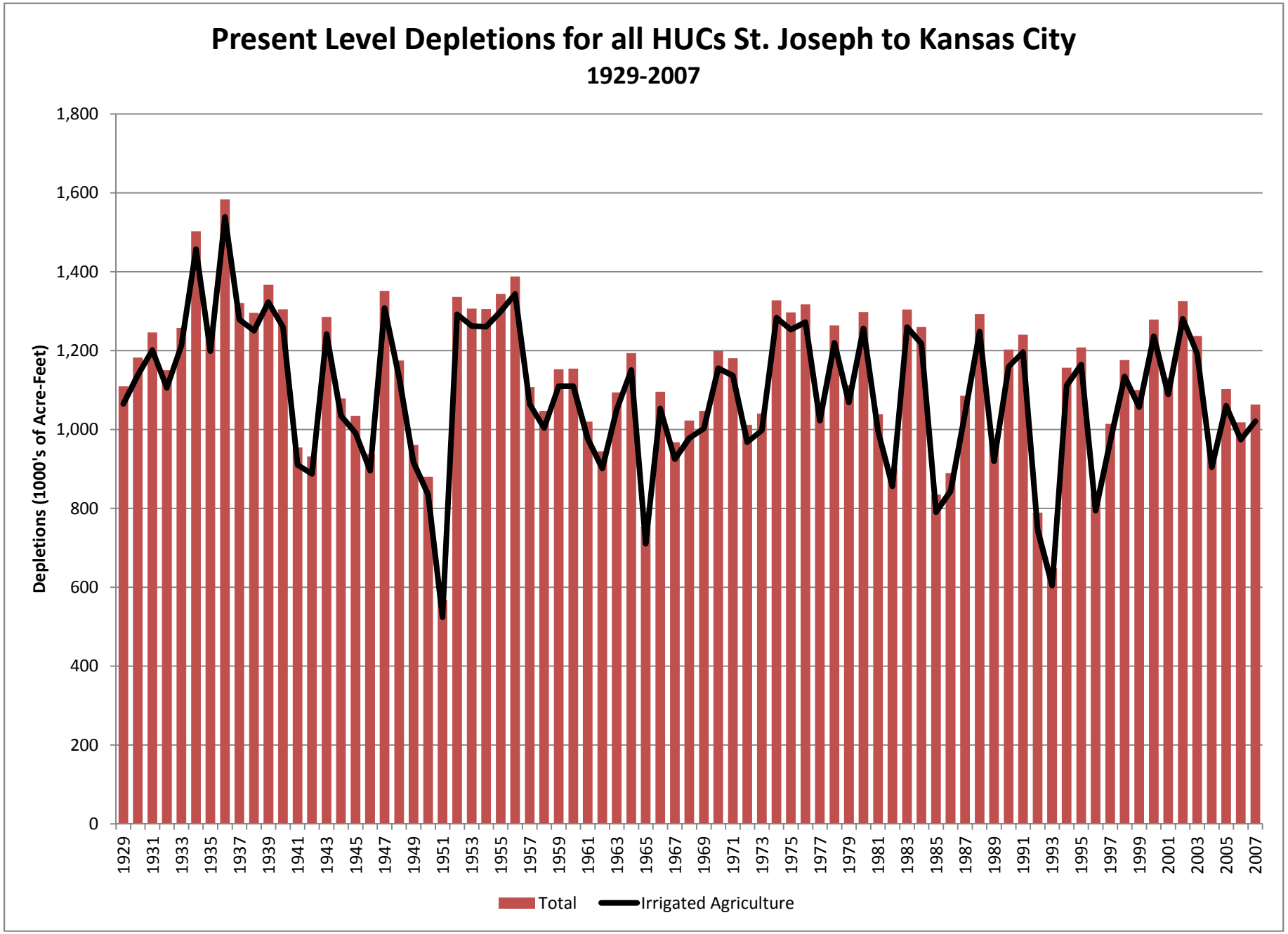
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	-8	-5	0	6	24	93	410	546	101	-22	-23	-13	1,109
1930	-4	-2	2	8	17	84	492	384	255	-17	-23	-14	1,182
1931	-5	-3	0	8	43	190	413	375	253	11	-24	-15	1,246
1932	-6	-4	-1	9	53	59	391	474	217	2	-27	-16	1,150
1933	-8	-5	0	5	29	320	411	231	234	84	-26	-17	1,258
1934	-8	-5	-1	14	77	161	633	496	116	56	-23	-14	1,502
1935	-8	-4	1	8	5	61	636	448	128	5	-23	-14	1,243
1936	-8	-4	1	9	26	233	640	548	143	33	-24	-14	1,583
1937	-8	-5	-1	10	46	83	402	599	242	-8	-25	-14	1,321
1938	-8	-5	0	5	11	116	401	513	200	108	-28	-18	1,296
1939	-10	-6	-2	6	50	73	478	385	370	65	-26	-16	1,367
1940	-7	-4	0	10	52	164	504	384	214	28	-24	-15	1,305
1941	-7	-4	-1	5	44	37	350	481	93	-11	-20	-12	955
1942	-7	-4	0	4	42	36	483	366	19	20	-18	-11	932
1943	-7	-4	0	8	31	63	426	524	260	27	-27	-17	1,285
1944	-12	-7	-3	-1	45	119	297	395	268	23	-27	-17	1,079
1945	-6	-4	1	1	27	37	301	493	155	72	-27	-17	1,035
1946	-8	-4	1	20	16	97	389	383	88	-16	-18	-11	938
1947	-5	-3	0	4	21	34	380	626	293	49	-30	-18	1,352
1948	-9	-5	-2	20	41	35	350	474	291	29	-30	-18	1,175
1949	-9	-6	-2	8	18	42	389	401	158	-4	-22	-13	961
1950	-5	-3	0	10	22	237	143	279	183	49	-21	-13	880
1951	-6	-3	-1	5	17	19	172	346	23	12	-12	-6	567
1952	-3	-1	1	5	36	250	348	382	291	72	-27	-17	1,336
1953	-8	-5	-1	4	34	166	361	494	282	24	-28	-17	1,306
1954	-8	-5	-1	14	17	172	525	313	325	-8	-24	-15	1,306
1955	-6	-3	0	14	37	41	508	611	118	60	-23	-14	1,344
1956	-7	-4	0	8	59	166	396	472	299	38	-25	-15	1,388
1957	-7	-4	-1	3	10	39	479	455	195	-21	-25	-15	1,108
1958	-8	-4	-1	6	34	100	188	491	204	85	-29	-18	1,047
1959	-9	-6	-1	10	30	159	409	522	104	-30	-22	-13	1,153
1960	-8	-5	-1	10	36	56	381	494	239	-6	-27	-16	1,154
1961	-9	-5	-1	6	11	85	407	459	70	35	-23	-14	1,020
1962	-8	-5	-1	15	45	33	264	467	152	18	-23	-13	945
1963	-8	-5	0	15	54	147	384	391	67	86	-23	-15	1,094
1964	-9	-5	-1	6	54	74	503	365	172	79	-26	-17	1,194
1965	-9	-5	-2	15	42	24	284	426	-9	13	-15	-9	754
1966	-5	-3	2	10	106	86	355	384	155	45	-25	-15	1,095
1967	-9	-5	1	10	17	31	304	521	116	18	-23	-13	967
1968	-8	-4	1	9	24	150	368	322	200	-4	-22	-13	1,023
1969	-8	-5	-1	10	24	84	312	427	277	-33	-25	-15	1,047
1970	-8	-5	-1	8	45	133	484	513	70	-7	-21	-12	1,199
1971	-7	-4	0	6	17	156	326	536	199	-10	-24	-14	1,180

Missouri River St. Joseph to Kansas City

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs St. Joseph to Kansas City

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	-8	-5	1	9	21	114	328	379	211	1	-24	-14	1,012
1973	-8	-5	-2	3	33	208	261	606	-23	-2	-20	-11	1,041
1974	-7	-4	1	6	53	104	597	344	271	2	-24	-15	1,328
1975	-7	-4	-1	8	27	42	446	523	216	92	-28	-17	1,297
1976	-10	-6	-1	3	32	197	439	579	120	-3	-22	-13	1,317
1977	-7	-4	0	5	26	164	455	268	170	27	-23	-14	1,067
1978	-8	-5	-1	10	21	200	355	447	246	38	-24	-15	1,264
1979	-9	-5	-2	8	32	71	244	465	379	-22	-30	-18	1,113
1980	-10	-7	-3	7	39	139	519	387	258	6	-23	-14	1,298
1981	-9	-5	-1	9	9	209	249	356	240	21	-25	-15	1,039
1982	-10	-6	-2	8	13	31	388	343	168	0	-21	-12	901
1983	-7	-4	-1	2	20	51	535	561	173	9	-22	-13	1,304
1984	-8	-5	-1	0	32	100	460	537	213	-30	-24	-14	1,260
1985	-9	-5	0	6	30	118	343	353	30	-8	-15	-9	835
1986	-5	-3	3	9	30	112	362	340	76	-8	-17	-10	889
1987	-6	-3	-1	11	35	95	409	336	227	24	-26	-16	1,085
1988	-9	-5	-1	6	34	233	364	498	154	61	-26	-16	1,293
1989	-9	-6	-1	18	33	41	346	385	142	52	-23	-14	964
1990	-9	-5	-1	9	13	169	304	413	336	21	-29	-18	1,203
1991	-10	-6	-1	6	22	127	410	461	268	6	-26	-16	1,240
1992	-9	-6	-1	15	59	49	163	312	239	0	-20	-12	789
1993	-6	-4	-1	6	23	69	127	329	117	12	-15	-9	649
1994	-5	-3	2	5	68	131	269	487	251	-7	-27	-16	1,157
1995	-9	-6	-2	2	4	121	444	511	158	23	-24	-14	1,208
1996	-8	-5	-1	9	14	75	316	328	81	60	-19	-12	838
1997	-7	-4	1	5	32	85	401	378	177	-19	-22	-13	1,014
1998	-7	-4	-1	7	50	140	281	492	270	-7	-28	-16	1,176
1999	-9	-6	-2	1	28	51	411	365	229	78	-28	-18	1,100
2000	-10	-6	-2	9	63	112	360	578	242	-25	-27	-15	1,279
2001	-9	-6	-1	8	25	160	385	511	93	4	-24	-14	1,132
2002	-9	-5	-1	9	34	243	476	416	227	-29	-22	-13	1,325
2003	-8	-5	-1	4	29	48	549	488	131	43	-26	-16	1,237
2004	-10	-6	-1	6	50	75	264	450	137	17	-22	-13	948
2005	-8	-5	-1	7	35	65	403	377	287	-17	-26	-16	1,102
2006	-9	-6	-1	12	48	108	458	353	94	-8	-20	-12	1,018
2007	-7	-4	0	3	30	115	350	434	179	1	-24	-14	1,063
Average	-8	-5	-1	8	33	110	387	438	185	19	-24	-14	1,129


Present Level Depletions for all HUCs St. Joseph to Kansas City
1929-2007
Depletions (1000's of Acre-Feet)
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Kansas City to Boonville

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Kansas City to Boonville

Units - 1,000's of Acre-Feet

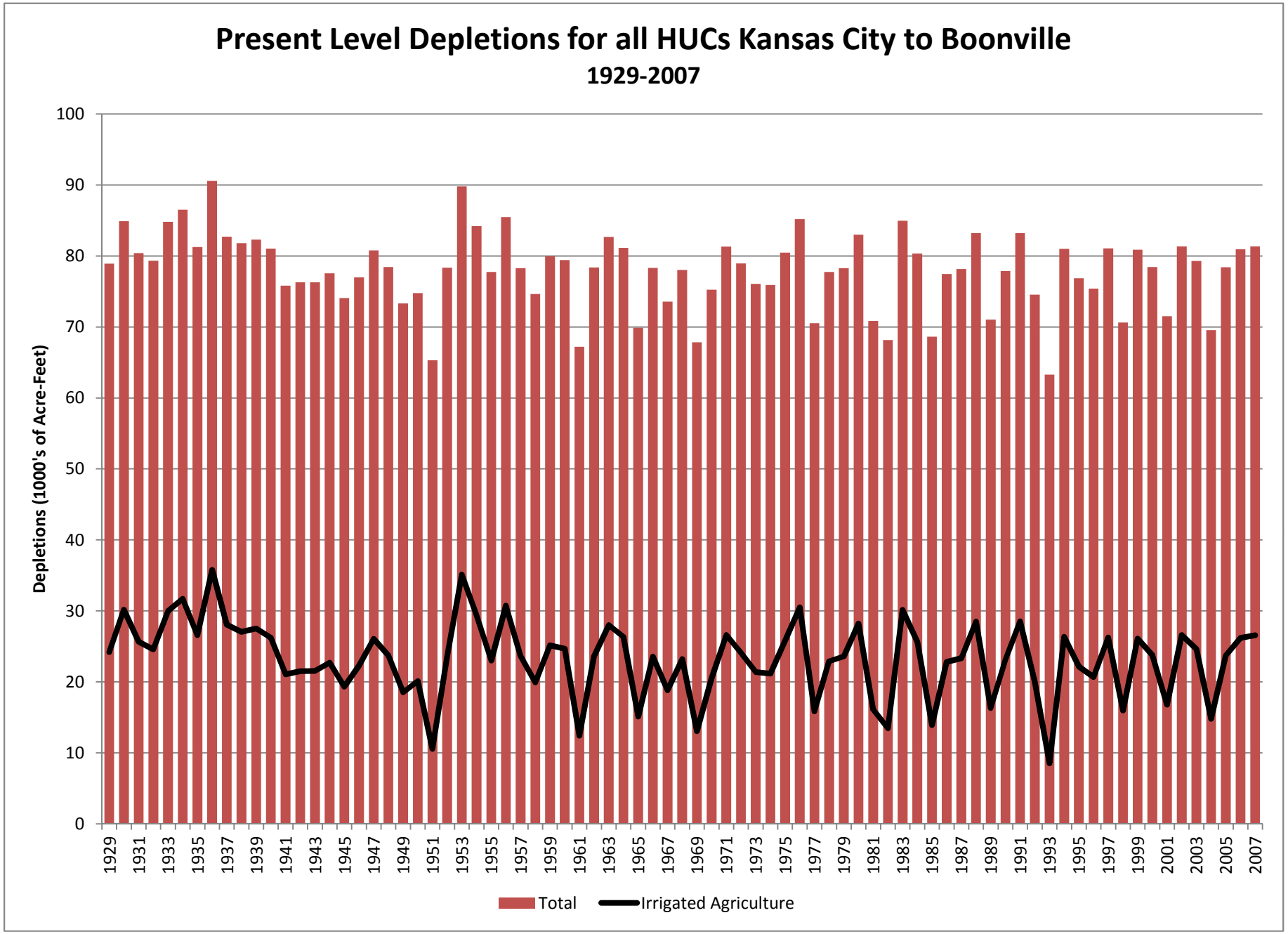
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	1	2	3	4	5	7	21	19	11	4	1	1	79
1930	1	2	3	4	6	9	23	19	11	5	1	1	85
1931	1	2	3	4	6	13	19	15	11	5	1	1	80
1932	1	2	3	4	6	10	19	16	12	5	1	1	79
1933	1	2	3	4	5	13	21	15	12	5	1	1	85
1934	1	2	3	4	6	13	24	20	5	6	1	1	87
1935	1	2	3	4	5	7	20	22	9	5	1	1	81
1936	1	2	3	4	6	15	23	24	5	5	1	1	91
1937	1	2	3	4	6	11	17	20	13	5	1	1	83
1938	1	1	3	4	5	8	19	18	13	7	1	1	82
1939	1	1	3	4	6	7	21	14	16	6	1	1	82
1940	1	1	3	4	6	10	22	10	15	6	1	1	81
1941	1	1	3	4	6	8	19	19	8	4	1	1	76
1942	1	2	3	4	5	7	18	19	9	6	1	1	76
1943	1	2	3	4	5	8	16	21	10	4	1	1	76
1944	1	2	3	4	6	12	19	12	11	6	1	1	78
1945	1	2	3	4	5	7	17	21	5	6	1	1	74
1946	1	2	3	4	5	11	19	15	11	4	1	1	77
1947	1	2	3	4	5	7	17	24	10	5	1	1	81
1948	1	2	3	4	6	8	15	21	12	5	1	1	78
1949	1	1	3	4	6	8	17	19	7	4	1	1	73
1950	2	2	3	4	6	10	15	10	14	8	1	1	75
1951	2	2	3	4	6	7	14	12	9	5	1	1	65
1952	2	2	3	4	6	13	18	12	11	7	1	1	78
1953	1	2	3	4	6	13	20	20	12	6	1	1	90
1954	1	2	3	4	5	12	24	13	14	4	1	1	84
1955	1	2	3	4	5	9	22	13	12	4	1	1	78
1956	1	2	3	4	6	13	14	19	15	7	1	1	85
1957	1	1	3	4	5	9	20	19	9	4	1	1	78
1958	1	2	3	4	6	8	11	22	10	6	1	1	75
1959	1	1	3	4	6	14	16	20	9	4	1	1	80
1960	1	2	3	4	5	9	16	19	14	4	1	1	79
1961	1	2	3	4	5	10	12	17	6	4	1	1	67
1962	2	2	3	4	6	11	16	21	8	5	1	1	78
1963	1	2	3	4	5	13	17	16	13	6	1	1	83
1964	1	1	3	4	6	8	21	19	9	7	1	1	81
1965	1	2	3	4	6	8	14	16	7	6	1	1	70
1966	1	2	3	4	6	8	21	16	10	5	1	1	78
1967	1	1	3	4	5	7	18	20	8	4	1	1	74
1968	1	2	3	4	6	12	15	18	10	5	1	1	78
1969	1	1	3	4	6	7	13	18	8	4	1	1	68
1970	2	2	3	4	6	10	23	15	5	4	1	1	75
1971	2	2	3	4	6	12	17	19	10	5	1	1	81

Missouri River Kansas City to Boonville

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Kansas City to Boonville

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	1	2	3	4	6	13	16	18	9	5	1	1	79
1973	1	2	3	4	5	11	15	22	6	5	1	1	76
1974	1	1	3	4	5	11	22	12	9	4	1	1	76
1975	2	2	3	4	6	10	22	16	7	6	1	1	80
1976	1	2	3	4	5	11	21	20	12	4	1	1	85
1977	2	2	3	4	6	9	18	14	7	4	1	1	71
1978	2	2	3	4	6	11	18	14	12	6	1	1	78
1979	1	1	3	4	6	8	17	17	14	4	1	1	78
1980	1	1	3	4	6	12	22	16	10	5	1	1	83
1981	1	2	3	4	5	7	10	20	12	4	1	1	71
1982	1	1	3	4	5	7	18	9	12	5	1	1	68
1983	2	2	3	4	6	10	21	22	11	4	1	1	85
1984	1	2	3	4	6	8	18	23	9	4	1	1	80
1985	1	2	3	4	6	8	17	12	9	4	1	1	69
1986	2	2	3	4	5	13	18	18	5	4	1	1	77
1987	1	2	3	4	6	12	17	15	11	5	1	1	78
1988	1	2	3	4	6	14	19	16	10	6	1	1	83
1989	1	2	3	4	5	10	17	14	8	5	1	1	71
1990	2	2	3	4	5	8	16	17	15	5	1	1	78
1991	1	1	3	4	6	12	18	20	10	5	1	1	83
1992	1	2	3	4	6	13	11	16	10	6	1	1	75
1993	1	2	3	4	5	8	10	16	6	6	1	1	63
1994	2	2	3	4	6	12	18	17	11	5	1	1	81
1995	1	2	3	4	5	9	17	18	10	6	1	1	77
1996	1	1	3	4	5	10	15	19	8	6	1	1	75
1997	1	2	3	4	5	10	22	18	11	4	1	1	81
1998	1	2	3	4	6	7	16	17	8	4	1	1	71
1999	2	2	3	4	5	9	21	19	8	6	1	1	81
2000	1	2	3	4	6	7	17	19	12	5	1	1	78
2001	1	1	3	4	5	7	15	18	9	4	1	1	72
2002	1	2	3	4	5	11	18	17	14	4	1	1	81
2003	1	2	3	4	6	9	21	19	6	6	1	1	79
2004	1	2	3	4	5	9	15	10	13	5	1	1	70
2005	1	2	3	4	6	10	21	13	12	5	1	1	78
2006	1	1	3	4	6	11	20	16	11	4	1	1	81
2007	1	2	3	4	5	8	20	19	12	4	1	1	81
Average	1	2	3	4	6	10	18	17	10	5	1	1	78


Present Level Depletions for all HUCs Kansas City to Boonville
1929-2007
Depletions (1000's of Acre-Feet)
100
90
80
70
60
50
40
30
20
10
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
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1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture

Missouri River Boonville to Hermann

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Boonville to Hermann

Units - 1,000's of Acre-Feet

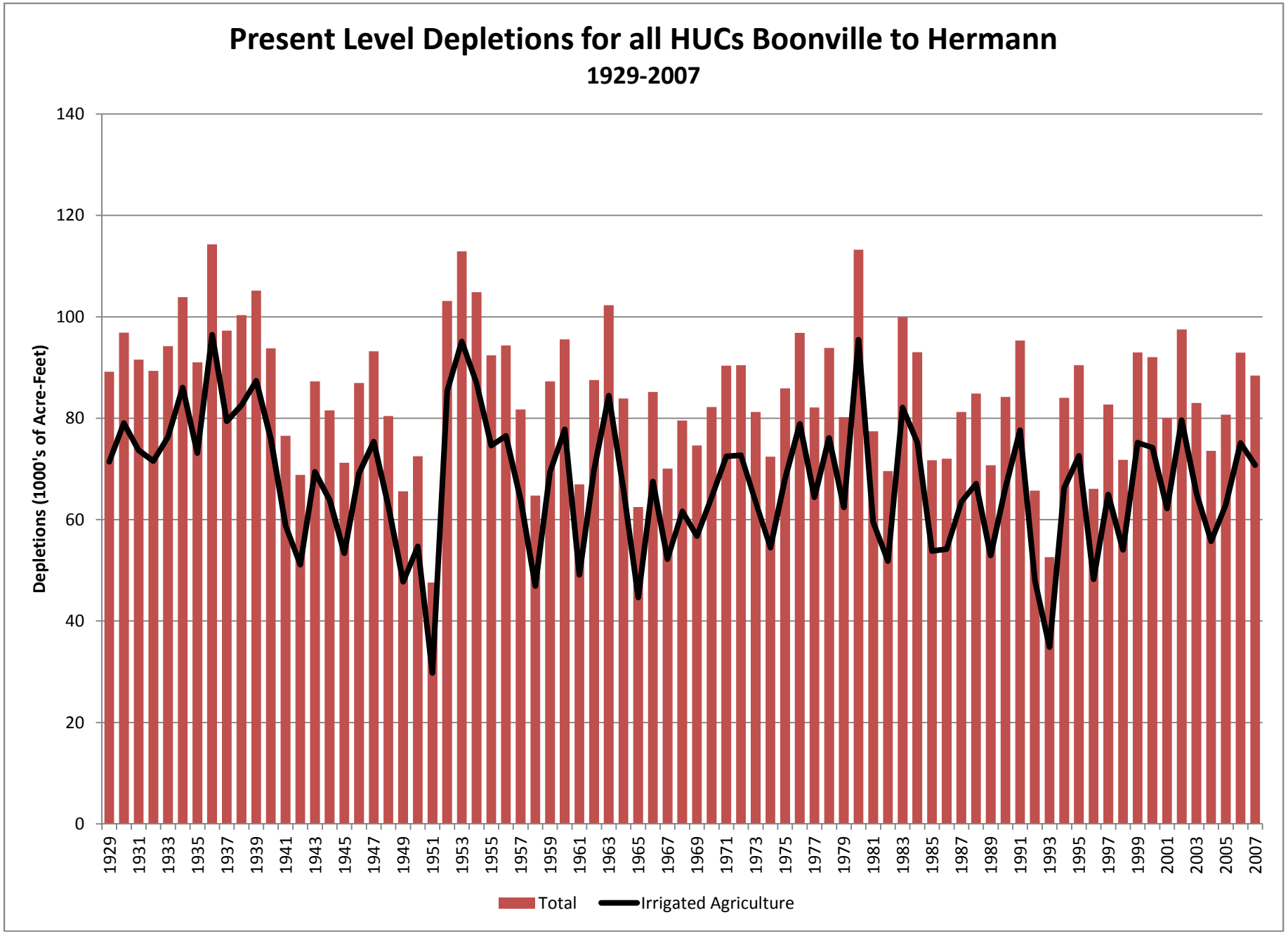
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1929	0	0	1	2	2	7	30	34	17	-1	-1	-1	89
1930	0	0	1	3	5	9	33	35	11	2	-1	0	97
1931	0	0	1	2	3	23	24	20	17	3	-1	-1	92
1932	0	0	1	2	6	9	25	28	18	3	-1	-1	89
1933	0	0	1	1	2	25	27	23	14	2	-1	0	94
1934	0	0	1	2	6	20	38	35	0	3	-1	0	104
1935	0	0	1	2	2	3	39	31	15	0	-1	-1	91
1936	0	0	1	2	6	22	40	42	0	2	-1	0	114
1937	0	0	1	2	4	7	26	35	20	4	-2	-1	97
1938	0	0	1	2	2	7	28	38	17	8	-1	-1	100
1939	0	0	1	1	4	9	32	26	28	6	-1	-1	105
1940	0	0	1	1	5	8	35	15	24	8	-2	-1	94
1941	0	0	1	1	8	9	29	28	3	-1	-1	0	77
1942	0	0	1	2	4	4	26	24	4	4	-1	0	69
1943	0	0	1	2	2	6	34	37	6	1	-1	-1	87
1944	0	0	1	1	6	19	24	12	17	5	-1	-1	82
1945	0	0	1	1	2	3	26	34	0	6	-1	0	71
1946	0	0	1	2	3	18	31	12	18	4	-1	-1	87
1947	0	0	1	1	5	6	26	39	12	6	-1	-1	93
1948	0	0	1	4	5	3	14	34	20	3	-2	-1	80
1949	0	0	1	3	4	6	22	24	6	1	-1	0	66
1950	0	0	1	2	4	11	14	12	22	9	-1	-1	73
1951	0	0	1	2	4	2	15	19	2	2	0	0	48
1952	0	0	1	2	6	28	26	14	22	7	-2	-1	103
1953	-1	0	0	1	4	23	30	35	18	4	-1	-1	113
1954	0	0	1	2	2	18	38	27	18	-1	-1	0	105
1955	0	0	1	4	3	7	33	32	13	2	-1	-1	92
1956	0	0	1	2	4	11	15	32	25	7	-2	-1	94
1957	0	0	1	1	2	4	27	36	11	2	-1	-1	82
1958	0	0	1	2	5	5	4	34	9	7	-1	-1	65
1959	0	0	1	2	5	20	19	32	13	-1	-1	0	87
1960	0	0	1	2	3	16	20	31	23	1	-1	-1	96
1961	0	0	1	1	2	11	19	29	3	4	-1	0	67
1962	0	0	1	3	7	10	28	35	0	5	-1	0	88
1963	0	0	1	3	3	11	27	30	19	9	-1	-1	102
1964	0	0	1	1	6	4	29	26	12	7	-1	-1	84
1965	0	0	1	2	7	3	22	19	3	6	-1	0	62
1966	0	0	1	1	5	14	31	17	13	5	-1	-1	85
1967	0	0	1	1	3	3	22	31	11	-1	-1	0	70
1968	0	0	1	2	3	17	21	23	12	3	-1	-1	80
1969	0	0	1	2	6	3	26	32	7	-1	-1	0	75
1970	0	0	1	1	5	5	36	34	0	1	-1	0	82
1971	0	0	1	3	4	16	20	35	11	4	-1	-1	90

Missouri River Boonville to Hermann

Total Present Level Irrigation and Public Surface Water Supply Depletions for HUCs Boonville to Hermann

Units - 1,000's of Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1972	0	0	1	1	6	20	25	31	8	0	-1	-1	90
1973	0	0	1	1	3	11	18	42	5	2	-1	0	81
1974	0	0	1	2	4	9	37	11	5	3	-1	0	72
1975	0	0	1	2	5	8	37	20	9	5	-1	-1	86
1976	0	0	1	2	3	13	30	30	20	0	-1	0	97
1977	0	0	1	3	5	3	34	29	7	1	-1	0	82
1978	0	0	1	2	3	14	27	24	21	5	-2	-1	94
1979	0	0	1	2	3	8	19	30	19	2	-1	-1	80
1980	0	0	1	2	6	15	39	31	20	0	-1	-1	113
1981	0	0	1	3	2	3	23	27	22	-1	-1	-1	77
1982	0	0	1	2	3	7	29	9	17	4	-1	-1	70
1983	0	0	1	1	4	11	31	40	15	-1	-1	0	100
1984	0	0	1	1	6	13	27	37	12	-1	-1	0	93
1985	0	0	1	2	4	3	33	12	17	2	-1	0	72
1986	0	0	1	2	5	19	26	20	0	0	-1	0	72
1987	0	0	1	3	4	12	23	24	14	2	-1	-1	81
1988	0	0	1	1	6	19	18	29	10	4	-1	-1	85
1989	0	0	1	4	3	10	18	18	15	5	-1	-1	71
1990	0	0	1	2	2	8	22	30	22	1	-2	-1	84
1991	0	0	1	2	3	22	24	32	10	4	-1	-1	95
1992	0	0	1	2	6	8	10	26	7	7	-1	0	66
1993	0	0	1	1	3	6	8	28	0	6	-1	0	53
1994	0	0	1	1	5	13	22	25	16	1	-1	-1	84
1995	0	0	1	1	2	8	26	32	16	7	-1	-1	90
1996	0	0	1	2	3	14	16	25	4	2	-1	0	66
1997	0	0	1	2	2	10	32	20	16	2	-1	-1	83
1998	0	0	1	2	7	8	14	34	7	0	-1	0	72
1999	0	0	1	1	2	9	36	27	12	6	-1	-1	93
2000	0	0	1	3	5	3	23	39	17	4	-1	-1	92
2001	0	0	1	3	3	5	22	33	14	0	-1	-1	80
2002	0	0	1	2	2	17	26	31	21	1	-1	-1	97
2003	0	0	1	2	4	9	33	27	4	5	-1	-1	83
2004	0	0	1	2	5	12	14	19	23	1	-1	-1	74
2005	0	0	1	2	6	9	30	16	13	6	-1	-1	81
2006	0	0	1	2	4	17	24	28	17	2	-1	-1	93
2007	0	0	1	1	4	4	22	38	17	3	-1	-1	88
Average	0	0	1	2	4	11	26	28	13	3	-1	-1	85


Present Level Depletions for all HUCs Boonville to Hermann
1929-2007
Depletions (1000's of Acre-Feet)
140
120
100
80
60
40
20
0
1929
1931
1933
1935
1937
1939
1941
1943
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Total
Irrigated Agriculture