STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

REPORT OF INSPECTION

FILING DATA

APPLICATION NO.: 8180 **FILING DATE:** November 27, 1934

NAME : Nevada Irrigation District
ADDRESS : 1036 W. Main St., Grass Valley, CA 95945
SOURCES : (1) Clear Creek, (2) Texas Creek, (3) Fall Creek, (4) Trap Creek, (5) Rucker Creek
COUNTY : Nevada
PTS. OF DIV. : (1) North 11° 30' West 2,200 feet from Southeast corner of Section 36, T18N, R11E, MDB&M
(2) North 81° 0' East 1,300 feet from Southwest corner of Section 19, T18N, R12E, MDB&M
(3) South 62° 12' East 1,191 feet from Northwest corner of Section 6, T17N, R12E, MDB&M
(4) North 6° 0' East 1,700 feet from Southwest corner of Section 6, T17N R12E, MDB&M
(5) North 35° 0' West 1,020 feet from Eastern ¼ - corner of Section 7, T17N, R12E, MDB&M
AMOUNTS : Direct diversion: (1) 30 cfs (2) 70 cfs, (3) 85 cfs, (4) 15 cfs, (5) 25 cfs
To offstream storage:(1) 60 cfs (2) 140 cfs, (3) 170 cfs (4) 30 cfs, (5) 50 cfs, ∑ not to exceed 350 cfs
Offstream storage: (1) 6 TAFA (2) 14 TAFA, (3) 17 TAFA (4) 3 TAFA, (5) 5 TAFA
PURPOSE : Irrigation and Incidental Domestic
SEASON : About November 1 through about June 30 of the following year for offstream storage.
Direct diversion year-round.
PLACE OF USE : 167,789 acres as shown on Map no. 1020 filed December 24, 1940

PERMIT NO. 5815 **DATE ISSUED:** June 17, 1941 **EXPIRES:** December 1, 1966

Date of Inspection: June 26, 2002 **Inspected By (signature/submit date):** Kevin Long K. Long 9/4/08
Accompanied By: Don Kienlen, MBK Engineers (Ret.) **Telephone:** (916) 456-4400
Person(s) Interviewed: Sue Sindt, NID **Telephone:** (530) 273-6185
Also inspected on July 18, 2006 by flyover with R. Satkowski, K. Long, S. Sindt and pilot

RECOMMENDATIONS

License: After Petitions are filed & approved **Extension:** Yes (to _____) **No Action:** No
Revoke: Partial **Changes:** Yes **Corrections:** Yes **Owner:** As permitted
Address: As shown in eWRIMS **Sources:** As permitted **POD:** Change to CCS as shown below
Purpose: Retain Irrigation use. Petition needed to add Municipal, Industrial, Domestic, and Incidental Power uses
Amount: Reduce **Season:** Modify **POU:** Reduce to 35,077 acres for Irrigation use
Terms: Recommend adding Standard License Term Nos. 46 and 47. Add term recognizing release from priority of Yuba County Water Agency's License No. 11565 and Permit 15026 (Applications 5631 and 5632) in favor of this permit, and special term acknowledging PG&E's prior rights.
Remarks:
Delete Anthony House Reservoir and Parker Reservoir as places of off-stream storage since these facilities were never constructed. Reduce storage to 3,030 acre-feet per annum based on offstream storage in Rollins, Combie and Scotts Flat Reservoirs in WY 1978. Change petition needed to add Municipal and Industrial uses, as well as Domestic use (as opposed to Incidental Domestic authorized by amended Permit), and Incidental Power use. A Petition to Change the Distribution of Storage is needed to add Rollins Reservoir and Combie Reservoir as additional places of off-stream storage before a license can be issued that includes these facilities. Except for projected expansion in the service area(s) due to population growth, the project is complete and a license is recommended following approval of the recommended petitions for change in character, place(s) of use, distribution of storage, and extension of time to complete use, subject to any stipulated petition protest dismissal terms (if any) and/or terms and conditions otherwise set by the State Water Board in the process of approving the petitions.
Owner: As permitted.
Address: As shown in eWRIMS.
Sources: As permitted.
PODs: Reorder, renumber, and change to CCS coordinates as follows:
(9) Texas Creek: North 636,000 ft and East 2,374,350 ft, CCS, Zone 2, NAD27, within SW¼ of SW¼ Section19, T18N, R12E
(10) Clear Creek: North 627,100 ft and East 2,373,000 ft, CCS, Zone 2, NAD27, within NE¼ of SE¼ Section 36, T18N, R11E
(11) Fall Creek: North 624,300 ft and East 2,374,200 ft, CCS, Zone 2, NAD27, within NW¼ of NW¼ Section 6, T17N, R12E
(12) Trap Creek: North 622,100 ft and East 2,374,050 ft, CCS, Zone 2, NAD27, within NW¼ of SW¼ Section 6, T17N, R12E
(13) Rucker Crk: North 617,980 ft and East 2,377,780 ft, CCS, Zone 2, NAD27, within SE¼ of NE¼ Section 7, T17N, R12E

2002
3rd Inspection

RSS 9/4/08

Amounts: 3,030 AF storage as follows: 1,961 AF in Rollins Reservoir, 40 AF in Combie Reservoir, and 1,029 AF in Scotts Flat Reservoir. In combination with other rights, 59,845 AF (say 59,900 AF) taken from the sources (Direct Diversion plus collection to storage). 89,900 AF placed to beneficial use (Direct Diversion from the sources plus withdrawals from storage) under all pertinent rights. Total direct diversion of 58.5 cfs as shown on Page 6.

Purpose: Municipal, Domestic, Industrial, Irrigation and Incidental Power uses[1].

Season: Instead of using "… storage to be collected from *about* November 1 to *about* June 30…", update to "…to be collected from November 1 of each year to June 30 of the succeeding year…" in license (delete "about").

POU: Irrigation of 35,077 acres net within a gross area of 291,991 acres, and Municipal, Domestic, and Industrial uses all within the service area of the Nevada Irrigation District, as shown on map (N.I.D. Drawing No. xxxxxx) filed with the State Water Board. Incidental Power use at 16 locations listed on pages 7 and 8.

Terms: Use modified License Terms 5f and $5n_{pl}$ and add the following special term: "Water diverted under this license includes an undetermined amount of water diverted and/or rediverted under pre-1914 appropriative rights held by Pacific Gas and Electric Company in accordance with the Yuba-Bear Consolidated Contract, dated July 12,1963". This term is in NID License Nos. 12795, 12798, 12799, 12800, and 12802 as term no. 9990300.

Exhibit "B" of State Water Commission Resolution No. 145 released from priority Yuba County Water Agency's License No. 11565 and Permit 15026 (Applications 5631 and 5632[2]) in favor of this Permit. Therefore Standard Supplemental License Term 24a should also be added, and the term should read as follows:

> This license is subject to the ~~agreement~~ **terms of the stipulation** dated **November 13, 1961** between the Licensee and **Yuba County Water Agency relative to regulation of the use of rights acquired under Applications 5631 and 5632 between the District and Agency,** to the extent the agreement covers matters within the Board's jurisdiction. (0000024)

To facilitate accurate self-reporting of offstream storage and use under this Permit/license, staff also recommends that any Order or Decision granting Permittee's petition(s) include language causing Standard License Terms 46 (means for determining offstream storage) and 47 (reservoir staff gages or equivalent) to be added to this Permit/license. Because determining the amount of water stored offstream involves more than just measuring existing flow gages, Term 46 should be modified as follows:

> Licensee shall ~~maintain devices,~~ **employ means** satisfactory to the Chief of the Division of Water Rights, to ~~measure~~ **quantify** water **from Texas, Clear, Fall, Trap and Rucker Creeks** diverted ~~into the reservoir from [SOURCE NAME] and water released from or flowing out of the reservoir~~ **to storage**. (0060046_{mod})

And since Permittee utilizes bubble-tube manometers connected to automatic data recorders to measure and record reservoir levels, and since the recorded data is not often needed by the State Water Board, staff recommends the following modifications to Term 47:

> Licensee shall maintain in ~~the~~ **Rollins, Combie and Scotts Flat** Reservoir**s** ~~a staff~~ gage**s**, satisfactory to the Chief of the Division of Water Rights, for the purpose of determining water levels in the Reservoir**s**. Licensee shall record the ~~staff~~ gage reading(s) ~~on or about [DATE] of each year~~ throughout the year. The readings shall be supplied to the ~~SWRCB with the next Report of Licensee by the licensee~~ **State Water Board upon reasonable request**.
>
> (0070047_{mod})

SOURCES

Names: As permitted. **Tributary to:** (9) Canyon Creek, (10)(12) Fall Creek, thence South Yuba River.

Flow at time of inspection: The sum of Texas, Clear, Fall, Trap & Rucker Creeks on June 26, 2002 was 20 cfs; the June 2002 average was 35 cfs, and the 40-year median is 15 cfs.

How and where determined? Total creek diversions equals differential between USGS gauging stations 11416000 ("Bowman-Spaulding Canal Intake Near Graniteville, CA") and 11416100 ("Bowman-Spaulding Canal at Jordan Creek Siphon Venturi near Emigrant Gap, CA"). Individual creek flows are approximated based on watershed tributary areas as follows: Texas Creek 32%; Clear Creek 6%; Fall Creek 41%; Trap Creek 6%; Rucker Creek 15%. Actual creek flows depend partially on upstream storage and releases made by PG&E, and change in storage at Fuller Lake above the Jordan Creek Siphon gage. These storage/release factors have not been ascertained or quantified.

Who measures flow? Permittee and PG&E, under the general supervision of the USGS.

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[1] A change petition is needed to add Municipal, Domestic, Industrial, and Incidental Power uses.

[2] Applications 5631 and 5632 were originally State of California filings.

Is supply natural? The two smaller creeks, Clear Creek and Trap Creek, are natural.

Texas Creek is somewhat regulated by Culbertson Lake Reservoir (3,150 AF); Upper & Lower Rock Lake Reservoirs (207 AF & 48 AF); and Upper, Middle, & Lower Lindsey Lake Reservoirs (180 AF, 1,100 AF & 293 AF).

Fall Creek is somewhat regulated by Carr Lake Reservoir (150 AF) and Upper & Lower Feeley Lake Reservoirs (780 AF & 184 AF).

Rucker Creek is somewhat regulated by Blue Lake & Rucker Lake Reservoirs (1,163 AF & 648 AF).

DIVERSION SYSTEM

Are points of diversion as specified? Yes. Corrections are due to the use of different coordinate systems, better measurement technology, and updated USGS maps. No significant change in actual POD locations.

Are points of rediversion as specified? N/A. Supplemental Paragraph 4 of the Permit states, in part, "It is the intention to use Bear River within and adjacent to the place of use and all stream channels and water courses within the place of use as main conduits and distributaries which may call for a point of rediversion at any point on such streams and water courses."

Is change petition/correction required? No. Staff interprets Paragraph 4 to mean that all points of rediversion used by the Permittee on the extended "complete use" date for the uses authorized may be included in the offer for license without requiring a change petition.

Would change cause any injury? Not applicable

Owner(s) of land at point of diversion: Permittee, PG&E, and the USDA Tahoe National Forest

Assessor's Parcel Nos.: (9) Texas Creek BSC: 13-340-06 Nevada Irrigation District
(10) Clear Creek BSC: 13-250-17 US Tahoe NF
(11) Fall Creek BSC: 64-140-01 US Tahoe NF
(12) Trap Creek BSC: 64-140-01 US Tahoe NF
(13) Rucker Creek BSC: 64-140-06 Pacific Gas & Electric Company

Type of access: (9) Permittee; (10) (11) (12) Special Use Permits issued by USDA Tahoe National Forest; (13) Contract agreement with PG&E.

Is diversion system complete? Yes. Nevada Irrigation District's Raw Water Master Plan Update, Phase II, will describe, in detail, and prioritize the numerous capital improvements and expansion projects needed to reduce conveyance losses, improve system efficiency and to accommodate population growth and development through 2027. NID will likely be the CEQA lead agency for these projects, and State Water Board would likely be a responsible agency under CEQA.

If not, what remains to be done? TBD

Capacity of the limiting section: The capacity of the **B**owman-**S**paulding **C**onduit at each Point of Diversion to appropriate water from the Tributaries depends on 1) BSC imports at the head of the canal and 2) whether any of the several stream bypass gates located on the BSC are open. The highest total flow in the BSC has been 335 cfs.

How determined? Review of records published by the USGS for Gage No. 11416100 (Bowman-Spaulding Canal at Jordan Creek Siphon Venturi, Near Emigrant Gap, CA).

PLACE OF USE

Name of place of use, if commonly known as such: Nevada Irrigation District and part of Yuba County.

Describe any changes/corrections from the place of use as described in the Permit or Order:

Reduce from 167,789 acres to 35,077 net acres for irrigation use. A portion of the net acres is outside the 1940 District boundary shown on Map No. 1020.

Is change petition required? Yes. Certain areas served by NID facilities, such as the Railroad Commission Order (RCO # 15926 dated 1927) service area, are outside the authorized place of use. Those areas could be served by other NID water rights that include, or will include, these areas; however, it is preferable to have a consolidated and conformed POU amongst NIDs Upper Division (aka Mountain Division) water rights. Not doing so would make water right place of use compliance verification very difficult.

Is place of use developed to a point where full use of water may be made? Yes. Conveyance infrastructure improvements, rehabilitation and development have been ongoing for over a century. Water diverted under this permit is relatively small piece (< 5%) of the water supply and water right matrix serving the District and its many customers.

Does it appear that development has been pursued with due diligence? Yes. Normal delays occurred due to development plan changes, changes in community size and values, political forces, project financing, understanding of local meteorological variability, and the sporadic nature of rural and urban area development and growth. In this case, the filing of a seventh petition for extension of time to complete use for this project is recommended. A time extension that includes

September 1985 would cover permittee's year of maximum combined direct diversion and withdrawal. A time extension that includes 1986 would cover Permittee's year of maximum irrigated acreage. A time extension to 2008 would cover Municipal, Domestic, Industrial, and Irrigation uses land development up to the present date. A time extension of 25 years would cover additional M & I growth, development and/or expansion of water use under this Permit.

Owner of land at place of use: N/A. Thousands of publicly and privately held parcels, large and small, within Nevada County, Placer County and Yuba County RCO area near Smartsville.

Acreage: Reduce from 167,789 acres to 35,077 net acres for irrigation use. For Municipal, Domestic, and Industrial Uses, Permittee requests that the place of use be shown in the License as 291,991 acres as shown on the District boundaries map provided by NID. This amount includes 60,944[3] acres served by the District and approximately 205,000 acres, or 70**%** of the total, not actually served at this time by the District or its 33 mutual water association customers like Mustang Valley MWC, Iron Mountain MWC, or Big Oak Valley MWC. Inclusion of 291,991 acres under the Municipal, Industrial, and Domestic uses (most of which is either undeveloped land, national forest land, or land served by groundwater wells or sources other than NID's facilities), is in accordance with direction given by the management of the Division of Water Rights.[4]

Type of arrangement, if not owned by permittee: Public water supply utility organized pursuant to Division 11 of the California Water Code (§ 20500 et seq).

MAJOR USES OF WATER

Describe diversion works and method of applying water to major use:

Diversion Works: A 14-mile conduit hydraulically connecting Permittee's Bowman Reservoir to PG&E's Fuller Lake consisting of 6.5 miles of concrete-lined canal and 7.5 miles of tunnel intercepts and diverts the entire flows of Texas, Clear, Fall, Trap and Rucker Creeks ("Tributaries") at points where the canal crosses the stream (except Fall Creek[5]). From Fuller Lake, water is conveyed to and through the Spaulding Powerhouse # 3 (aka Rim powerhouse) penstock and turbine and into PG&E's Spaulding Reservoir. At Spaulding dam, water diverted from the Tributaries is either stored by PG&E under Pre-1914 rights, conveyed to/through the South Yuba Canal thence Deer Creek, the Drum Canal thence Bear River, or, during wet periods, discharged or spilled to the South Yuba River. Permittee's offstream storage and re-diversion facilities are located on the Bear River and Deer Creek. Major project components include:

- 7,250 cu yd earth dam 36 feet high with dam crest of 365 feet on Jordan Creek (**Fuller Lake** owned by PG&E)
- 191,770 cu yd arch dam 275 feet high with dam crest of 800 feet on South Yuba River (**Spaulding Reservoir** owned by PG&E)
- Nine-mile conduit consisting of seven miles of concrete-lined canal, one mile of elevated flume, 0.6 mile-long tunnel, and 1,800 feet of parallel siphon pipes (**Drum Canal** owned by PG&E)
- 19-mile conduit consisting of 11.5 miles of concrete-lined canal, 5.9 miles of elevated flume, 0.7 mile-long tunnel, and 0.8 mile of concrete pipe (**Main South Yuba and Chalk Bluff Canals** owned by PG&E)
- 2.3 million cu yd earth and rock dam 242 feet high with dam crest of 1,260 feet on Bear River (**Rollins Reservoir**)
- 1.1 million cu yd earth dam 175 feet high with dam crest of 980 feet on Deer Creek (**Scotts Flat Reservoir**)
- 6,700 cu yd arch dam 92 feet high with dam crest of 334 feet on Deer Creek (**Lower Scotts Flat Diversion Dam**)
- 21,440 cu yd arch dam 85 feet high with dam crest of 762 feet on Bear River (**Combie Reservoir**)

Deer Creek Diversion Dams and Canals: Cascade Canal (S. Fk. Deer Ck), D-S Canal (@ Lower Scotts Flat Diversion Dam), Newtown Canal, Tunnel Canal

Bear River Diversion Dams and Canals: Bear River Canal, Combie Phase 1 Canal (@Combie Dam)

Auburn Ravine Diversion Dams and Canals: Auburn Ravine 1 Canal, Hemphill Canal

Other Diversion Dams and Canals: Tarr Canal (Wolf Creek), Wolf-Hannaman Canal (Little Wolf Creek), China/Union Canal (Squirrel Creek), Rattlesnake Canal (Rattlesnake Creek), Halsey Afterbay Dam (Dry Creek) Orr Creek Dam, Camp Far West Canal (Coon Creek), Doty South Canal (Doty Ravine)

[3] 60,944 acres = 38,447 Ac (Deer Crk System) + 44,837 Ac (Bear R. System) + 2,330 Ac (Yuba Cty RCO) – 24,670 Ac (Irrigation)

[4] The License POU description for municipal, industrial and domestic uses will be determined more formally through the Division's change petition and CEQA processes, rather than the licensing inspection process.

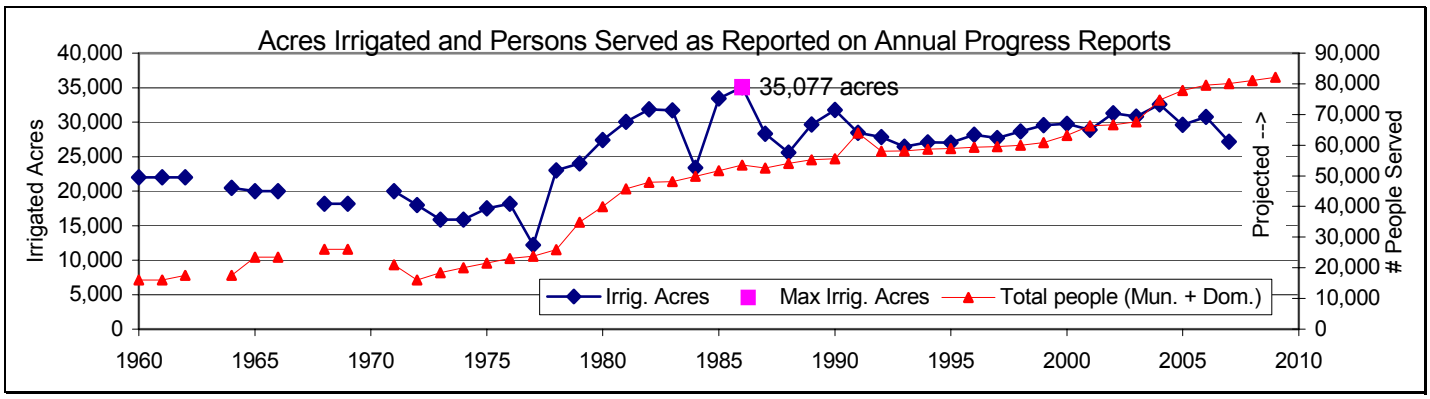
[5] At the Fall Creek POD, a small diversion dam and flume is used to convey water approximately 150 feet to the Bowman-Spaulding Conduit.

Water Treatment Plants: Cascade Shores WTP (0.9 mgd), Lake Wildwood WTP (4.1 mgd), Lake of the Pines WTP (6 mgd), North Auburn WTP (4 mgd), Loma Rica WTP (6.3 mgd), Elizabeth George WTP (10 mgd), Smartsville WTP (64,600 gpd), Nevada City MWTP (1 mgd), Grass Valley MWTP (2.3 mgd). Permittee does not own the Nevada City Municipal Water Treatment Plant or the Grass Valley Municipal Water Treatment Plant.

Major Use(s): Irrigation, municipal, industrial, and domestic.

Does method appear wasteful, judging from local standards? No. NID has an Urban Water Management Plan[6] (last updated in 2001) and billing practices based on quantities delivered to raw water customers encourages conservation. In addition, the District operates wastewater treatment facilities and currently recycles 3,400 acre-feet per year.[7] The District is seeking opportunities to expand its recycling program in coordination with the Regional Water Quality Control Board – Central Valley Region (Rancho Cordova) under its NPDES waste discharge permits.

List acreage/crop type or other units served: A total of 35,077 acres of pasture, gardens, orchards, corn and rice were reportedly irrigated in 1986 (see graph below). Due to its size, irrigated acreage was not checked or GPS'd during the inspection.



OTHER USES

Average number of persons served during maximum period: Approximately 80,000 people presently served (see graph)

Number of housing units: 35,000 (estimated)

Plumbing facilities available: Yes. Residences and businesses subject to uniform building and plumbing codes.

Area of garden, lawn, orchard, dust control, etc. (show measurements on attached sketch): N/A

Number and type of domestic livestock served: Approximately 5,000 head in Nevada County.[8]

Other miscellaneous uses: Direct-diversion Power use under companion power filings (A2372, A4310, A6701, A8178) and PG&E pre-1914 rights (Statement nos. 957 and 9978 – 9982). Fire defense at reservoirs and throughout the NID. Public Recreational use at Rollins and Scotts Flat Reservoirs, and semi-private recreational use at Combie Reservoir. Occasional frost protection of family-owned vineyards.[9] Incidental Power generation of water stored in and withdrawn from offstream reservoirs.

EXTENT OF USE OF WATER

Season of use and/or diversion to storage: Direct diversion season as permitted. For the storage season, Instead of using "… storage to be collected from *about* November 1 to *about* June 30…", update to "…to be collected from November 1 of each year to June 30 of the succeeding year…" in license (delete "about") per directive by Division management.

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[6] 2005 Raw Water Master Plan Update pp 6-20, 21

[7] 2005 Raw Water Master Plan Update pp ES-4. This amount is based on treated effluent discharges from Nevada City, Grass Valley, Auburn, and northern Placer County to: Deer Creek (thence Tunnel Canal & Keystone Canal); Wolf Creek (thence Tarr Canal); Auburn Ravine (thence Auburn Ravine I Canal & Hemphill Canal); and Rock Creek (thence Camp Far West Canal) during the irrigation season.

[8] Nevada County 2005 Annual Crop Report. However, not all ranches in Nevada County are served by the Permittee, and Permittee serves ranch parcels outside Nevada County.

[9] The Nevada County Agricultural Commissioner's Annual Crop Report lists 700 acres of vines harvested in 2005. The vineyards are in a frost zone. For permits issued before 1979, vine frost protection may be considered to be part of irrigation use (see Office of Chief Counsel opinion dated July 1, 2002).

How was information on season obtained? Except for Clear Creek and Trap Creek, due to upstream storage releases by PG&E, creek flows may exist year-round for either direct diversion or [re-]storage.

Rate of use by direct diversion during maximum period: Total maximum of **58.5 cfs** (30-day average), as follows: Texas Creek – 10.1 cfs; Clear Creek – 2.5 cfs; Fall Creek – 26.4 cfs; Trap Creek – 0.7 cfs; Rucker Creek – 18.8 cfs. See Appendix Tables 6 – 10 for average direct diversion rate calculations.

Beginning and ending dates of maximum period: For Texas, Clear, Fall & Rucker Creeks: May 26, 1983 – June 24, 1983
For Trap Creek: March 16, 1983 – April 14, 1983

Maximum annual diversion: 59,845 AFA (say **59.9 TAFA**) from these five sources under this permit and License Nos. 12795, 12798, 12799, 12800, and 12802 (Applications 1270, 2372, 6701, 6702, and 8178, respectively)

Year of maximum use: May 19, 1983, – May 18, 1984

Complete if storage is involved:

Maximum amount diverted to storage in one season: 3,030 AF **Year:** 1977-78

Maximum withdrawal in one season (if applicable): 47,013 AF[10] from Rollins Reservoir, 6,643 AF from Combie Reservoir and 22,702 AF from Scotts Flat Reservoir for a total of 76,358 AF withdrawal (see Appendix Figures 1, 2 and 3 and Footnote 21). The maximum combined withdrawal period was identified by permittee to be September 10, 1984 - September 9, 1985. Direct diversion during this period was 13,529 AF, so the total amount of water placed to beneficial use (direct diversion from the above-listed sources *plus* withdrawal from storage under the rights listed below) was 89,887 AF (say **89.9 TAFA**). NIDs Lower Division reservoir(s) storage rights are as follows:

Rollins Reservoir	Combie Reservoir	Scotts Flat Reservoir
- -	- -	Permit 1481 (A1614)
License 10350 (A2652A)	License 10350 (A2652A)	- -
Permit 11626 (A2652B)	- -	- -
Permit 13770 (A5193)	Permit 13770 (A5193)	Permit 13770 (A5193)
Permit 5815 (A8180)*	Permit 5815 (A8180)*	Permit 5815 (A8180)
Permit 13772 (A20017)*	Permit 13772 (A20017)*	Permit 13772 (A20017)
Permit 16953 (A24983)	- -	- -
Permit 13773 (A20072)*	Permit 13773 (A20072)*	Permit 13773 (A20072)*
- -	- -	Permit 18608 (A27132)

*If Reservoir is added to permit by petition for change in distribution of storage

Based on the integrated nature of this project, its unique characteristics, and the direct-diversion rates, storage amounts, "amount taken from the source" (direct diversion plus storage), and amount beneficially used (direct diversion plus withdrawal) listed above, staff recommends that Standard License Term 5f be modified as follows:

> …shall not exceed **a total of 58.5 cubic feet per second by direct diversion to be diverted from January 1 to December 31 of each year as follows: 10.1 cubic feet per second from Texas Creek, 2.5 cubic feet per second from Clear Creek, 26.4 cubic feet per second from Fall Creek, 0.7 cubic feet per second from Trap Creek and 18.8 cubic feet per second from Rucker Creek; and 3,030 acre-feet per annum by storage to be collected from November 1 of each year to June 30 of the succeeding year in Scotts Flat Reservoir, Rollins Reservoir, and in Combie Reservoir.**
>
> **The total amount of water to be taken from the above-listed sources (direct diversion plus collection to storage) under this license and licenses 12795, 12798, 12799, 12800, and 12802 shall not exceed 59,900 acre-feet per ~~year~~ annum.**
>
> **The total amount of water to be placed to beneficial use (direct diversion from the above-listed sources plus withdrawal from storage) under this license and licenses issued pursuant to Applications 1270, 1614, 2372, 2652A, 2652B, 5193, 6701, 6702, 8178, 20017, 20072, 24983, and 27132 shall not exceed 89,900 acre-feet per ~~year~~ annum.**

Permittee has requested that the individual reservoir storage amounts of 1,961 AF in Rollins Reservoir, 1,029 AF in Scotts Flat Reservoir, and 40 AF stored in Combie Reservoir (sum = 3,030 AF) be lumped together as a single storage amount to allow maximum operational flexibility. It has also asked that "… per year." be changed to "… per annum." to clarify that the annual taken and used amounts apply to any 365-day period. Management of the Division of Water Rights has agreed to the requests.

[10] 47,013 AF = 79,388 (Total withdrawal) – 7,606 (water collected out-of-season) – 24,769 (water re-stored & re-withdrawn)

PERMIT TERMS

Address compliance with each Permit term (by term number): # 3 – Purpose of Use: Water appropriated from Texas, Clear, Fall, Trap, & Rucker Creeks are part of a large matrix of sources used for municipal and industrial needs in addition to irrigation within the District. When the District filed the application in 1934, a separate application was required for each additional use except for domestic use *incidental* to the primary use of irrigation (see box on p. 1 of Application/Permit). Although these uses may have been contemplated, Municipal and Industrial are not authorized purposes of use under this Permit and separate applications for Municipal and Industrial uses were never filed. Although it was done for NID's other "Upper Division" licenses issued in 1991, Division staff do not have the authority to add Municipal & Industrial uses to the proposed license administratively without a change petition.

As noted above, water from the Tributaries has been stored offstream in Rollins, Combie, and Scotts Flat Reservoirs for later consumptive use. Applications for non-consumptive power use of water from the Tributaries were filed in 1921, 1930 and 1934 (Application Nos. 2372, 6701 and 8178), but none of these filings cover the offstream storage proposed to be offered/authorized under this Permit/license. Using a pro-rata accounting (i.e., source-proportional fill), staff notes that for a reservoir filled from multiple sources;

- By convention, water tends to lose its source identity on the withdrawal side, since: 1) the various sources ("colors") of water are commingled, and 2) accounting for the different sources coming out of storage becomes difficult.
- Depending on the water year type, not all of the commingled water withdrawn from NID's lower division storage facilities is used consumptively; and, therefore,
- Some Tributaries water stored offstream is used for power-only upon withdrawal, which requires an application/permit.

Since water stored and withdrawn at these facilities is now also used to generate electricity at Reservoir powerhouses built since this Application was permitted, it appears that the Permittee must file an application for a Power-only Permit to cover offstream storage from Texas, Clear, Fall, Trap, and Rucker Creeks.

Permittee's consultant has said that it can demonstrate, through an alternate accounting method, that Tributaries water stored and withdrawn in/from Rollins, Combie and Scotts Flat Reservoirs under this permit only generates power *incidental* to its seasonal withdrawal-deliveries for consumptive uses. Therefore, Permittee believes that adding incidental power use to this Permit/license through a change petition pursuant to Title 23, CCR, §799 is sufficient. Incidental Power generation places-of-use for water stored/withdrawn under this permit may include:

- A Gilkes-Francis turbine connected to an 875 KW Kato Reliance generator at the **Scotts Flat Dam Powerhouse**, located within NE¼ of NE¼ of Section 11, T16N, R9E, MDB&M in Nevada County
- A vertical-shaft Francis turbine connected to a 12.15 MW Shinko Generator located at the **Rollins Reservoir Power Unit** located within the NE¼ of SE¼ of Section 22, T15N, R9E, MDB&M in Placer County
- An Allis-Chalmers double-overhung Francis turbine connected to a 13.6 MW Westinghouse generator at the **Halsey Powerhouse** located within NW¼ of NW¼ of Section 25, T13N, R8E, MDB&M in Placer County
- A horizontal-shaft Pelton Francis turbine connected to a 13.6 MW Westinghouse generator at the **Wise Powerhouse # 1** located within NW ¼ of SW ¼ of Section 16, T12N, R8E, MDB&M in Placer County
- A horizontal-shaft Francis turbine connected to a 2.9 MW generator at the **Wise Powerhouse # 2** located within NW¼ of SW¼ of Section 16, T12N, R8E, MDB&M in Placer County
- Three Byron-Jackson vertical-shaft turbines and three 0.5 MW U.S. Motors Titan Horizontal Generators at the **Combie South Powerhouse** located within SW¼ of NW¼ of Section 2, T13N, R8E, MDB&M in Placer County
- Two crossflow turbines connected to 2 x 150 KW induction generators at the **Combie North/Phase 1 Canal Powerhouse** located within SW¼ of NW¼ of Section 2, T13N, R8E, MDB&M in Nevada County

The following power-generation POUs are already covered by pre-1914 rights claimed by PG&E for Texas, Clear, Fall, Trap and Rucker Creeks. But since it will be petitioning to add Incidental Power use anyway, Permittee proposes to also add the following Incidental-Power POUs to this permit:

- Horizontal Francis turbine connected to a 7.6 MW Westinghouse generator at the Rim Powerhouse, aka PG&E **Spaulding Powerhouse # 3**, located within NE¼ of SW¼ of Section 16, T17N, R12E, MDB&M in Nevada County
- Vertical Francis turbine and 7MW generator at the PG&E **Spaulding Powerhouse # 1 Powerhouse** located

within NE¼ of SE¼ of Section 20, T17N, R12E, MDB&M in Nevada County

- Vertical Francis turbine and 3.7 MW generator at the PG&E **Spaulding Powerhouse # 2** located within NE¼ of SE¼ of Section 20, T17N, R12E, MDB&M in Nevada County
- Double-overhung Francis turbine connected to a 5.5 MW generator at the PG&E **Deer Creek Powerhouse** located within SE¼ of NW¼ of Section 34, T17N, R10E, MDB&M in Nevada County
- Three indoor double-overhang impulse turbines connected to three 12 MW generators and one single-overhang impulse turbine connected to a 13.2 MW generator at the PG&E **Drum Powerhouse # 1** located within NE¼ of NW¼ of Section 17, T16N, R11E, MDB&M in Placer County
- 6-jet vertical-impulse turbine and 53.1 MW generator at the PG&E **Drum Powerhouse # 2** located within NE¼ of NW¼ of Section 17, T16N, R11E, MDB&M in Placer County
- Vertical-shaft Francis turbine connected to a 22 MW generator at the PG&E **Dutch Flat PH # 1** located within SE¼ of SE¼ of Section 27, T16N, R10E, MDB&M in Placer County
- Vertical-shaft Francis turbine connected to a 26 MW generator at the **Dutch Flat Powerhouse # 2** located within SE¼ of SE¼ of Section 27, T16N, R10E, MDB&M in Nevada County
- Vertical-shaft Francis turbine connected to a 41.5 MW generator at the **Chicago Park Powerhouse** located within NW¼ of SE¼ of Section 6, T15N, R10E, MDB&M in Nevada County

Note that Permittee has several power-only licenses which include some or all of the Tributary streams in the source(s) description[11]. Adding Incidental Power use to this Permit/license will cause some overlap with these existing licenses, depending on the time of year:

License 12802 (Application 8178) authorizes a total direct diversion of 191 cfs as follows: 68 cfs from Texas Creek between 1/1 – 6/30; 13.6 cfs from Clear Creek between 1/1 – 7/31; 75.7 cfs from Fall Creek between 12/1 – 7/31; 8.6 cfs from Trap Creek between 4/15 – 6/30; and 25 cfs from Rucker Creek year-round for power-only use at the above facilities.

License 12799 (Application 6701) authorizes 5 cfs from Clear Creek year-round; 10 cfs from Fall Creek between 12/1 – 7/31, and 5 cfs from Trap Creek between 1/1 – 7/3 at the above facilities.

License 1707 (Application 4310) authorizes 126 cfs[12] of year-round diversion from Texas, Fall and Trap Creeks at the Spaulding # 2 and Deer Creek powerhouses.

License 12798 (Application 2372) authorizes year-round direct diversion of: 30 cfs from Texas Creek; 15 cfs from Fall Creek; and 5 cfs from Trap Creek for power-only use at Spaulding Powerhouse # 3 only.

To clarify that diversion authorized under these power-only Licenses overlaps with, and is not in addition to, direct diversion for consumptive *and Incidental Power* use under this Permit/license, staff recommends that any Order or Decision granting Permittee's petition to add Incidental Power use include language causing the following special term (or similar) to be added to the license:

> Where the season of diversion under this license overlaps with the season(s) of diversion authorized by License Nos. 1707, 12798, 12799 and 12802, the above rates of diversion are inclusive of, and not in addition to, rates of diversion authorized by said licenses.

(9999999[13])

OTHER RIGHTS

Appendix Tables 4 and 5 list the water right summary information for Nevada Irrigation District, which include:

NID Water Right License Nos.: 1707, 4403, 4544, 8808, 8809, 9902, 9903, 10016, 10350, 12795, 12796, 12797, 12798, 12799, 12800, 12801, 12802, & 12803

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[11] License 1707 (Application 4310) describes the Texas Creek, Fall Creek and Trap Creek points of diversion as: "…foreign water in South Fork of Yuba River imported from Middle Fork of Yuba River, Canyon Creek *and other points enroute* under Applications 2272, 2275, and 2372…"

[12] Total of 126 cfs from: Middle Yuba R., Canyon Creek, Texas Creek, Fall Creek and Trap Creek, which may include upstream storage withdrawals.

[13] Special term code # 9999999 is used when: 1) the term does not correspond to any established enforcement categories, and 2) there is no standard term yet developed for this type of condition.

NID Water Right Permit Nos.: 1481, 5815, 11626, 13770, 13772, 13773, 16953, 18608, 18757, & 19158

NID Claim of Pre-1914 Right Statement Nos.: 4716, 4717, 10794, 12949, 12950, 12951, 12952, 12953, 13330, 13790, 13791, 13800, 13801, 13809, 13926, 13927, 13928, 14355, 14356, & 160xx (160xx refers to the Statement of Water Diversion and Use filed in November 2007 for Jackson Lake for which the Division has not yet assigned a number.)

NID Claim of Riparian Right Statement Nos.: 10591, 10592, 14353*, 14354*, & 160yy (160yy refers to the Statement of Water Diversion and Use filed in January 2008 for the Combie South Powerhouse for which the Division has not yet assigned a number.) * Statement also claims a pre-1914 right.

CALCULATIONS

How was information regarding storage obtained? Permittee's consultant, MBK Engineers (Sacramento), prepared a spreadsheet-based water accounting model called "Lower Division Analysis" to examine and apportion "pro-rata" storage amounts in NID's five main reservoirs (Jackson Meadows, Bowman, Rollins, Combie and Scotts Flat). The 216-page spreadsheet has 29 data input columns, 172 formula columns and 365 rows. Based on the Lower Division Analysis (v. 7), 1,961 AF[14] was stored in Rollins Reservoir, 40 AF[15] was stored in Combie Reservoir and 1,029 AF[16] was stored in Scotts Flat Reservoir for a total storage amount during water year 1978 of **3,030 AF**.

On December 29, 1977, combined storage amounts were 341 AF (172 cfs) in Rollins, 0 AF in Combie, and 8 AF (4 cfs) to Scotts Flat for a total maximum combined instantaneous (daily) diversion to offstream storage of **176 cfs**[17], which divides up as follows: 56.3 cfs from Texas Creek, 10.6 cfs from Clear Creek, 72.2 cfs from Fall Creek, 10.6 cfs from Trap Creek, and 26.4 cfs from Rucker Creek based on watershed-area percentages. However, staff recommends omitting the maximum instantaneous rate of diversion to offstream storage limitation in the proposed license (the Permit limitation is 350 cfs total from all five Creeks) because of the number of different sources the BSC is used for [direct diversion, diversion to offstream storage, multiple sources (in addition to those covered under this permit), rediversion of storage withdrawals, etc.] and the complexity of the system. Demonstrating compliance with the term would be problematic for the Permittee and for future water right inspectors/auditors. Alternatively, staff recommends expanding the analysis and/or modifying Standard License Term 5jnew$_{mod}$ to include NID's Canyon Creek and Middle Yuba sources. To conserve staff resources, the exact Term 5j language modifications should be worked out in consultation with the Permittee and Division management before attempting the analysis.

The highest total flow in the Bowman-Spaulding Conduit has been 335 cfs in December 1983, May 2005 and April 2006, which includes a combination of direct diversion, rediversion, restorage, and/or diversion to offstream storage from multiple sources under numerous pre-1914 and post-1914 rights.

Location of backup data: Bound printouts of the **L**ower **D**ivision **A**nalysis from MBK Engineers for Water Years 1978 and 1985 is located in the file for Application 1270 (NID lowest-numbered app.) under Category 8, "Licensing Materials", Volume ___. A CD-ROM with the LDA in Excel™ spreadsheet format is located inside the cover jacket.

CALCULATION OF DIVERSION DURING THE MAXIMUM SEASON: (state assumptions made)
Permittee was asked to identify the one-year period of "maximum amount taken from the source(s)", which it identified as May 19, 1983 – May 18, 1984. Staff assumes that all of the water taken from the Tributaries during this period can be credited to NID's permit and licenses by using an "amount taken from the source under combined rights" term (Std. Term 5f$_{mod}$), except for: 1) Tributaries water stored by PG&E in Spaulding Reservoir, and 2) Tributaries water that could only be diverted directly by PG&E[18]. During the period-of-interest, the total entering the Bowman-Spaulding Conduit (BSC) from the Permittee's other Mountain Division sources (Canyon Creek & Middle Yuba R.) was 153,514 AF (USGS gage No.11416000). The amount of water leaving the BSC (USGS Gage # 11416100) was 220,107 AF. The difference, which is the total amount of both NID water and PG&E water taken from the Permit sources under combined rights, is 66,593 AF. Of this amount, 6,508 AF[19] was stored in PG&E's Spaulding Reservoir during the storage periods that occurred during the period-of-interest. An additional 692 AF could

[14] Lower Division Analysis, Sheet 3D, Column 17

[15] Lower Division Analysis, Sheet 3G, Column 12

[16] Lower Division Analysis, Sheet 4D, Column 12

[17] Other years have not been analyzed to see if a higher rate of (instantaneous) diversion to offstream storage occurred.

[18] NID and PG&E both take water from the same source(s), at the same time, and at the same place(s), but for different uses and/or different places of use. For this reason and particular situation, "double-credit" is an appropriate water accounting method, although a special term recognizing PG&E's unquantified prior rights is needed.

[19] Amount assumes that Spaulding Reservoir fills in proportion to its sources, namely imported water from the Tributaries, South Yuba R., and Fordyce Reservoir releases.

only be taken by PG&E between June 9 and June 24, 1983, under its Pre-1914 rights because of the rate-of-diversion limitation (25 cfs) for Rucker Creek in NID's water rights. Subtracting these amounts from 66,593 AF, and adding 452 AF of canal leakage[20] losses, gives **59,845 AF** "taken from the source". At least this amount was beneficially used to generate electricity at one of NID's Bear River power plants under one or more of NID's Power-use licenses for the Tributaries. Staff estimates that approximately 20 TAF of this amount was used consumptively within the District for Irrigation, Municipal, Industrial, and/or Domestic uses. Permittee's consultant indicated that it would supply the data to estimate the total consumptive use amount (from these sources) with better accuracy upon formal request. Since term 5f $_{mod}$ lists all of the licenses that may be used to appropriate water from the Tributaries, and all of the licenses and permits that may be used to store and withdraw water in the reservoirs for both consumptive and non-consumptive uses, the estimate is not necessary to make an offer for license.
The outline of the analysis for calculating the "Amount(s) taken from the source(s) (direct diversion plus collection to storage)" and the maximum rates of diversion under this Permit include the following steps:

1. Identify the storage periods in PG&E's Spaulding Reservoir during the period-of-interest identified by the Permittee
2. List the daily ΔS_{Spaul} for each day of storage collection
3. Calculate Spaulding Reservoir inflow
4. Calculate daily tributaries Diversion = BSC_{out} - BSC_{in}
5. Calculate Tributaries remaining after Spaulding storage collection of its sources (on-stream and imports)
6. Split total Tributaries into the five individual creeks and check if 30-day average diversion rates are exceeded
7. Impair for amount taken from Rucker Creek under PG&Es appropriative rights
8. Calculate the daily percentages of 1) water used for power only and 2) water used for consumption and incidental power
9. Multiply consumptive-use percentages by the individual creek flows
10. Show appropriation under senior consumptive-use rights first, and assign the remaining amounts to A8180
11. Identify the 30-day maximum rate(s) of diversion under this permit, which are shown in Tables 6 – 10 along with the supporting calculations

The analysis for determining the direct diversion component of the "total amount of water to be placed to beneficial use (direct diversion plus withdrawal from storage)" is the same as steps 1 through 6 above for the period of September 10, 1984 to September 9, 1985. In summary, the total amount of water entering the Bowman-Spaulding Conduit (BSC) from Permittee's other Mountain Division sources (Canyon Creek & Middle Yuba R.) was 127,928 AF (USGS gage No.11416000). The amount of water leaving the BSC (USGS Gage # 11416100) was 149,818 AF. The difference, which includes both stored water and water directly diverted by the Permittee, is 21,890 AF. Of this amount, 6,622 AF was stored in PG&E's Spaulding Reservoir during the storage periods that occurred during the period-of-interest, and 2,674 AF was stored in Rollins, 21 AF was stored in Combie and 285 AF stored in Scotts Flat. Subtracting these storage amounts from 21,890 AF and adding 1,241 AF lost to canal leakage, gives a direct diversion component of 13,529 AF during the maximum combined withdrawal period.

The data sheets accounting for:

- Daily appropriation of Tributaries water,
- Pro-rata storage collection in Spaulding Reservoir,
- Estimate of creek flows by percent watershed area,
- Amounts taken from the creeks under NID's various licenses and this Permit, and
- Daily Consumptive use percentages,

are located in the main folder for this Permit just below this report. Excel™ datasheets showing steps 1 through 8, above, will be uploaded/archived into eWRIMS. Data used in Steps 9, 10 & 11, (shown in Tables 6 – 10) are embedded as Excel™ spreadsheet objects in the electronic Word™ version of this report uploaded to eWRIMS. Likewise, the reservoir hydrographs (Figures 1 – 3) and underlying reservoir storage data are also embedded as Excel™ objects in this report.

[20] When the amount of water flowing out of the BSC is less than the amount going into the BSC, the difference is assumed to be minor canal losses due to leakage. However, it could also be due to type I and II errors in gage readings, gage calibration, and/or travel time delay. Minor leakage is an unavoidable consequence of appropriation, and, for the most part, ends up back in the Yuba R. system.

A P P E N D I X

Figures

1. 1984-85 annotated hydrograph for Rollins Reservoir shows total withdrawal of 79,388 AF
2. 1984-85 annotated hydrograph for Scotts Flat Reservoir shows total withdrawal of 22,702 AF
3. 1984-85 annotated hydrograph for Combie Reservoir shows total withdrawal of 6,643 AF

Tables

4. NID Water Rights – Pre-1914 appropriative and riparian rights summary
5. NID Water Rights – Post-1914 appropriative rights summary (4,311 TAFA total)
6. 30-Day Average Direct Diversion Rate for Texas Creek under A8180 – 10.1 cfs
7. 30-Day Average Direct Diversion Rate for Clear Creek under A8180 – 2.5 cfs
8. 30-Day Average Direct Diversion Rate for Fall Creek under A8180 – 26.4 cfs
9. 30-Day Average Direct Diversion Rate for Trap Creek under A8180 – 0.7 cfs
10. 30-Day Average Direct Diversion Rate for Rucker Creek under A8180 – 18.8 cfs
11. Points of Diversion and Rediversion in NAD 27 and NAD 83 CCS Coordinates

Attachments

12. Photos and descriptions of locations of Points of Diversion and Rediversion
13. NID Upper Division System Flow diagram schematic
14. Proposed draft License for Permit 5815 (Application 8180)

Figure 1- Rollins Reservoir Storage Withdrawal

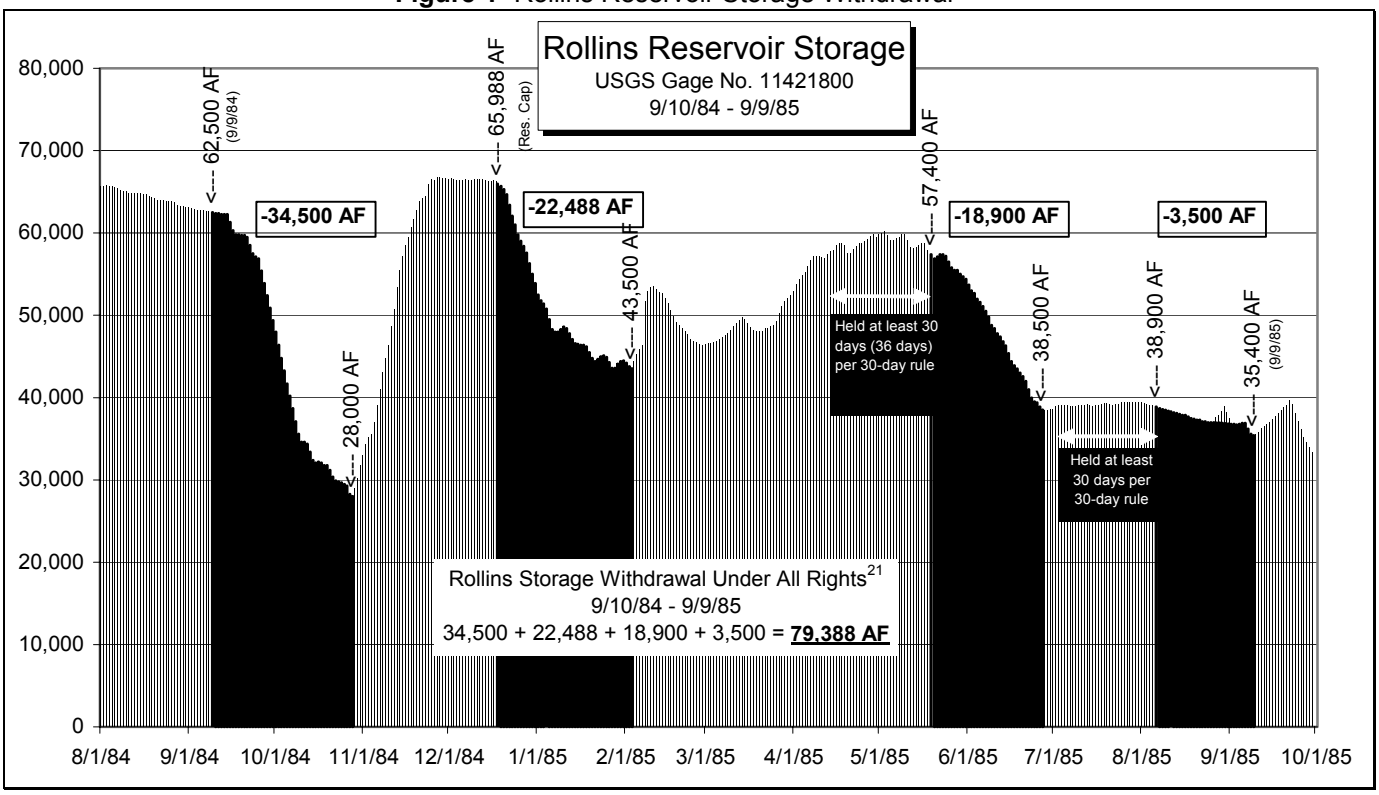
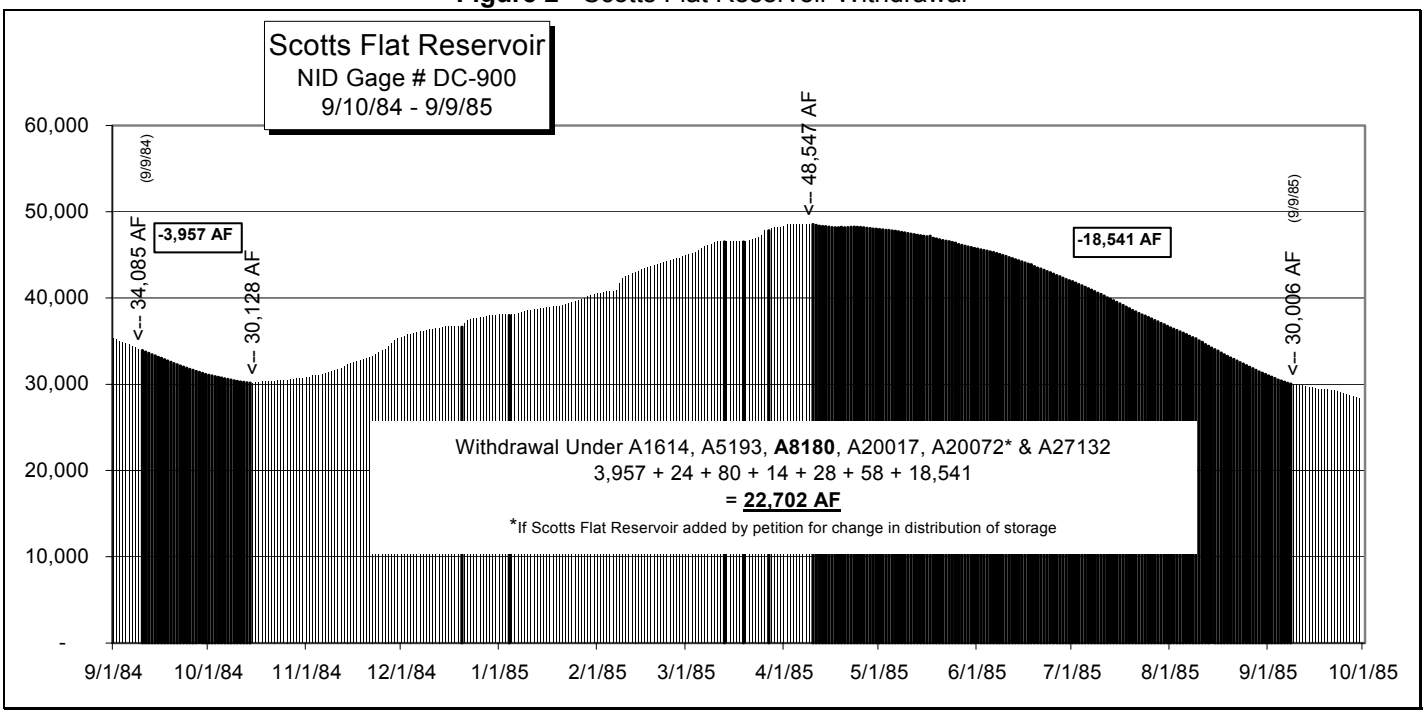


Figure 2 - Scotts Flat Reservoir Withdrawal



[21] As discussed in the inspection report for Permit 11626 (Application 2652B), the total combined withdrawal amount includes withdrawal quantities previously made from (and credited to) other NID and PG&E storage facilities, and natural Bear R. water collected outside the authorized diversion season.

Figure 3 - Combie Reservoir Storage Withdrawal

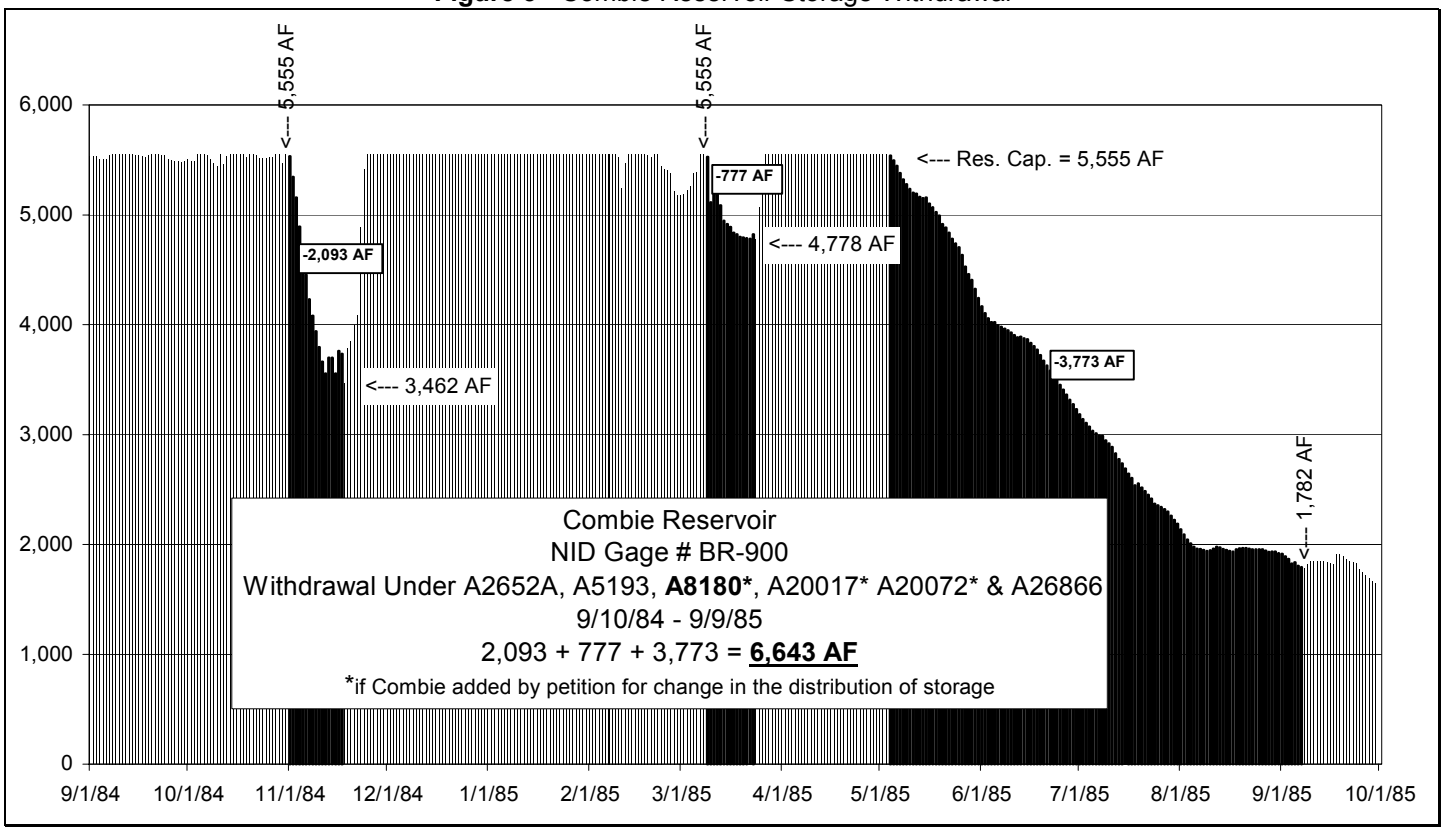


Table 4 - Water Right Summary
Nevada Irrigation District Claims of Riparian and Pre-1914 Right

STATEMENT NO.	WR TYPE	SOURCE	AMOUNT CFS	AMOUNT AF	PLACE OF STORAGE/DIVERSION	YEAR BUILT
S10591	RIPARIAN	DAMFINE SPG	0.22+		JACKSON MDWS CAMPGROUND	
S10592	RIPARIAN	UNNAMED TRIB TO PASS CK	0.22+		JACKSON MEADOWS CAMPGROUND	
S14353	RIPARIAN	DEER CK	96+		SCOTTS FLAT PH	
S14354	RIPARIAN	BEAR R.	840+		ROLLINS PH	
S160yy	RIPARIAN	BEAR R.	344+		COMBIE PH	
			+ may be increased if needed			
S4716	Pre-1914	CANYON CK	50	2,760	SAWMILL LAKE (enlarged to 3,030 AF in 1941)	1873 (Rebuilt 1910)
S4717	Pre-1914	CANYON CK	150	13,840	FRENCH LAKE	1859
S10794	Pre-1914	ORR CK	15	10	GOLD HILL CANAL	1880
		COON CK	35		CAMP FAR WEST CANAL	1880
S12949	Pre-1914	DEER CK	2		KEYSTONE CANAL	1851
S12950	Pre-1914	DEER CK	30		TUNNEL CANAL	1851
S12951	Pre-1914	DEER CK	21		NEWTOWN CANAL	1851
S12952	Pre-1914	DEER CK	90		D/S CANAL	1850
S12953	Pre-1914	SF DEER CK	55		CASCADE CANAL (enlarged to 65 cfs in 1969)	1857
S13330	Pre-1914	MIDDLE YUBA R.	75		MILTON DIVERSION DAM (enlarged to 500 cfs in 1928)	1854
S13790	Pre-1914	AUBURN RAVINE	40		HEMPHILL CANAL	1853
S13791	Pre-1914	AUBURN RAVINE	60		AUBURN RAVINE I CANAL (enlarged to 75 cfs in 1940)	1853
S13800	Pre-1914	CANYON CK		21,350	BOWMAN LAKE (enlarged to 68,510 AF in 1926)	1872
S13801	Pre-1914	CANYON CK		3,902	FAUCHERIE LAKE (enlarged to 3,980 AF in 1964)	1872
S13809	Pre-1914	BEAR R.	38		COMBIE PHASE I CANAL (enlarged to 200 cfs in 1929)	1853
S13926	Pre-1914	WOLF CK	65		TARR CANAL	1859
S13927	Pre-1914	S. YUBA R.	165		S. YUBA CANAL	1874
S13928	Pre-1914	S. YUBA R.	UNK		DRUM CANAL (enlarged to 860 cfs in 19xx)	1874
S14353	Pre-1914	DEER CK	96	48,547	SCOTTS FLAT	1948
S14354	Pre-1914	BEAR R.	880	65,988	ROLLINS	1965
S14355	Pre-1914	BEAR R.	350		BEAR RIVER CANAL (enlarged to 485 cfs in 1929)	1853
S14356	Pre-1914	CANYON CK	388	21,350	BOWMAN PH (enlarged to 68,510 AF in 1926)	1985 (PH Added)
S160xx	Pre-1914	JACKSON CRK		344	JACKSON LAKE (enlarged to 1,296 AF in 1942)	1872

UNK means that the pre-1914 rate of direct diversion has been requested, but not provided.
S160xx and S160yy refer to Statements of Water Diversion and Use filed in November 2007 and January 2008, respectively, which have not yet been assigned a number.

2002
3rd Inspection

Table 5 - Water Right Summary
Post-1914 Appropriative Rights Held by Nevada Irrigation District

APP ID	PERMIT	LICENSE	SOURCE	AMOUNT CFS	AMOUNT AF	PLACE OF STG/DIVER	SEASON DIVERSION	SEASON STORAGE	PURPOSE	eWRIMS FACE VALU
1270	2082	12795	JACKSON CK		970	JACKSON LAKE		YEAR-ROUND	MINING	130,701
			CANYON CK		3,980	FAUCHERIE LAKE		YEAR-ROUND	DOMESTIC	
			CANYON CK		1,221	SAWMILL LAKE		YEAR-ROUND	IRRIGATION	
			CANYON CK		58,829	BOWMAN LAKE		YEAR-ROUND	MUNICIPAL	
			CANYON CK	146		BSC	4/15 - 9/30			
			TEXAS CK	30		BSC	4/15 - 9/30			
			FALL CK	15		BSC	4/15 - 9/30			
			TRAP CK	5		BSC	4/15 - 9/30			
1614	1481		DEER CK		60,000	SCOTTS FLAT RES.		YEAR-ROUND	MINING	60,000
									DOMESTIC	
									IRRIGATION	
									MUNICIPAL*	
									INDUSTRIAL*	
1615	5801	8808	S. FK DEER C	100		CASCADE CAN	4/1 - 10/1		IRRIGATION	36,496
			DEER CK			SNOW MTN CANAL			DOMESTIC	
						D-S CANAL			MUNICIPAL*	
						ROUGH & READY CANAL			INDUSTRIAL*	
						NEWTOWN CANAL				
						TUNNEL CANAL				
						CHINA CANAL				
2275	2084	12796	MIDDLE YUBA		60,000	JACKSON MEADOWS		1/1 - 12/31	POWER	60,000
						BOWMAN LAKE			(Rim PH)	
2276	2085	12797	MIDDLE YUBA		60,000	JACKSON MEADOWS		12/1 - 7/15	IRRIGATION	60,000
						BOWMAN LAKE			DOMESTIC	
									MUNICIPAL	
									MINING	
2372	2087	12798	JACKSON CK		970	JACKSON LAKE		12/1 - 7/15	POWER	162,221
			CANYON CK		2,993	FAUCHERIE LAKE		12/1 - 7/15		
			CANYON CK		3,030	SAWMILL LAKE		12/1 - 7/15		
			CANYON CK		47,530	BOWMAN LAKE		12/1 - 7/15		
			CANYON CK	152		BSC	YEAR-ROUND			
			TEXAS CK	30		BSC	YEAR-ROUND			
			FALL CK	15		BSC	YEAR-ROUND			
			TRAP CK	5		BSC	YEAR-ROUND			
2652A	5803	10350	BEAR R.		5,555	COMBIE		11/30 - 6/1	IRRIGATION	12,500
					6,945	ROLLINS		11/30 - 6/1	DOMESTIC	
									POWER	
									RECREATION	

Table 5 Continued - Water Right Summary
Post-1914 Appropriative Water Rights Held by Nevada Irrigation District

APP ID	PERMIT	LICENSE	SOURCE	AMOUNT CFS	AMOUNT AF	PLACE OF STG/DIVER.	SEASON DIVERSION	SEASON STORAGE	PURPOSE	eWRIMS FACE VAL
2652B	11626		BEAR R.		65,000	ROLLINS		11/30 - 6/1	IRRIGATION INC. DOMESTIC RECREATION MUNICIPAL* DOMESTIC* INDUSTRIAL* INC. POWER*	65,000
4309	2935	4544	MIDDLE YUBA CANYON CRK ETC. NOT LISTED	135		DRUM CANAL	YEAR-ROUND		POWER	97,737
4310	2936	1707	MIDDLE YUBA CANYON CK ETC. NOT LISTED	126		S. YUBA CANAL	YEAR-ROUND		POWER	91,221
5193	13770		MIDDLE YUBA		50,000	JACKSON MEADOWS MILTON DIV. DAM BOWMAN SCOTTS FLAT ROLLINS COMBIE		10/1 - 12/1 1/1 - 6/30	IRRIGATION NC. DOMESTIC RECREATION MUNICIPAL* DOMESTIC* INDUSTRIAL*	50,000
6229	5804	8809	BEAR R.	120		BEAR R. CANAL	4/1 - 10/31		IRRIGATION DOMESTIC	50,936
6529	5805	4403	AUBURN RA	8		HEMPHILL CANAL	4/1 - 11/1		IRRIGATION	3,412
6701	5806	12799	CLEAR CK	5		BSC	10/1 - 9/30		POWER	10,542
			FALL CK	10		BSC	12/1 - 7/31			
			TRAP CK	5		BSC	1/1 - 7/31			
6702	5807	12800	CLEAR CK	5		BSC	4/15 - 9/30		IRRIGATION	4,889
			FALL CK	10		BSC	4/15 - 7/31			
			TRAP CK	5		BSC	4/15 - 7/31			
8177	5812	12801	WILSON CK	2.7	680	MBC BOWMAN	YEAR-ROUND	11/1 - 6/30	IRRIGATION DOMESTIC MUNICIPAL	1,580
8178	5813	12802	TEXAS CK	68		BSC	1/1 - 6/30		POWER	53,200
			CLEAR CK	13.6		BSC	1/1 - 7/31			
			FALL CK	75.7		BSC	12/1 - 7/31			
			TRAP CK	8.6		BSC	4/15 - 6/30			
			RUCKER CK	25		BSC	YEAR-ROUND			

Table 5 Continued - Water Right Summary
Post-1914 Appropriative Water Rights Held by Nevada Irrigation District

APP ID	PERMIT	LICENSE	SOURCE	AMOUNT CFS	AMOUNT AF	PLACE OF STG/DIVER.	SEASON DIVERSION	SEASON STORAGE	PURPOSE	eWRIMS FACE VAL
8179	5814	12803	WILSON CK	3.5	680	MBC	YEAR-ROUND	11/1 - 6/30	POWER	1,580
						BOWMAN				
8180	5815		CLEAR CK	30	6,000	BSC	YEAR-ROUND	11/1 - 6/30	IRRIGATION	207,895
			TEXAS CK	70	14,000	BSC	YEAR-ROUND	11/1 - 6/30	INC. DOMESTIC	
			FALL CK	85	17,000	BSC	YEAR-ROUND	11/1 - 6/30	MUNICIPAL*	
			TRAP CK	15	3,000	BSC	YEAR-ROUND	11/1 - 6/30	INDUSTRIAL*	
			RUCKER CK	25	5,000	BSC	YEAR-ROUND	11/1 - 6/30	DOMESTIC*	
						SCOTTS FLAT			INC. POWER*	
						ROLLINS*				
						COMBIE*				
15525	13771	10016	S. YUBA	200		SPAULDING	9/1 - 6/30		POWER	120,200
20017	13772		S. YUBA	200	18,000	ROLLINS	9/1 - 6/30	11/1 - 6/30	NC. DOMESTI	101,160
						SCOTTS FLAT			IRRIGATION	
									MUNICIPAL*	
									DOMESTIC*	
									INDUSTRIAL*	
									INC. POWER*	
20072	13773		MIDDLE YUBA		50,000	JACKSON MEADOWS		10/1 - 6/30	POWER	50,000
						BOWMAN				
						ROLLINS*				
						COMBIE*				
						SCOTTS FLAT*				
21151	14799	9903	BEAR R.	1,056		BEAR R.	YEAR-ROUND		POWER	764,520
						(CHICAGO PARK PH)				
21152	14800	9902	BEAR R.	550		BEAR R.	YEAR-ROUND		POWER	398,188
						(DUTCH FLAT PH)				
24983	16953		BEAR R.	700	62,080	ROLLINS	YEAR-ROUND	11/30 - 6/1	POWER	573,080
						COMBIE*				
26866	18757		BEAR R.	1,000		COMBIE	YEAR-ROUND		POWER	723,978
27132	18608		DEER CK	85	60,000	SCOTTS FLAT	YEAR-ROUND	YEAR-ROUND	POWER	121,538
27559	19158		CANYON CK	322	65,000	BOWMAN	YEAR-ROUND	12/1 - 7/31	POWER	298,121

MBC - Milton-Bowman Conduit, aka Milton-Bowman Tunnel

BSC - Bowman-Spaulding Conduit

* If added by petition

Sum Consumptive Use: 784,569
Sum Power-only: 3,526,126
Grand Sum: 4,310,695 AFA

Table 6 - Direct Diversion Rate for **Texas Creek** Under A8180
5/26/83 – 6/24/83

	Tribs Remaining (Last Column of Remaining Tribs Sheet) (AF)	Consumptive Use of D/d %	C.U. Tribs Remaining (AF)	Texas Creek 32%	Amt Taken Under A1270 After 4/15	30-d avg Under A1270 Max 59.5 AF (=30 cfs)	Amt Taken Under A8180
5/8/83	173	30%	52	17	17	na	
5/9/83	173	30%	52	17	17	na	
5/10/83	154	31%	48	15	15	na	
5/11/83	168	31%	53	17	17	na	
5/12/83	159	32%	51	16	16	na	
5/13/83	151	33%	49	16	16	na	
5/14/83	135	34%	46	15	15	na	
5/15/83	110	34%	38	12	12	na	
5/16/83	125	35%	43	14	14	na	
5/17/83	168	37%	62	20	20	na	
5/18/83	169	37%	62	20	20	na	
5/19/83	146	38%	55	18	18	na	
5/20/83	133	42%	56	18	18	na	
5/21/83	135	42%	57	18	18	na	
5/22/83	156	41%	63	20	20	na	
5/23/83	160	45%	71	23	23	na	
5/24/83	157	45%	70	22	22	na	
5/25/83	151	52%	79	25	25	na	
5/26/83	390	53%	205	66	66	na	0
5/27/83	499	53%	264	84	84	na	0
5/28/83	553	53%	292	93	93	na	0
5/29/83	546	57%	313	100	100	na	0
5/30/83	545	57%	312	100	100	na	0
5/31/83	540	58%	313	100	100	na	0
6/1/83	532	54%	290	93	93	na	0
6/2/83	528	54%	287	92	92	na	0
6/3/83	479	52%	250	80	80	na	0
6/4/83	504	52%	263	84	84	na	0
6/5/83	528	52%	276	88	88	na	0
6/6/83	526	50%	265	85	85	46	0
6/7/83	526	51%	270	86	86	49	0
6/8/83	526	51%	270	87	87	51	0
6/9/83	506	49%	250	80	80	53	0
6/10/83	460	48%	221	71	71	55	0
6/11/83	487	48%	232	74	74	57	0
6/12/83	528	48%	252	81	81	59.0	0
6/13/83	524	53%	275	88	31	**59.5**	57
6/14/83	508	47%	237	76	12	**59.5**	64
6/15/83	506	47%	237	76	14	**59.5**	62
6/16/83	491	47%	230	73	20	**59.5**	54
6/17/83	419	47%	197	63	20	**59.5**	43
6/18/83	529	48%	253	81	18	**59.5**	63
6/19/83	514	48%	246	79	18	**59.5**	61
6/20/83	376	51%	193	62	18	**59.5**	44
6/21/83	315	52%	162	52	20	**59.5**	32
6/22/83	340	52%	175	56	23	**59.5**	33
6/23/83	400	53%	211	68	22	**59.5**	45
6/24/83	413	53%	218	70	25	**59.5**	45
						30-day average:	**20.1** AF/day
						x	0.5042
						Max 30-day average Direct Diversion Rate from Texas Creek:	**10.1** **cfs**
						(Consumptive Use under A8180)	

Table 7 - Direct Diversion Rate for **Clear Creek** Under A8180
5/26/83 – 6/24/83

	Tribs Remaining (Last Column of Remaining Tribs Sheet) (AF)	Consumptive Use of D/d %	C.U. Tribs Remaining (AF)	Clear Creek (AF) **6%**	Amt Taken Under A6702 After 4/15	30-d avg Under A6702 Max 9.9 AF (= 5 cfs)	Amt Taken Under **A8180**
5/5/1983	180	30%	54	3	3	NA	
5/6/1983	179	30%	54	3	3	NA	
5/7/1983	179	30%	53	3	3	NA	
5/8/1983	173	30%	52	3	3	NA	
5/9/1983	173	30%	52	3	3	NA	
5/10/1983	154	31%	48	3	3	NA	
5/11/1983	168	31%	53	3	3	NA	
5/12/1983	159	32%	51	3	3	NA	
5/13/1983	151	33%	49	3	3	NA	
5/14/1983	135	34%	46	3	3	NA	
5/15/1983	110	34%	38	2	2	NA	
5/16/1983	125	35%	43	3	3	NA	
5/17/1983	168	37%	62	4	4	NA	
5/18/1983	169	37%	62	4	4	NA	
5/19/1983	146	38%	55	3	3	NA	
5/20/1983	133	42%	56	3	3	NA	
5/21/1983	135	42%	57	3	3	NA	
5/22/1983	156	41%	63	4	4	NA	
5/23/1983	160	45%	71	4	4	NA	
5/24/1983	157	45%	70	4	4	NA	
5/25/1983	151	52%	79	5	5	NA	
5/26/1983	390	53%	205	12	12	NA	0
5/27/1983	499	53%	264	16	16	NA	0
5/28/1983	553	53%	292	18	18	NA	0
5/29/1983	546	57%	313	19	19	NA	0
5/30/1983	545	57%	312	19	19	NA	0
5/31/1983	540	58%	313	19	19	NA	0
6/1/1983	532	54%	290	17	17	NA	0
6/2/1983	528	54%	287	17	17	NA	0
6/3/1983	479	52%	250	15	15	7.4	0
6/4/1983	504	52%	263	16	16	7.8	0
6/5/1983	528	52%	276	17	17	8.3	0
6/6/1983	526	50%	265	16	16	8.7	0
6/7/1983	526	51%	270	16	16	9.1	0
6/8/1983	526	51%	270	16	16	9.5	0
6/9/1983	506	49%	250	15	13	**9.9**	2
6/10/1983	460	48%	221	13	3	**9.9**	10
6/11/1983	487	48%	232	14	3	**9.9**	11
6/12/1983	528	48%	252	15	3	**9.9**	12
6/13/1983	524	53%	275	17	3	**9.9**	14
6/14/1983	508	47%	237	14	2	**9.9**	12
6/15/1983	506	47%	237	14	3	**9.9**	12
6/16/1983	491	47%	230	14	4	**9.9**	10
6/17/1983	419	47%	197	12	4	**9.9**	8
6/18/1983	529	48%	253	15	3	**9.9**	12
6/19/1983	514	48%	246	15	3	**9.9**	11
6/20/1983	376	51%	193	12	3	**9.9**	8
6/21/1983	315	52%	162	10	4	**9.9**	6
6/22/1983	340	52%	175	11	4	**9.9**	6
6/23/1983	400	53%	211	13	4	**9.9**	8
6/24/1983	413	53%	218	13	5	**9.9**	8
						30-day average:	**5.0** AF/day
						x	0.5042
						Max 30-day average Direct Diversion Rate from Clear Creek: (Consumptive Use Under A8180)	**2.5 cfs**

Table 8 – Max D/d Rate for **Fall Creek** Under A8180: 5/26/83 – 6/24/83

	Tribs Remaining (Last Column of Remaining Tribs Sheet) (af)	Consumptive Use of D/d %	C.U. Tribs Remaining (AF)	Fall Crk Creek (AF) 41%	Amt Taken Under A1270 After 4/15	30-d avg Under A1270 Max 29.8 AF (= 15 cfs)	Amt Taken Under A6702 After 4/15	30-d avg Under A6702 Max 19.8 AF (= 10 cfs)	Remaining Amt Taken Under **A8180**
4/23/83	19	31%	6	2	2	NA			
4/24/83	63	33%	21	9	9	NA			
4/25/83	117	31%	36	15	15	NA			
4/26/83	159	30%	47	19	19	NA			
4/27/83	129	30%	38	16	16	NA			
4/28/83	184	30%	56	23	23	NA			
4/29/83	184	31%	57	23	23	NA	0		
4/30/83	190	31%	59	24	24	NA	0		
5/1/83	184	29%	53	22	22	NA	0		
5/2/83	133	30%	40	16	16	NA	0		
5/3/83	157	30%	47	19	19	NA	0		
5/4/83	177	31%	54	22	22	NA	0		
5/5/83	180	30%	54	22	22	NA	0		
5/6/83	179	30%	54	22	22	NA	0		
5/7/83	179	30%	53	22	22	NA	0		
5/8/83	173	30%	52	21	21	NA	0		
5/9/83	173	30%	52	21	21	NA	0		
5/10/83	154	31%	48	20	20	NA	0		
5/11/83	168	31%	53	22	22	NA	0		
5/12/83	159	32%	51	21	21	NA	0		
5/13/83	151	33%	49	20	20	NA	0		
5/14/83	135	34%	46	19	19	NA	0		
5/15/83	110	34%	38	16	16	NA	0		
5/16/83	125	35%	43	18	18	NA	0		
5/17/83	168	37%	62	25	25	NA	0		
5/18/83	169	37%	62	26	26	NA	0		
5/19/83	146	38%	55	23	23	NA	0		
5/20/83	133	42%	56	23	23	NA	0		
5/21/83	135	42%	57	23	23	NA	0		
5/22/83	156	41%	63	26	26	20	0		
5/23/83	160	45%	71	29	29	21	0		
5/24/83	157	45%	70	29	29	22	0		
5/25/83	151	52%	79	32	32	22	0		
5/26/83	390	53%	205	84	84	24	0		0
5/27/83	499	53%	264	108	108	27	0		0
5/28/83	553	53%	292	120	95	**29.8**	25	1	0
5/29/83	546	57%	313	128	23	**29.8**	105	4	0
5/30/83	545	57%	312	128	24	**29.8**	104	8	0
5/31/83	540	58%	313	128	22	**29.8**	106	11	0
6/1/83	532	54%	290	119	16	**29.8**	102	15	0
6/2/83	528	54%	287	118	19	**29.8**	98	18	0
6/3/83	479	52%	250	103	22	**29.8**	54	**19.8**	26
6/4/83	504	52%	263	108	22	**29.8**	0	**19.8**	86
6/5/83	528	52%	276	113	22	**29.8**	0	**19.8**	91
6/6/83	526	50%	265	109	22	**29.8**	0	**19.8**	87
6/7/83	526	51%	270	111	21	**29.8**	0	**19.8**	89
6/8/83	526	51%	270	111	21	**29.8**	0	**19.8**	89
6/9/83	506	49%	250	103	20	**29.8**	0	**19.8**	83
6/10/83	460	48%	221	90	22	**29.8**	0	**19.8**	69
6/11/83	487	48%	232	95	21	**29.8**	0	**19.8**	74
6/12/83	528	48%	252	103	20	**29.8**	0	**19.8**	83
6/13/83	524	53%	275	113	19	**29.8**	0	**19.8**	94
6/14/83	508	47%	237	97	16	**29.8**	0	**19.8**	82
6/15/83	506	47%	237	97	18	**29.8**	0	**19.8**	80
6/16/83	491	47%	230	94	25	**29.8**	0	**19.8**	69
6/17/83	419	47%	197	81	26	**29.8**	0	**19.8**	55
6/18/83	529	48%	253	104	23	**29.8**	0	**19.8**	81
6/19/83	514	48%	246	101	23	**29.8**	0	**19.8**	78
6/20/83	376	51%	193	79	23	**29.8**	0	**19.8**	56
6/21/83	315	52%	162	67	26	**29.8**	0	**19.8**	41
6/22/83	340	52%	175	72	29	**29.8**	0	**19.8**	43
6/23/83	400	53%	211	87	29	**29.8**	0	**19.8**	58
6/24/83	413	53%	218	89	32	**29.8**	0	**19.8**	57

30-day average: **52.4** AF

x 0.5042

Max 30-day average Direct Diversion Rate from Fall Creek: 26.4 cfs
(Consumptive Use Under A8180)

2002
3rd Inspection

Table 9 - Direct Diversion Rate for **Trap Creek** Under A8180
3/16/83 – 4/14/83

	Tribs Remaining (Last Column of Remaining Tribs Sheet) (AF)	Consumptive Use of D/d %	C.U. Tribs Remaining (AF)	Trap Crk (AF) **6%**	Amt Taken Under A1270 After 4/15	Amt Taken Under A6702 After 4/15	Amt Taken Under **A8180**
3/16/1983	189	15%	29	1.7	-	-	1.7
3/17/1983	168	15%	25	1.5	-	-	1.5
3/18/1983	166	15%	25	1.5	-	-	1.5
3/19/1983	167	15%	25	1.5	-	-	1.5
3/20/1983	179	16%	28	1.7	-	-	1.7
3/21/1983	186	16%	30	1.8	-	-	1.8
3/22/1983	169	16%	27	1.6	-	-	1.6
3/23/1983	163	16%	26	1.5	-	-	1.5
3/24/1983	161	16%	26	1.5	-	-	1.5
3/25/1983	137	17%	23	1.4	-	-	1.4
3/26/1983	121	16%	19	1.1	-	-	1.1
3/27/1983	121	15%	19	1.1	-	-	1.1
3/28/1983	101	15%	15	0.9	-	-	0.9
3/29/1983	87	15%	13	0.8	-	-	0.8
3/30/1983	111	14%	16	1.0	-	-	1.0
3/31/1983	294	15%	44	2.6	-	-	2.6
4/1/1983	258	15%	39	2.4	-	-	2.4
4/2/1983	165	15%	25	1.5	-	-	1.5
4/3/1983	123	15%	19	1.1	-	-	1.1
4/4/1983	131	11%	14	0.9	-	-	0.9
4/5/1983	121	10%	12	0.7	-	-	0.7
4/6/1983	135	10%	14	0.8	-	-	0.8
4/7/1983	123	13%	16	0.9	-	-	0.9
4/8/1983	123	13%	16	0.9	-	-	0.9
4/9/1983	123	13%	16	0.9	-	-	0.9
4/10/1983	125	16%	21	1.2	-	-	1.2
4/11/1983	125	17%	21	1.3	-	-	1.3
4/12/1983	113	17%	19	1.1	-	-	1.1
4/13/1983	105	46%	48	2.9	-	-	2.9
4/14/1983	111	16%	18	1.1	-	-	1.1
						30-day average:	**1.4** AF/day
						x	0.5042
	Max 30-day average Direct Diversion from Trap Creek under A8180:						**0.7 cfs**

Table 10 - Direct Diversion Rate for **Rucker Creek** Under A8180
5/26/83 – 6/24/83

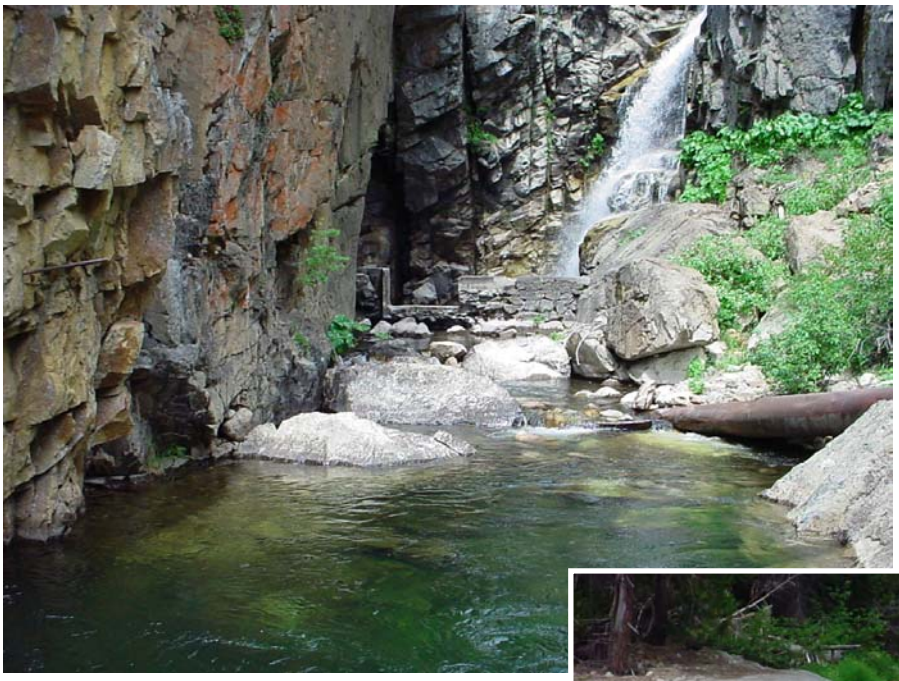
	Tribs Remaining (Last Column of Remaining Tribs Sheet) (AF)	Consumptive Use of D/d %	C.U. Tribs Remaining (AF)	Rucker Creek 15%
5/26/1983	390	53%	205	30.8
5/27/1983	499	53%	264	39.6
5/28/1983	553	53%	292	43.8
5/29/1983	546	57%	313	46.9
5/30/1983	545	57%	312	46.8
5/31/1983	540	58%	313	46.9
6/1/1983	532	54%	290	43.4
6/2/1983	528	54%	287	43.0
6/3/1983	479	52%	250	37.5
6/4/1983	504	52%	263	39.5
6/5/1983	528	52%	276	41.5
6/6/1983	526	50%	265	39.8
6/7/1983	526	51%	270	40.5
6/8/1983	526	51%	270	40.6
6/9/1983	506	49%	250	37.5
6/10/1983	460	48%	221	33.1
6/11/1983	487	48%	232	34.9
6/12/1983	528	48%	252	37.8
6/13/1983	524	53%	275	41.3
6/14/1983	508	47%	237	35.6
6/15/1983	506	47%	237	35.6
6/16/1983	491	47%	230	34.5
6/17/1983	419	47%	197	29.6
6/18/1983	529	48%	253	37.9
6/19/1983	514	48%	246	36.8
6/20/1983	376	51%	193	29.0
6/21/1983	315	52%	162	24.4
6/22/1983	340	52%	175	26.3
6/23/1983	400	53%	211	31.7
6/24/1983	413	53%	218	32.7
			30-day average:	**37.3** AF/day
			x	0.5042
Max 30-day average D/d Rate from Rucker Crk:				**18.8 cfs**

Table 11 – Points of Diversion and Rediversion in NAD 27 and NAD 83 CCS Coordinates

Point of Diversion or Rediversion Name ID	Map Index #	Stream	CCS, Zone 2, NAD 27 Northing	Easting	Qtr - Qtr	Section	Townshp	Range	USGS Quad Map	NAD 27 --> NAD 83 Conversion Values North (feet)	East (feet)	California Coordinates CCS, NAD **83** Datum Northing (Y)	Easting (X)
					(MDB&M)								
Texas Creek BSC	9	Texas Creek	636,000	2,374,350	SW¼ of SW¼	19	T18N	R12E	Graniteville	1,640,389	4,561,361	2,276,389	6,935,711
Clear Creek BSC	10	Clear Creek	627,100	2,373,000	NE¼ of SE¼	36	T18N	R11E	Graniteville	1,640,389	4,561,361	2,267,489	6,934,361
Fall Creek BSC	11	Fall Creek	624,300	2,374,200	NW¼ of NW¼	6	T17N	R12E	Blue Canyon	1,640,389	4,561,361	2,264,689	6,935,561
Trap Creek BSC	12	Trap Creek	622,100	2,374,050	NW¼ of SW¼	6	T17N	R12E	Blue Canyon	1,640,389	4,561,361	2,262,489	6,935,411
Rucker Creek BSC	13	Rucker Creek	617,984	2,377,778	SE¼ of NE¼	7	T17N	R12E	Blue Canyon	1,640,389	4,561,362	2,258,373	6,939,140
Fuller Lake (PG&E)	14	UNST	614,110	2,381,982	NW¼ of NE¼	17	T17N	R12E	Blue Canyon	1,640,389	4,561,362	2,254,499	6,943,344
Spaulding Dam (PG&E)	15	South Yuba R.	607,300	2,384,200	SE¼ of NE¼	20	T17N	R12E	Blue Canyon	1,640,389	4,561,362	2,247,689	6,945,562
Cascade Canal	16	S. Fork Deer Crk	596,100	2,325,700	SW¼ of NW¼	34	T17N	R10E	Washington	1,640,388	4,561,361	2,236,488	6,887,061
Scotts Flat Dam	17	Deer Creek	586,700	2,303,000	SE¼ of SE¼	2	T16N	R9E	North Bloomfield	1,640,387	4,561,360	2,227,087	6,864,360
Lwr Scotts Flat Diversion Dam	18	Deer Creek	585,321	2,296,424	NW¼ of NE¼	10	T16N	R9E	North Bloomfield	1,640,387	4,561,360	2,225,708	6,857,784
Tarr Canal	19	Wolf Creek	545,577	2,265,080	SE¼ of SE¼	10	T15N	R8E	Grass Valley	1,640,387	4,561,360	2,185,964	6,826,440
Newtown Canal	20	Deer Creek	582,012	2,276,118	NW¼ of SE¼	12	T16N	R8E	Nevada City	1,640,387	4,561,360	2,222,399	6,837,478
Tunnel Canal	21	Deer Creek	575,963	2,246,954	NW¼ of SW¼	18	T16N	R8E	Rough & Ready	1,640,387	4,561,359	2,216,350	6,808,313
China/Union Canal	22	Squirrel Creek	566,066	2,221,590	SW¼ of NW¼	29	T16N	R7E	Rough & Ready	1,640,387	4,561,359	2,206,453	6,782,949
Rattlesnake Diversion Dam	23	Rattlesnake Crk	549,438	2,274,023	NW¼ of NE¼	12	T15N	R8E	Grass Valley	1,640,387	4,561,360	2,189,825	6,835,383
Wolf-Hannaman Diversion Dam	24	Little Wolf Crk	501,968	2,228,005	NW¼ of NE¼	28	T14N	R7E	Wolf	1,640,387	4,561,359	2,142,355	6,789,364
Drum Afterbay Dam	25	Bear River	580,850	2,347,334	SW¼ of NW¼	17	T16N	R11E	Washington	1,640,388	4,561,361	2,221,238	6,908,695
Dutch Flat Afterbay Dam	26	Bear River	565,780	2,327,785	NE¼ of NW¼	34	T16N	R10E	Dutch Flat	1,640,387	4,561,361	2,206,167	6,889,146
Rollins Dam	27	Bear River	536,750	2,297,350	NE¼ of SE¼	22	T15N	R9E	Chicago Park	1,640,386	4,561,360	2,177,136	6,858,710
Bear River Canal	28	Bear River	536,100	2,297,100	SW¼ of SE¼	22	T15N	R9E	Chicago Park	1,640,386	4,561,360	2,176,486	6,858,460
Halsey Afterbay Dam	29	Dry Creek	470,880	2,272,470	NE¼ of NE¼	26	T13N	R8E	Auburn	1,640,386	4,561,360	2,111,266	6,833,830
Auburn Ravine 1 Canal	30	Auburn Ravine	449,466	2,240,125	NE¼ of NE¼	14	T12N	R7E	Gold Hill	1,640,386	4,561,359	2,089,852	6,801,484
Hemphill Canal	31	Auburn Ravine	449,000	2,213,100	NW¼ of NE¼	13	T12N	R6E	Lincoln	1,640,387	4,561,359	2,089,387	6,774,459
Combie Dam	32	Bear River	490,600	2,267,800	SW¼ of NW¼	2	T13N	R8E	Lake Combie	1,640,386	4,561,360	2,130,986	6,829,160
Orr Creek Dam (GH 1)	33	Orr Creek	479,717	2,250,134	SW¼ of NE¼	18	T13N	R8E	Auburn	1,640,386	4,561,360	2,120,103	6,811,494
Camp Far West Canal	34	Coon Creek	476,431	2,241,360	SW¼ of SW¼	13	T13N	R7E	Gold Hill	1,640,386	4,561,360	2,116,817	6,802,720
Doty South Canal	35	Doty Ravine	463,589	2,212,685	SW¼ of NE¼	36	T13N	R6E	Lincoln	1,640,387	4,561,359	2,103,976	6,774,044

bold indicates project storage facilities

Attachment 12 - Photos and descriptions of locations of Points of Diversion and Rediversion
POD photos taken by K. Long PORD photos taken by NID
CCS location information collected by NID surveyors



(9) Texas Creek: North 636,000 ft and East 2,374,350 ft, CCS, Zone 2, NAD27, within SW¼ of SW¼ Section19, T18N, R12E , MDB&M

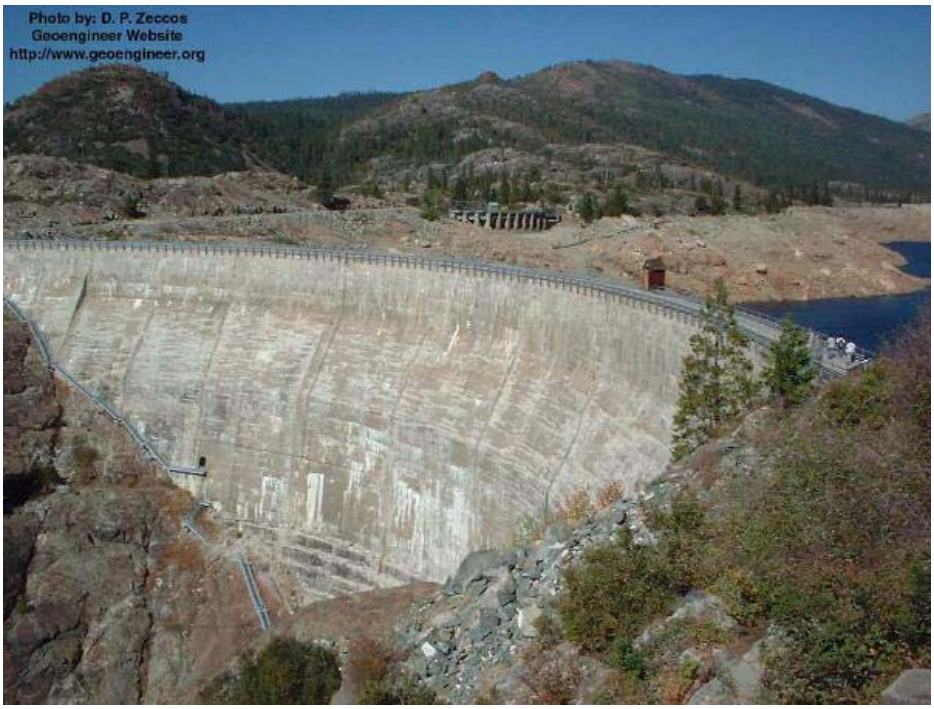
(10) Clear Creek: North 627,100 ft and East 2,373,000 ft, CCS, Zone 2, NAD27, within NE¼ of SE¼ Section 36, T18N, R11E, MDB&M

(11) Fall Creek: North 624,300 ft and East 2,374,200 ft, CCS, Zone 2, NAD27, within NW¼ of NW¼ Section 6, T17N, R12E , MDB&M

(12) Trap Creek: North 622,100 ft and East 2,374,050 ft, CCS, Zone 2, NAD27, within NW¼ of SW¼ Section 6, T17N, R12E, MDB&M

(13) Rucker Creek: North 617,980 ft and East 2,377,780 ft, CCS, Zone 2, NAD27, within SE¼ of NE¼ Section 7, T17N, R12E, MDB&M

(14) Fuller Lake Dam - By California Coordinate System of 1927, Zone 2, North 614,110 feet and East 2,381,980 feet, being within NW¼ of NE¼ of Section 17, T17N, R12E, MDB&M



(15) PG&E Spaulding Reservoir Dam - By California Coordinate System of 1927, Zone 2, North 607,300 feet and East 2,384,200 feet, being within SE¼ of NE¼ of Section 20, T17N, R12E, MDB&M

Photo used with permission of Dimitris Zekkos, PhD

(16) Cascade Canal Diversion Dam - By California Coordinate System of 1927, Zone 2, North 596,100 feet and East 2,325,700 feet, being within SW¼ of NW¼ of Section 34, T17N, R10E, MDB&M

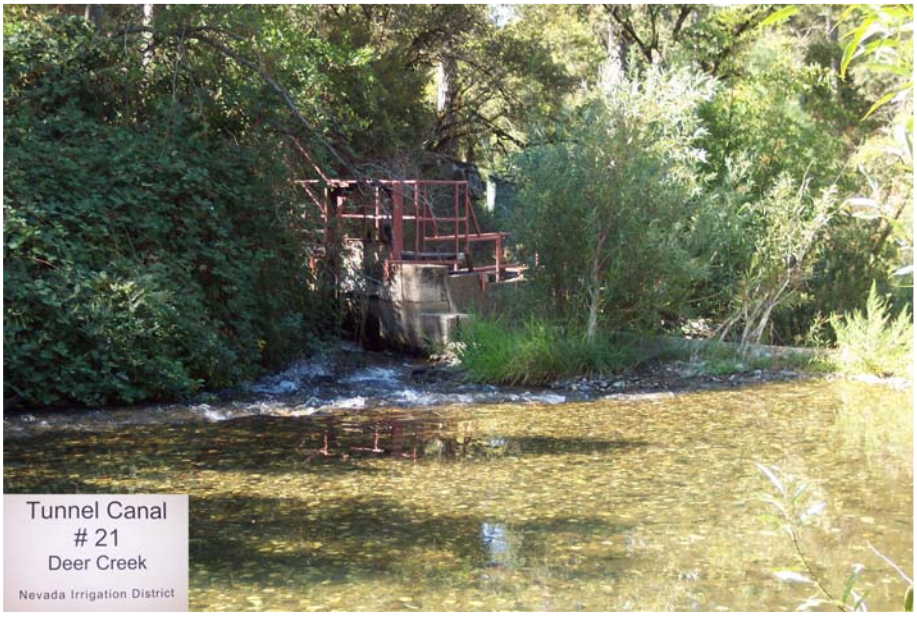
(17) Scotts Flat Reservoir Dam - By California Coordinate System of 1927, Zone 2, North 586,700 feet and East 2,303,000 feet, being within SE¼ of SE¼ of Section 2, T16N, R9E, MDB&M

(18)/(36) Lower Scotts Flat [Re-]Diversion Dam/D-S Canal - By California Coordinate System of 1927, Zone 2, North 585,320 feet and East 2,296,420 feet, being within NW¼ of NE¼ of Section 10, T16N, R9E, MDB&M

(19) Tarr Canal [Re-]Diversion Dam (on Wolf Creek) - By California Coordinate System of 1927, Zone 2, North 545,577 feet and East 2,265,080 feet, being within SE¼ of SE¼ of Section 10, T15N, R8E, MDB&M

(20). Newtown Canal [Re-]Diversion Dam (on Deer Creek) - By California Coordinate System of 1927, Zone 2, North 582,010 feet and East 2,276,120 feet, being within NW¼ of SE¼ of Section 12, T16N, R8E, MDB&M

(21) Tunnel Canal [Re-]Diversion Dam (on Deer Creek) - By California Coordinate System of 1927, Zone 2, North 575,960 feet and East 2,246,950 feet, being within NW¼ of SW¼ of Section 18, T16N, R8E, MDB&M



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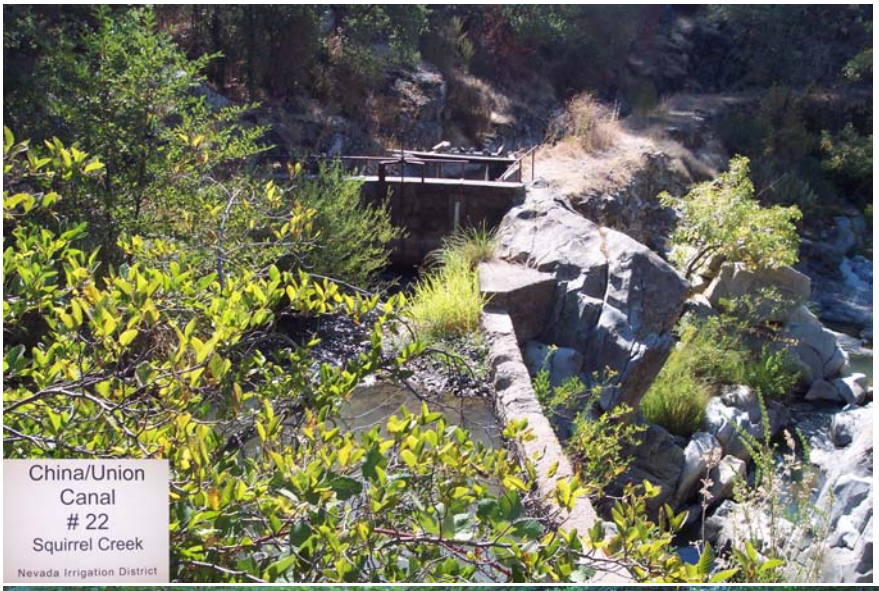


(22) China/Union Canal [Re-]Diversion Dam (on Squirrel Creek) - By California Coordinate System of 1927, Zone 2, North 566,070 feet and East 2,221,590 feet, being within SW¼ of NW¼ of Section 29, T16N, R7E, MDB&M

(23) Rattlesnake Ditch [Re-]Diversion Dam (on Rattlesnake Creek) - By California Coordinate System of 1927, Zone 2, North 549,440 feet and East 2,274,020 feet, being within NW¼ of NE¼ of Section 12, T15N, R8E, MDB&M

(24) Wolf-Hannaman Canal [Re-]Diversion Dam – By California Coordinate System of 1927, Zone 2, North 501,970 feet and East 2,228,000 feet, being within NW¼ of NE¼ of Section 28, T14N, R7E, MDB&M

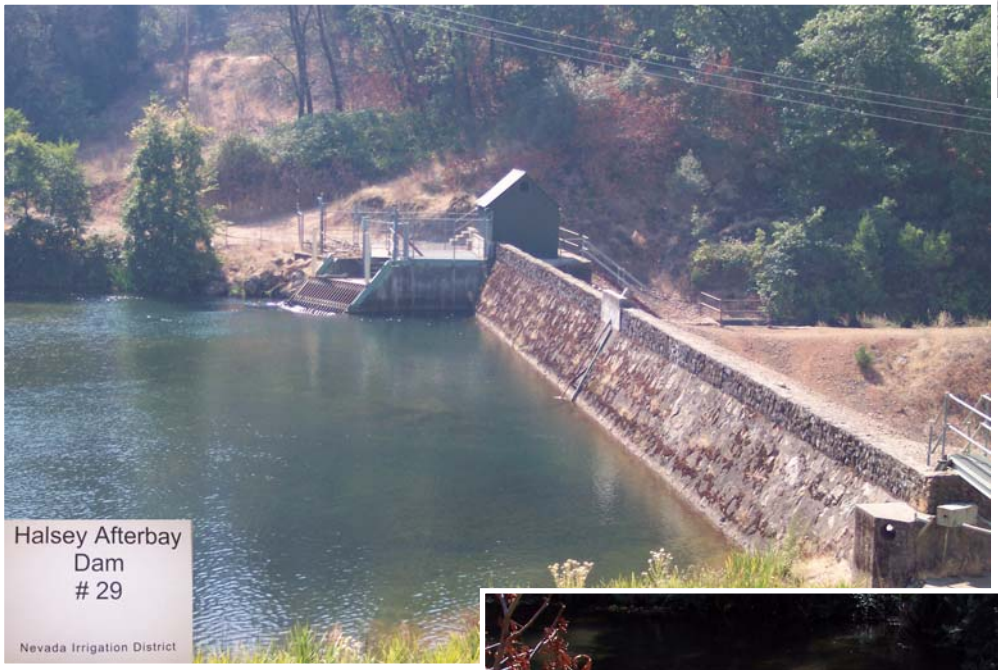
(Same as PORD # 17 in Permit - “Little Wolf Creek”)

(25) Drum Afterbay Dam (Dutch Flat PH Forebay) (on Bear R.) - By California Coordinate System of 1927, Zone 2, North 580,850 feet and East 2,347,330 feet, being within SW¼ of NW¼ of Section 17, T16N, R11E, MDB&M

(26) Dutch Flat Afterbay Dam (Chicago Park PH Forebay) (on Bear R.) - By California Coordinate System of 1927, Zone 2, North 565,780 feet and East 2,327,785 feet, being within NE¼ of NW¼ of Section 34, T16N, R10E, MDB&M

(27) Rollins Reservoir Dam (on Bear R.) - By California Coordinate System of 1927, Zone 2, North 536,750 feet and East 2,297,350 feet, being within NE¼ of SE¼ of Section 22, T15N, R9E, MDB&M

(28) Bear River Canal Diversion Dam (on Bear R. below Rollins Reservoir) - By California Coordinate System of 1927, Zone 2, North 536,100 feet and East 2,297,100 feet, being within SW¼ of SE¼ of Section 22, T15N, R9E, MDB&M



(29) Halsey Afterbay Dam (on Dry Creek) – By California Coordinate System of 1927, Zone 2, North 470,880 feet and East 2,272,470 feet, being within NE¼ of NE¼ of Section 26, T13N, R8E, MDB&M

(30) Auburn Ravine 1 Canal Diversion Dam - By California Coordinate System of 1927, Zone 2, North 449,470 feet and East 2,240,125 feet, being within NE¼ of NE¼ of Section 14, T12N, R7E, MDB&M

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(31) Hemphill Canal [Re-]Diversion Dam - By California Coordinate System of 1927, Zone 2, North 449,000 feet and East 2,213,100 feet, being within NW¼ of NE¼ of Section 13, T12N, R6E, MDB&M

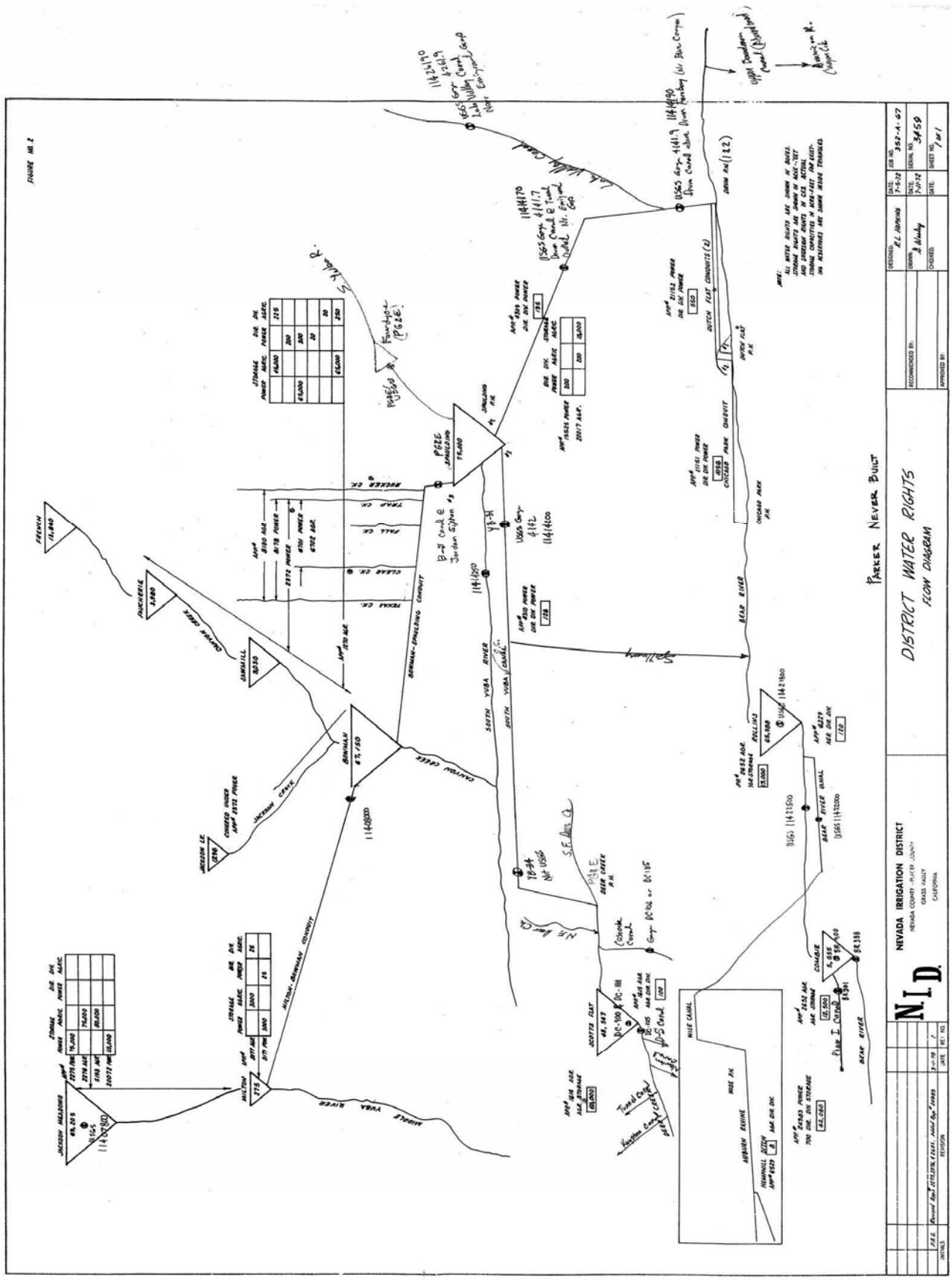
(32) Combie Reservoir Dam (on Bear R.) (aka Van Giessen Dam) - By California Coordinate System of 1927, Zone 2, North 490,600 feet and East 2,267,800 feet, being within SW¼ of NW¼ of Section 2, T13N, R8E, MDB&M

(33) Orr Creek [Re-]Diversion Dam (on Orr Creek) - By California Coordinate System of 1927, Zone 2, North 479,720 feet and East 2,250,130 feet, being within SW¼ of NE¼ of Section 18, T13N, R8E, MDB&M

(34) Camp Far West Canal [Re-]Diversion Dam (on Coon Creek) - By California Coordinate System of 1927, Zone 2, North 476,430 feet and East 2,241,360 feet, being within SW¼ of SW¼ of Section 13, T13N, R7E, MDB&M

(35) Doty South Canal [Re-]Diversion Dam (on Doty Ravine) - By California Coordinate System of 1927, Zone 2, North 463,590 feet and East 2,212,690 feet, being within SW¼ of NE¼ of Section 36, T13N, R6E, MDB&M

Attachment 13 - NID Upper Division System Flow Diagram Schematic



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3rd Inspection

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

License for Diversion and Use of Water

APPLICATION 8180 PERMIT 5815 LICENSE

THIS IS TO CERTIFY, That

Nevada Irrigation District
1036 W. Main St
Grass Valley, CA 95945

has made proof as of **June 26, 2002** (the date of inspection) to the satisfaction of the State Water Resources Control Board (State Water Board) of a right to the use of the waters of **(9) Texas Creek, (10) Clear Creek, (11) Fall Creek, (12) Trap Creek and (13) Rucker Creek** in **Nevada County**

tributary to **(9) Canyon Creek, (10)(12) Fall Creek, thence South Yuba River**

for the purpose of **Municipal, Domestic, Industrial, Irrigation, and Incidental Power uses**

under Permit **5815** of the State Water Board; that the right to the use of this water has been perfected in accordance with the laws of California, the Regulations of the State Water Board, and the permit terms; that the priority of this right dates from **November 27, 1934**; and that the amount of water to which this right is entitled and hereby confirmed is limited to the amount actually beneficially used for the stated purposes and shall not exceed **a total of fifty-eight and five tenths (58.5) cubic feet per second by direct diversion to be diverted from January 1 to December 31 of each year as follows: 10.1 cubic feet per second from Texas Creek, 2.5 cubic feet per second from Clear Creek, 26.4 cubic feet per second from Fall Creek, 0.7 cubic foot per second from Trap Creek and 18.8 cubic feet per second from Rucker Creek; and 3,030 acre-feet per annum by storage to be collected from November 1 of each year to June 30 of the succeeding year in Scotts Flat Reservoir, Rollins Reservoir, and in Combie Reservoir.**

The total amount of water to be taken from the above-listed sources (direct diversion plus collection to storage) under this license and Licenses 1707, 12795, 12798, 12799, 12800, and 12802 shall not exceed 59,900 acre-feet per annum.

The total amount of water to be placed to beneficial use (direct diversion from the above-listed sources plus withdrawal from storage) under this license and licenses issued pursuant to Applications 1270, 1614, 2372, 2652A, 2652B, 5193, 6701, 6702, 8178, 20017, 20072*, 24983, and 27132 shall not exceed 89,900 acre-feet per annum.

Where the season of diversion under this license overlaps with the season(s) authorized by Licenses 1707, 12798, 12799 and 12802, the above rates of direct diversion are inclusive of, and not in addition to, rates of diversion authorized by said Licenses.

(9999999)

The equivalent of such continuous flow allowance for any 30-day period may be diverted in a shorter time provided there is no interference with other rights and instream beneficial uses and provided further that all terms or conditions protecting instream beneficial uses are observed.

(0000027)

The maximum instantaneous rates of diversion to offstream storage from (9)Texas Creek, (10) Clear Creek, (11) Fall Creek, (12) Trap Creek, and (13) Rucker Creek shall not exceed 140 cfs, 60 cfs, 170 cfs, 30 cfs, and 50 cfs, respectively. The maximum instantaneous combined rate of diversion to offstream storage from the above-listed sources shall not exceed 350 cfs. **These are permit term storage rates. Recommend not carrying over to license, if possible**

(5jnew$_{mod}$)

The capacities of Scotts Flat Reservoir, Rollins Reservoir, and Combie Reservoir covered by this License shall not exceed 48,547 acre-feet, 65,988 acre-feet, and 5,555 acre-feet, respectively.

THE POINTS OF DIVERSION AND DIVERSION TO OFFSTREAM STORAGE OF SUCH WATER ARE LOCATED:

(9) Texas Creek BSC - By California Coordinate System of 1983, Zone 2, North 2,276,390 feet and East 6,935,710 feet, being within SW¼ of SW¼ of Section 19, T18N, R12E, MDB&M.

(10) Clear Creek BSC - By California Coordinate System of 1983, Zone 2, North 2,267,490 feet and East 6,934,360 feet, being within NE¼ of SE¼ of Section 36, T18N, R11E, MDB&M.

(11) Fall Creek BSC - By California Coordinate System of 1983, Zone 2, North 2,264,690 feet and East 6,935,560 feet, being within NW¼ of NW¼ of Section 6, T17N, R12E, MDB&M.

(12) Trap Creek BSC - By California Coordinate System of 1983, Zone 2, North 2,262,490 feet and East 6,935,410 feet, being within NW¼ of SW¼ of Section 6, T17N, R12E, MDB&M.

(13) Rucker Creek BSC - By California Coordinate System of 1983, Zone 2, North 2,258,370 feet and East 6,939,140 feet, being within SE¼ of NE¼ of Section 7, T17N, R12E, MDB&M.

THE POINTS OF REDIVERSION AND PLACE OF STORAGE OF SUCH WATER ARE LOCATED:

(17) Scotts Flat Dam - By California Coordinate System of 1983, Zone 2, North 2,227,090 feet and East 6,864,360 feet, being within SE¼ of SE¼ of Section 2, T16N, R9E, MDB&M.

(27) Rollins Dam - By California Coordinate System of 1983, Zone 2, North 2,177,140 feet and East 6,858,710 feet, being within NE¼ of SE¼ of Section 22, T15N, R9E, MDB&M.

(32) Combie Dam - By California Coordinate System of 1983, Zone 2, North 2,130,990 feet and East 6,829,160 feet, being within SW¼ of NW¼ of Section 2, T13N, R8E, MDB&M.

THE POINTS OF REDIVERSION OF SUCH WATER ARE LOCATED:

(14) Fuller Lake Dam - By California Coordinate System of 1983, Zone 2, North 2,254,500 feet and East 6,943,340 feet, being within NW¼ of NE¼ of Section 17, T17N, R12E, MDB&M.

(15) Spaulding Dam - By California Coordinate System of 1983, Zone 2, North 2,247,690 feet and East 6,945,560 feet, being within SE¼ of NE¼ of Section 20, T17N, R12E, MDB&M.

(16) Cascade Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,236,490 feet and East 6,887,060 feet, being within SW¼ of NW¼ of Section 34, T17N, R10E, MDB&M.

(18) D-S Canal/Lower Scotts Flat Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,225,710 feet and East 6,857,780 feet, being within NW¼ of NE¼ of Section 10, T16N, R9E, MDB&M.

(19) Tarr Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,185,960 feet and East 6,826,440 feet, being within SE¼ of SE¼ of Section 10, T15N, R8E, MDB&M.

(20) Newtown Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,222,400 feet and East 6,837,480 feet, being within NW¼ of SE¼ of Section 12, T16N, R8E, MDB&M.

(21) Tunnel Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,216,350 feet and East 6,808,310 feet, being within NW¼ of SW¼ of Section 18, T16N, R8E, MDB&M.

(22) China/Union Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,206,450 feet and East 6,782,950 feet, being within SW¼ of NW¼ of Section 29, T16N, R7E, MDB&M.

(23) Rattlesnake Ditch Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,189,830 feet and East 6,835,380 feet, being within NW¼ of NE¼ of Section 12, T15N, R8E, MDB&M.

(24) Wolf-Hannaman Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,142,360 feet and East 6,789,360 feet, being within NW¼ of NE¼ of Section 28, T14N, R7E, MDB&M.

(25) Drum Afterbay Dam (Dutch Flat PH Forebay) - By California Coordinate System of 1983, Zone 2, North 2,221,240 feet and East 6,908,700 feet, being within SW¼ of NW¼ of Section 17, T16N, R11E, MDB&M.

(26) Dutch Flat Afterbay Dam (Chicago Park PH Forebay) - By California Coordinate System of 1983, Zone 2, North 2,206,170 feet and East 6,889,150 feet, being within NE¼ of NW¼ of Section 34, T16N, R10E, MDB&M.

(28) Bear River Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,176,490 feet and East 6,858,460 feet, being within SW¼ of SE¼ of Section 22, T15N, R9E, MDB&M.

(29) Halsey Afterbay Dam - By California Coordinate System of 1983, Zone 2, North 2,111,270 feet and East 6,833,830 feet, being within NE¼ of NE¼ of Section 26, T13N, R8E, MDB&M.

(30) Auburn Ravine I Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,089,850 feet and East 6,801,480 feet, being within NE¼ of NE¼ of Section 14, T12N, R7E, MDB&M.

(31) Hemphill Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,089,390 feet and East 6,774,460 feet, being within NW¼ of NE¼ of Section 13, T12N, R6E, MDB&M.

(33) Orr Creek Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,120,100 feet and East 6,811,490 feet, being within SW¼ of NE¼ of Section 18, T13N, R8E, MDB&M.

(34) Camp Far West Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,116,820 feet and East 6,802,720 feet, being within SW¼ of SW¼ of Section 13, T13N, R7E, MDB&M.

(35) Doty South Canal Diversion Dam - By California Coordinate System of 1983, Zone 2, North 2,103,980 feet and East 6,774,040 feet, being within SW¼ of NE¼ of Section 36, T13N, R6E, MDB&M.

A DESCRIPTION OF THE LANDS OR THE PLACE WHERE SUCH WATER IS PUT TO BENEFICIAL USE IS AS FOLLOWS:

Irrigation of 35,077 acres net within a gross area of 291,991 acres, and Municipal, Domestic, and Industrial, uses all within the service area of the Nevada Irrigation District, as shown on map (N.I.D. Drawing No. xxxxxx) filed with the State Water Resources Control Board. Incidental power use at

(17)	Scotts Flat Dam Powerhouse	within NW¼ of NE¼ of Section 11, T16N, R9E, MDB&M
(27)	Rollins Dam Powerhouse	within NE¼ of SE¼ of Section 22, T15N, R9E, MDB&M
(32a)	Combie North Powerhouse	within SW¼ of NW¼ of Section 2, T13N, R8E, MDB&M
(32b)	Combie South Powerhouse	within SW¼ of NW¼ of Section 2, T13N, R8E, MDB&M
(37)	Spaulding # 3 (RIM) Powerhouse	within NE¼ of SW¼ of Section 16, T17N, R12E, MDB&M
(38)	Spaulding # 1 Powerhouse	within NE¼ of SE¼ of Section 20, T17N, R12E, MDB&M
(39)	Spaulding # 2 Powerhouse	within NE¼ of SE¼ of Section 20, T17N, R12E, MDB&M
(40)	Deer Creek Powerhouse	within SE¼ of NW¼ of Section 34, T17N, R10E, MDB&M
(42a)	Drum # 1 Powerhouse	within NE ¼ of NW ¼ Section 17, T16N, R11E, MDB&M
(42b)	Drum # 2 Powerhouse	within NE ¼ of NW ¼ Section 17, T16N, R11E, MDB&M
(43)	Dutch Flat # 1 Powerhouse	within SE¼ of SE¼ of Section 27, T16N, R10E, MDB&M
(44)	Dutch Flat # 2 Powerhouse	within SE¼ of SE¼ of Section 27, T16N, R10E, MDB&M
(45)	Chicago Park Powerhouse	within NW¼ of SE¼ of Section 6, T15N, R10E, MDB&M
(49)	Halsey Powerhouse	within NW¼ of NW¼ of Section 25, T13N, R8E, MDB&M
(50a)	Wise # 1 Powerhouse	within NW¼ of SW¼ of Section 16, T12N, R8E, MDB&M
(50b)	Wise # 2 Powerhouse	within NW¼ of SW¼ of Section 16, T12N, R8E, MDB&M

as shown on map filed with the State Water Board.

This license is subject to the terms of the stipulation dated November 13, 1961 between the Licensee and Yuba County Water Agency (YCWA) relative to regulation of the use of rights acquired under Applications 5631 and 5632 between the Licensee and YCWA, to the extent the agreement covers matters within the Board's jurisdiction.

(0000024)

Licensee shall employ means satisfactory to the Chief of the Division of Water Rights to quantify water from Texas, Clear, Fall, Trap and Rucker Creeks diverted to storage.

(0060046mod)

Licensee shall maintain in Rollins, Combie and Scotts Flat Reservoirs gages, satisfactory to the Chief of the Division of Water Rights, for the purpose of determining water levels in the Reservoirs. Licensee shall record the gage reading(s) throughout the year. The readings shall be supplied to the State Water Board upon reasonable request.

(0070047_{mod})

Water diverted under this License includes an undetermined amount of water diverted and/or rediverted under pre-1914 appropriative rights held by Pacific Gas and Electric Company in accordance with the Yuba-Bear Consolidated Contract, dated July 12, 1963.

(9990300)

The right hereby confirmed to the diversion and use of water is restricted to the point or points of diversion herein specified and to the lands or place of use herein described.

Reports shall be filed promptly by the licensee on the appropriate forms which will be provided for the purpose from time to time by the State Water Board.

Licensee shall allow representatives of the State Water Board and other parties, as may be authorized from time to time by the State Water Board, reasonable access to project works to determine compliance with the terms of this license.

Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this license, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the State Water Board may be exercised by imposing specific requirements over and above those contained in this license with a view to eliminating waste of water and to meeting the reasonable water requirements of licensee without unreasonable draft on the source. Licensee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to: (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this license and to determine accurately water use as against reasonable water requirement for the authorized project. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the State Water Board also may be exercised by imposing further limitations on the diversion and use of water by the licensee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution article X, section 2; is consistent with the public interest and is necessary to preserve or restore the uses protected by the public trust.

The quantity of water diverted under this license is subject to modification by the State Water Board if, after notice to the licensee and an opportunity for hearing, the State Water Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the State Water Board finds that: (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

This license does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, the licensee shall obtain authorization for an incidental take prior to construction or operation of the project. Licensee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this license.

If construction or rehabilitation work is required for the diversion works covered by this license within the bed, channel, or bank of the affected water body, the licensee shall enter into a streambed or lake alteration agreement with the State Department of Fish and Game. Licensee shall submit a copy of the agreement, or waiver thereof, to the Division of Water Rights prior to commencement of work. Compliance with the terms and conditions of the agreement is the responsibility of the licensee.

This license is granted and the licensee accepts all rights herein confirmed subject to the following provisions of the Water Code:

Section 1625. Each license shall be in such form and contain such terms as may be prescribed by the State Water Board.

Section 1626. All licenses shall be under the terms and conditions of this division (of the Water Code).

Section 1627. A license shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code) but no longer.

Section 1628. Every license shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article (of the Water Code) and the statement that any appropriator of water to whom a license is issued takes the license subject to the conditions therein expressed.

Section 1629. Every licensee, if he accepts a license, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any license granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any licensee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any licensee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Section 1630. At any time after the expiration of twenty years after the granting of a license, the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State shall have the right to purchase the works and property occupied and used under the license and the works built or constructed for the enjoyment of the rights granted under the license.

Section 1631. In the event that the State, or any city, city and county, municipal water district, irrigation district, lighting district, or political subdivision of the State so desiring to purchase and the owner of the works and property cannot agree upon the purchase price, the price shall be determined in such manner as is now or may hereafter be provided by law for determining the value of property taken in eminent domain proceedings.

STATE WATER RESOURCES CONTROL BOARD

Victoria A. Whitney, Deputy Director
Division of Water Rights

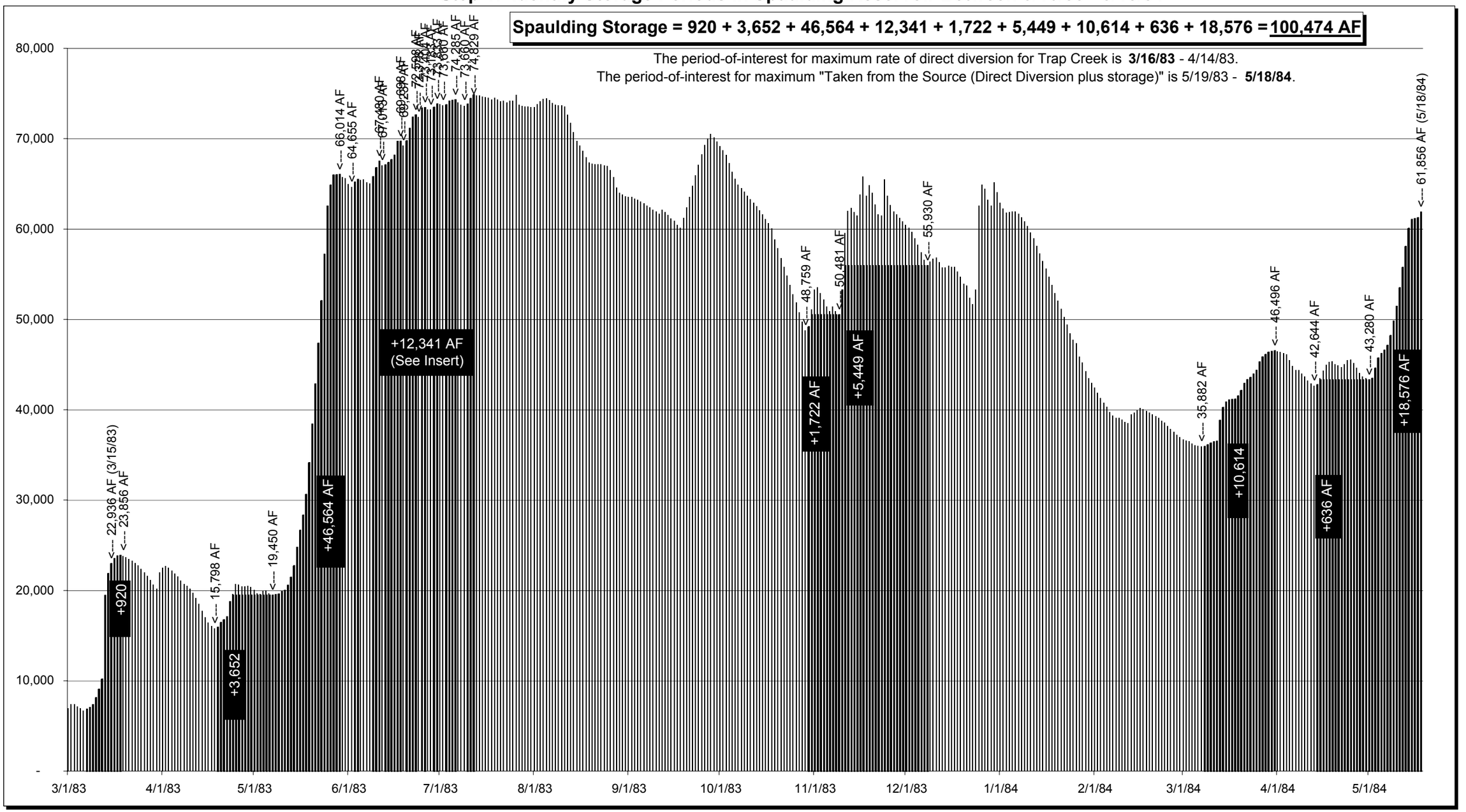
Dated:

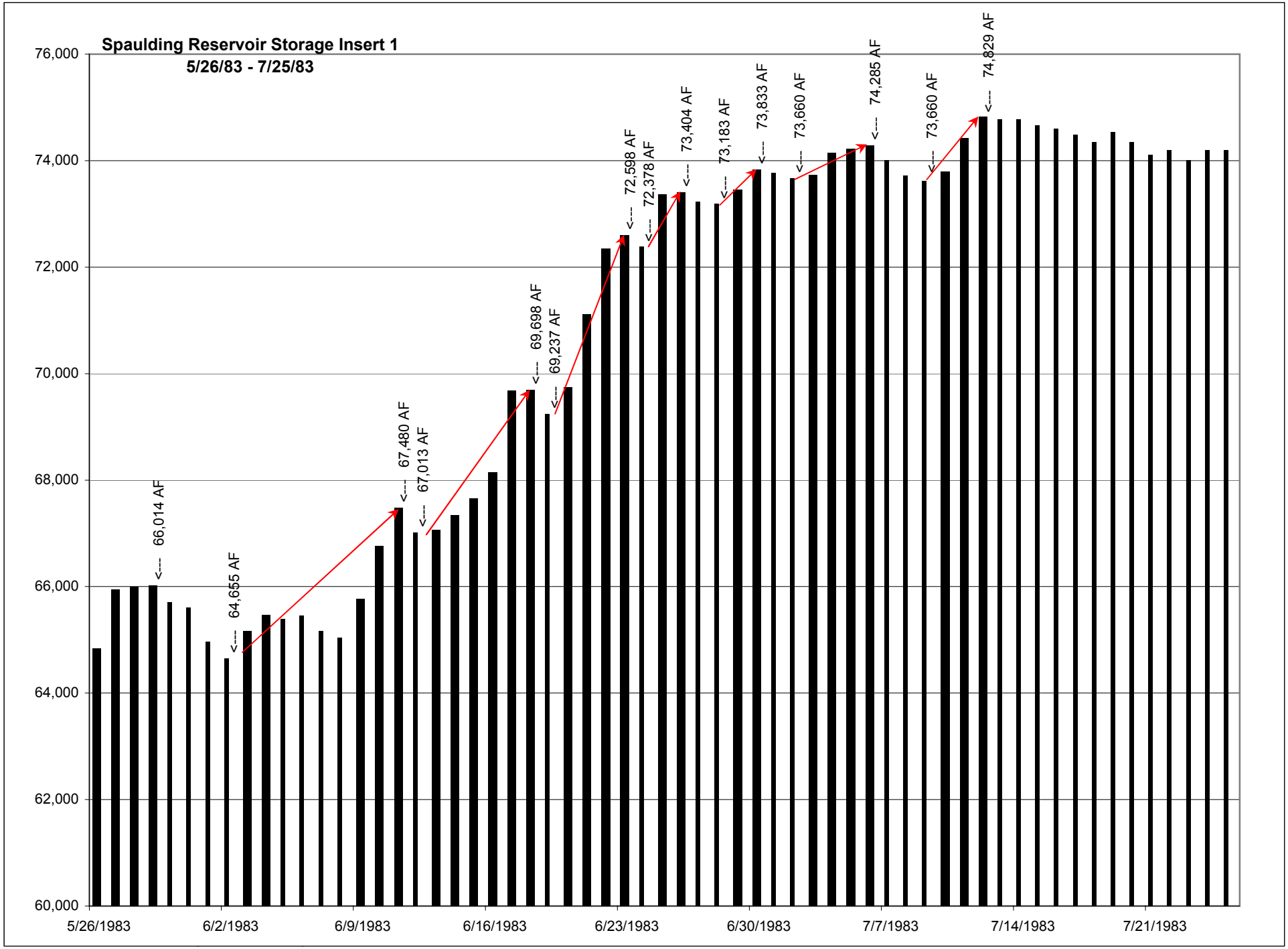
The reservoir hydrographs and data sheets in this packet show the daily time-step calculations for "The total amount of water to be taken from the listed sources (direct diversion plus collection to storage) under this license and Licenses 12795, 12798, 12799, 12800, and 12802 shall not exceed **59,845** acre-feet per anum." (say 59,900 AFA)

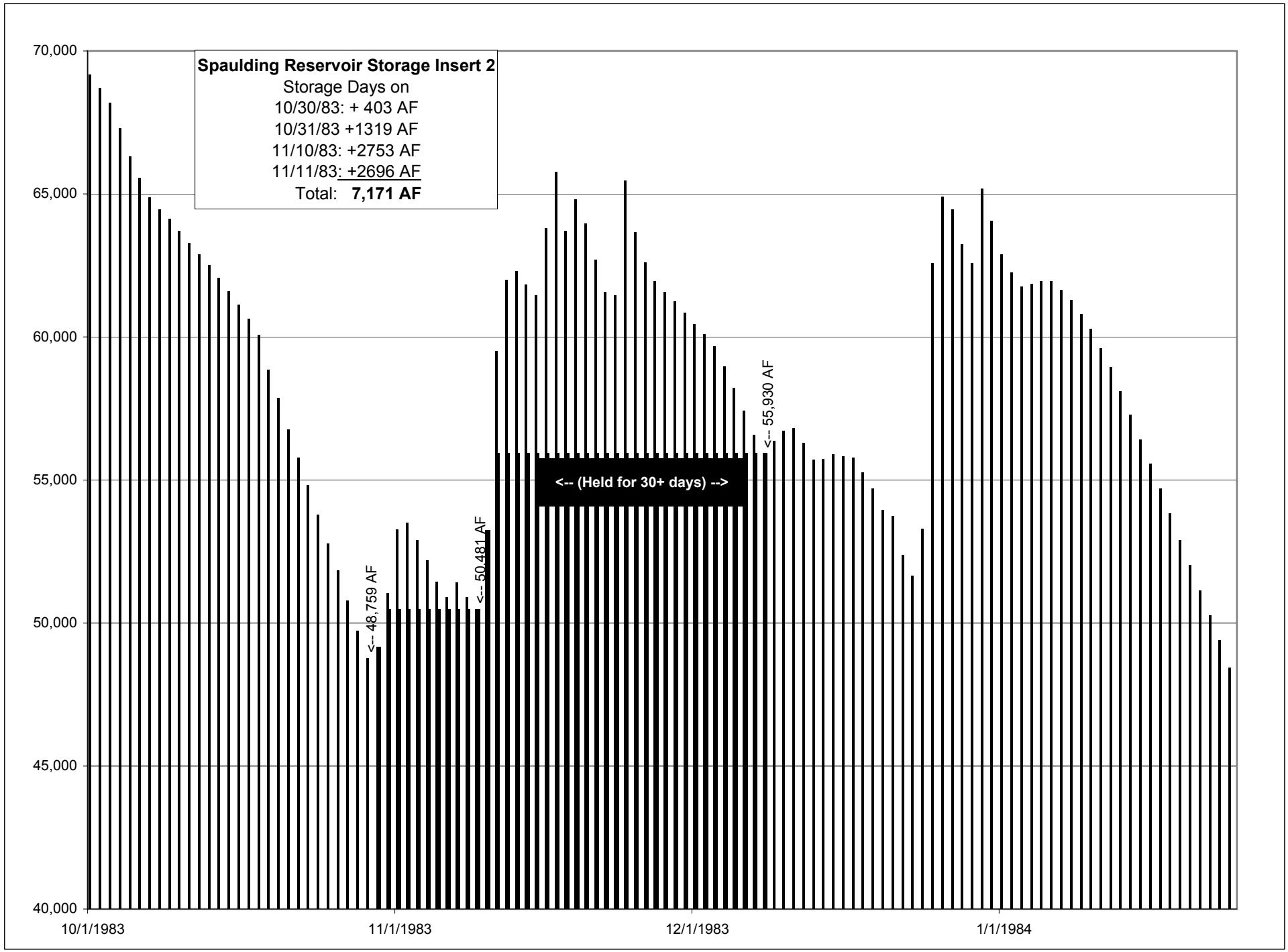
for
Texas, Clear, Fall, Trap and Rucker Creeks
During the Period of
May 19, 1983 to May 18, 1984

They also include the daily time-step calculations for the direct-diversion component of "The total amount of water to be placed to beneficial use (direct diversion from the above-listed sources plus withdrawal from storage)", which is 13,529 AF, for the period of 9/10/84 - 9/9/85.

Step 1: Identify Storage Periods in Spaulding Reservoir Between 3/16/83 - 5/18/84




Spaulding Reservoir Storage Insert 1
5/26/83 - 7/25/83
76,000
74,000
72,000
70,000
68,000
66,000
64,000
62,000
60,000
5/26/1983
6/2/1983
6/9/1983
6/16/1983
6/23/1983
6/30/1983
7/7/1983
7/14/1983
7/21/1983
66,014 AF
64,655 AF
67,480 AF
67,013 AF
69,698 AF
69,237 AF
72,598 AF
72,378 AF
73,404 AF
73,183 AF
73,833 AF
73,660 AF
74,285 AF
73,660 AF
74,829 AF


Spaulding Reservoir Storage Insert 2
Storage Days on
10/30/83: + 403 AF
10/31/83 +1319 AF
11/10/83: +2753 AF
11/11/83: +2696 AF
Total: 7,171 AF
70,000
65,000
60,000
55,000
50,000
45,000
40,000
10/1/1983
11/1/1983
12/1/1983
1/1/1984
<-- 48,759 AF
<-- 50,481 AF
<-- (Held for 30+ days) -->
<-- 55,930 AF

Step 2: Summary of Spaulding Reservoir Storage Periods

Period #	Start - End Dates	End Storage - Start Storage	Amt Stored	# Days
1	3/16/83 - 3/18/83:	23,856 - 22,936 =	920	3
2	4/19/83 - 4/25/83:	19,450 - 15,798 =	3,652	7
3	5/8/83 - 5/29/83:	66,014 - 19,450 =	46,564	22
4	6/3/83 - 6/11/83:	67,480 - 64,655 =	2,825	9
5	6/13/83 - 6/18/83:	69,698 - 67,013 =	2,685	6
6	6/20/83 - 6/23/83:	72,598 - 69,237 =	3,361	4
7	6/25/83 - 6/26/83:	73,404 - 72,378 =	1,026	2
8	6/29/83 - 6/30/83:	73,833 - 73,183 =	650	2
9	7/3/83 - 7/6/83:	74,285 - 73,660 =	625	4
10	7/10/83 - 7/12/83:	74,829 - 73,660 =	1,169	3
11	10/30/83 - 10/31/83:	50,481 - 48,759 =	1,722	2
12	11/10/83 - 11/11/93:	55,930 - 50,481 =	5,449	2
13	3/8/84 - 3/31/84:	46,496 - 35,882 =	10,614	24
14	4/14/84 - 4/15/84:	43,280 - 42,644 =	636	2
15	5/2/84 - 5/18/84:	61,856 - 43,280 =	18,576	17
Storage in Spaulding Reservoir Between 3/16/83 - 5/18/84:			**100,474** AF	109 days

Step 3: Calculate Spaulding Inflow

Inflow = ΔS - Imports + Outflow + Exports

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res (acre-feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce Releases
3/15/1983					22,936	
3/16/1983	319	763	130	41	23,492	**895**
3/17/1983	303	746	129	38	23,784	**757**
3/18/1983	304	754	127	37	23,856	**650**
3/19/1983	300	756	129	31	23,765	**570**
3/20/1983	306	752	129	29	23,654	**548**
3/21/1983	310	747	131	30	23,488	**514**
3/22/1983	307	746	130	30	23,296	**502**
3/23/1983	308	741	130	29	23,026	**456**
3/24/1983	307	741	130	28	22,761	**458**
3/25/1983	303	743	130	26	22,382	**405**
3/26/1983	301	746	130	19	21,975	**389**
3/27/1983	301	746	131	20	21,590	**402**
3/28/1983	300	743	130	19	21,127	**359**
3/29/1983	301	767	129	18	20,601	**348**
3/30/1983	305	811	130	27	20,165	**443**
3/31/1983	317	816	124	76	21,971	**1,610**
4/1/1983	314	829	131	47	22,486	**953**
4/2/1983	297	818	130	49	22,695	**805**
4/3/1983	300	827	131	37	22,506	**600**
4/4/1983	303	823	131	31	22,205	**530**
4/5/1983	303	783	130	28	21,868	**468**
4/6/1983	313	767	130	26	21,529	**439**
4/7/1983	307	803	130	24	21,048	**407**
4/8/1983	307	831	132	21	20,691	**497**
4/9/1983	307	827	133	20	20,496	**575**
4/10/1983	307	829	134	19	20,206	**529**
4/11/1983	307	832	133	19	19,725	**434**
4/12/1983	307	837	132	15	19,140	**382**
4/13/1983	307	836	131	14	18,488	**345**
4/14/1983	310	831	129	13	17,732	**282**
4/15/1983	310	829	130	11	16,983	**282**
4/16/1983	310	830	134	12	16,411	**378**
4/17/1983	307	835	130	15	16,027	**479**
4/18/1983	307	832	129	21	15,798	**560**
4/19/1983	310	834	129	24	15,894	**725**
4/20/1983	307	825	132	34	16,442	**960**
4/21/1983	310	827	132	27	16,729	**821**
4/22/1983	307	832	125	28	17,049	**839**
4/23/1983	310	198	87	69	18,733	**893**
4/24/1983	290	426	124	48	19,571	**730**
4/25/1983	290	160	130	40	20,676	**597**
4/26/1983	310	696	126	30	20,597	**502**
4/27/1983	310	737	128	35	20,399	**490**
4/28/1983	310	796	130	73	20,399	**689**
4/29/1983	303	829	130	56	20,489	**757**
4/30/1983	315	829	130	45	20,351	**619**
5/1/1983	311	827	129	33	20,002	**502**
5/2/1983	300	830	128	27	19,641	**503**
5/3/1983	312	830	130	25	19,604	**654**
5/4/1983	318	827	132	26	19,906	**819**
5/5/1983	320	824	133	31	19,950	**690**
5/6/1983	317	819	132	30	19,641	**508**
5/7/1983	317	829	132	24	19,450	**572**
5/8/1983	318	829	131	22	19,516	**697**
5/9/1983	318	830	132	21	19,578	**696**
5/10/1983	318	831	136	19	19,839	**800**
5/11/1983	312	830	138	14	19,983	**743**
5/12/1983	315	828	136	13	20,552	**949**
5/13/1983	312	830	139	13	21,441	**1,118**
5/14/1983	316	827	139	13	22,707	**1,301**
5/15/1983	320	827	140	20	24,732	**1,688**
5/16/1983	317	826	138	29	26,634	**1,635**
5/17/1983	320	823	138	34	28,322	**1,526**
5/18/1983	320	825	138	27	30,603	**1,820**
5/19/1983	323	828	139	25	34,113	**2,439**
5/20/1983	325	830	138	39	38,384	**2,835**
5/21/1983	325	830	138	50	42,822	**2,930**
5/22/1983	324	828	137	50	47,334	**2,966**
5/23/1983	324	823	137	57	52,042	**3,067**
5/24/1983	324	829	138	61	57,191	**3,300**
5/25/1983	325	828	138	62	62,518	**3,389**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res (acre-feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce Releases
5/26/1983	325	826	138	1730	64,835	**3,537**
5/27/1983	325	827	138	3760	65,949	**4,962**
5/28/1983	325	826	138	4150	65,988	**4,809**
5/29/1983	324	823	137	4230	66,014	**4,879**
5/30/1983	324	823	134	3850	65,708	**4,329**
5/31/1983	324	828	130	3660	65,598	**4,239**
6/1/1983	322	827	122	3160	64,958	**3,464**
6/2/1983	321	828	129	2270	64,655	**2,753**
6/3/1983	317	830	129	2290	65,164	**3,189**
6/4/1983	320	823	129	2910	65,462	**3,692**
6/5/1983	321	827	129	3160	65,384	**3,756**
6/6/1983	320	828	129	3090	65,449	**3,760**
6/7/1983	319	828	129	3170	65,164	**3,664**
6/8/1983	319	828	132	2790	65,042	**3,369**
6/9/1983	319	827	133	2410	65,767	**3,417**
6/10/1983	319	825	134	2600	66,764	**3,743**
6/11/1983	320	821	134	3460	67,480	**4,456**
6/12/1983	319	828	134	2890	67,013	**3,298**
6/13/1983	318	828	134	2510	67,066	**3,181**
6/14/1983	318	824	133	2680	67,341	**3,458**
6/15/1983	318	827	133	2840	67,651	**3,638**
6/16/1983	317	827	134	2360	68,140	**3,251**
6/17/1983	316	825	130	2150	69,684	**3,567**
6/18/1983	318	823	130	2650	69,698	**3,292**
6/19/1983	312	823	134	2380	69,237	**2,793**
6/20/1983	308	819	133	1660	69,745	**2,560**
6/21/1983	315	711	134	1590	71,118	**2,812**
6/22/1983	317	817	134	2090	72,351	**3,346**
6/23/1983	318	827	134	3200	72,598	**3,968**
6/24/1983	318	825	134	3370	72,378	**3,900**
6/25/1983	317	827	134	2370	73,369	**3,514**
6/26/1983	315	825	133	3040	73,404	**3,701**
6/27/1983	313	823	135	3040	73,231	**3,598**
6/28/1983	287	821	130	2630	73,183	**3,270**
6/29/1983	297	817	131	2080	73,452	**2,867**
6/30/1983	303	824	133	1560	73,833	**2,406**
7/1/1983	300	818	133	1980	73,764	**2,596**
7/2/1983	312	817	132	3170	73,660	**3,755**
7/3/1983	315	817	134	2000	73,729	**2,671**
7/4/1983	312	821	135	1380	74,145	**2,234**
7/5/1983	315	818	135	1390	74,215	**2,063**
7/6/1983	315	818	136	1490	74,285	**2,164**
7/7/1983	307	822	135	2050	74,006	**2,559**
7/8/1983	302	821	135	1370	73,715	**1,877**
7/9/1983	305	826	135	849	73,618	**1,456**
7/10/1983	305	827	136	418	73,798	**1,167**
7/11/1983	303	826	136	389	74,424	**1,364**
7/12/1983	306	825	135	658	74,829	**1,516**
7/13/1983	310	827	135	1140	74,773	**1,764**
7/14/1983	305	825	134	1300	74,773	**1,954**
7/15/1983	306	823	134	1370	74,661	**1,965**
7/16/1983	306	823	134	1310	74,591	**1,926**
7/17/1983	311	823	134	965	74,487	**1,559**
7/18/1983	305	823	134	763	74,347	**1,344**
7/19/1983	302	824	134	325	74,529	**1,073**
7/20/1983	302	822	134	282	74,347	**844**
7/21/1983	304	824	134	233	74,111	**768**
7/22/1983	304	824	134	148	74,201	**847**
7/23/1983	301	825	134	106	74,006	**666**
7/24/1983	295	825	126	96	74,187	**843**
7/25/1983	301	825	135	116	74,187	**775**
7/26/1983	300	825	135	109	74,813	**1,085**
7/27/1983	302	824	135	50	73,750	**171**
7/28/1983	300	811	135	12	73,584	**574**
7/29/1983	297	799	112	5.8	73,514	**585**
7/30/1983	298	800	85	5.6	73,514	**593**
7/31/1983	301	801	85	5.6	73,494	**581**
8/1/1983	305	802	85	5.8	73,459	**570**
8/2/1983	304	800	85	5.6	73,819	**768**
8/3/1983	307	800	85	5.8	74,132	**742**
8/4/1983	301	801	85	6.3	74,368	**710**
8/5/1983	302	804	85	6.4	74,445	**632**
8/6/1983	302	802	85	6.5	74,215	**476**
8/7/1983	302	801	85	6.3	73,958	**461**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res (acre-feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce Releases
8/8/1983	303	802	85	5.9	73,694	**457**
8/9/1983	304	803	85	5.8	73,639	**562**
8/10/1983	304	800	87	5.9	73,667	**603**
8/11/1983	303	801	89	5.9	73,507	**512**
8/12/1983	300	800	89	5.8	72,598	**137**
8/13/1983	301	797	89	5.7	71,723	**150**
8/14/1983	239	799	88	5.5	70,659	**117**
8/15/1983	110	803	89	5.6	69,738	**323**
8/16/1983	59	799	91	5.9	69,203	**567**
8/17/1983	11	801	90	5.7	68,597	**580**
8/18/1983	0	806	92	5.9	67,915	**560**
8/19/1983	40	807	94	6.1	67,328	**571**
8/20/1983	232	805	94	6	67,190	**603**
8/21/1983	285	804	95	6.2	67,144	**597**
8/22/1983	310	802	95	5.8	67,184	**613**
8/23/1983	308	805	95	6	67,157	**584**
8/24/1983	307	808	94	5.4	67,033	**538**
8/25/1983	303	809	91	5.6	66,934	**553**
8/26/1983	306	810	90	6.4	66,503	**383**
8/27/1983	308	808	90	6	65,721	**202**
8/28/1983	310	808	90	5.9	64,603	**30**
8/29/1983	311	808	91	5.9	64,007	**293**
8/30/1983	309	806	90	5.9	63,789	**483**
8/31/1983	308	808	90	6.6	63,630	**516**
9/1/1983	318	807	89	7	63,572	**556**
9/2/1983	317	806	89	7.5	63,521	**560**
9/3/1983	316	808	89	7.5	63,356	**505**
9/4/1983	315	808	87	5.9	63,190	**502**
9/5/1983	313	809	85	5.4	63,000	**491**
9/6/1983	312	808	88	5.7	62,797	**487**
9/7/1983	313	807	89	7.6	62,588	**485**
9/8/1983	314	807	89	14	62,360	**481**
9/9/1983	315	806	89	14	62,108	**467**
9/10/1983	313	807	89	14	61,919	**502**
9/11/1983	313	811	89	14	61,674	**477**
9/12/1983	311	815	89	13	62,139	**840**
9/13/1983	311	825	89	13	61,825	**458**
9/14/1983	310	825	90	13	61,511	**460**
9/15/1983	310	835	91	13	61,160	**452**
9/16/1983	309	837	91	5.4	60,854	**470**
9/17/1983	309	842	90	5.6	60,469	**434**
9/18/1983	309	840	90	5.6	60,097	**439**
9/19/1983	308	40	89	12	61,179	**379**
9/20/1983	308	0	92	15	62,360	**394**
9/21/1983	308	0	99	11	63,540	**397**
9/22/1983	309	0	101	9.2	64,751	**412**
9/23/1983	311	0	97	9.2	65,910	**380**
9/24/1983	311	0	101	9.2	67,098	**398**
9/25/1983	309	0	102	9.2	68,266	**391**
9/26/1983	308	0	101	7.3	69,290	**317**
9/27/1983	308	0	99	5.1	69,986	**147**
9/28/1983	308	242	97	5.6	70,483	**287**
9/29/1983	304	720	80	8.6	**70,081**	**302**
9/30/1983	319	800	86	12	69,678	**376**
10/1/1983	314	796	77	7.1	69,176	**313**
10/2/1983	317	793	58	13	68,710	**312**
10/3/1983	311	804	49	7.8	68,186	**286**
10/4/1983	227	813	45	6.3	67,282	**182**
10/5/1983	129	804	50	6	66,313	**242**
10/6/1983	73	799	49	7	65,546	**395**
10/7/1983	156	796	52	6.5	64,874	**360**
10/8/1983	261	796	52	5.9	64,462	**385**
10/9/1983	260	797	51	5.9	64,122	**422**
10/10/1983	272	794	50	5.9	63,693	**362**
10/11/1983	280	792	50	5.9	63,279	**359**
10/12/1983	280	798	52	5.9	62,885	**377**
10/13/1983	280	798	53	6	62,512	**389**
10/14/1983	280	806	53	6	62,064	**359**
10/15/1983	280	813	68	6	61,592	**369**
10/16/1983	279	815	73	6	61,110	**372**
10/17/1983	279	817	73	6	60,624	**372**
10/18/1983	279	815	75	6	60,053	**329**
10/19/1983	279	822	75	5.9	58,846	**15**
10/20/1983	279	825	75	5.9	57,857	**128**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res (acre-feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce Releases
10/21/1983	291	820	74	6.6	56,757	**55**
10/22/1983	307	822	74	7.3	55,786	**107**
10/23/1983	308	820	73	7.7	54,807	**99**
10/24/1983	308	823	75	5.4	53,783	**79**
10/25/1983	308	823	76	5.1	52,781	**91**
10/26/1983	308	826	76	6.2	51,829	**120**
10/27/1983	307	826	78	6.2	50,783	**76**
10/28/1983	307	826	77	6	49,718	**65**
10/29/1983	306	826	77	6.3	48,759	**120**
10/30/1983	316	826	78	19	49,162	**810**
10/31/1983	325	808	78	49	51,039	**1,556**
11/1/1983	319	789	62	43	53,252	**1,691**
11/2/1983	304	801	62	18	53,497	**701**
11/3/1983	282	817	64	11	52,880	**299**
11/4/1983	300	820	63	13	52,175	**241**
11/5/1983	307	825	62	18	51,422	**218**
11/6/1983	309	822	65	20	50,902	**336**
11/7/1983	318	809	66	27	51,416	**843**
11/8/1983	317	817	65	20	50,902	**326**
11/9/1983	314	820	65	27	50,481	**386**
11/10/1983	313	788	63	74	53,234	**2,000**
11/11/1983	326	779	82	178	59,510	**3,877**
11/12/1983	318	824	108	198	61,988	**2,061**
11/13/1983	315	833	108	348	62,284	**1,123**
11/14/1983	279	834	121	252	61,837	**703**
11/15/1983	297	839	134	148	61,448	**628**
11/16/1983	321	839	137	311	63,789	**2,146**
11/17/1983	315	837	126	5890	65,773	**7,538**
11/18/1983	286	838	129	2400	63,693	**2,032**
11/19/1983	320	829	129	1170	64,816	**2,374**
11/20/1983	253	835	129	2290	63,955	**2,567**
11/21/1983	300	838	130	920	62,708	**959**
11/22/1983	312	834	131	335	61,580	**419**
11/23/1983	300	830	131	162	61,454	**759**
11/24/1983	328	826	125	2090	65,462	**4,734**
11/25/1983	323	830	128	2230	63,661	**1,957**
11/26/1983	327	836	129	821	62,607	**928**
11/27/1983	321	836	132	307	61,957	**626**
11/28/1983	307	835	51	114	61,580	**503**
11/29/1983	301	832	20	36	61,235	**413**
11/30/1983	308	837	37	30	60,842	**398**
12/1/1983	308	836	35	19	60,444	**381**
12/2/1983	313	834	55	25	60,097	**426**
12/3/1983	322	835	134	118	59,676	**553**
12/4/1983	315	835	135	104	58,956	**396**
12/5/1983	302	837	139	94	58,210	**392**
12/6/1983	304	838	146	91	57,408	**367**
12/7/1983	304	838	152	85	56,564	**345**
12/8/1983	309	837	156	99	55,930	**463**
12/9/1983	324	833	153	143	56,354	**1,019**
12/10/1983	326	833	147	157	56,715	**993**
12/11/1983	324	834	148	154	56,811	**860**
12/12/1983	313	838	147	112	56,294	**523**
12/13/1983	311	834	148	102	55,709	**478**
12/14/1983	324	838	152	109	55,733	**787**
12/15/1983	323	838	154	100	55,894	**850**
12/16/1983	301	837	152	89	55,816	**738**
12/17/1983	310	836	148	88	55,774	**741**
12/18/1983	302	838	152	67	55,263	**497**
12/19/1983	305	837	149	59	54,688	**450**
12/20/1983	311	834	151	50	53,947	**350**
12/21/1983	304	835	154	24	53,730	**600**
12/22/1983	305	826	155	22	52,359	**7**
12/23/1983	312	830	154	23	51,657	**341**
12/24/1983	325	832	149	128	53,293	**1,609**
12/25/1983	335	823	141	331	62,588	**5,646**
12/26/1983	325	835	139	2370	64,906	**4,188**
12/27/1983	303	836	143	2430	64,443	**2,873**
12/28/1983	308	838	150	1340	63,222	**1,404**
12/29/1983	313	835	154	529	62,581	**882**
12/30/1983	317	823	153	1290	65,171	**3,255**
12/31/1983	285	837	153	2350	64,045	**2,487**
1/1/1984	310	837	153	981	62,893	**1,080**
1/2/1984	308	837	153	383	62,240	**736**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res (acre-feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce Releases
1/3/1984	304	836	154	168	61,762	**613**
1/4/1984	320	837	153	87	61,850	**801**
1/5/1984	321	838	154	149	61,950	**870**
1/6/1984	315	838	157	152	61,931	**822**
1/7/1984	310	837	157	106	61,638	**642**
1/8/1984	320	839	156	71	61,279	**565**
1/9/1984	320	840	154	63	60,786	**488**
1/10/1984	316	836	154	42	60,276	**459**
1/11/1984	312	839	156	36	59,608	**382**
1/12/1984	310	837	157	45	58,944	**394**
1/13/1984	306	835	157	43	58,088	**297**
1/14/1984	306	837	154	42	57,275	**317**
1/15/1984	306	836	153	35	56,414	**284**
1/16/1984	315	838	156	29	55,572	**283**
1/17/1984	319	839	146	40	54,706	**269**
1/18/1984	317	838	158	33	53,824	**267**
1/19/1984	315	837	155	42	52,897	**252**
1/20/1984	312	837	155	51	52,025	**291**
1/21/1984	310	838	154	51	51,125	**279**
1/22/1984	308	838	154	45	50,255	**290**
1/23/1984	308	837	154	44	49,403	**297**
1/24/1984	312	838	154	43	48,425	**230**
1/25/1984	316	838	154	42	47,704	**355**
1/26/1984	314	836	156	37	47,312	**517**
1/27/1984	313	836	155	32	45,853	**(26)**
1/28/1984	312	834	155	24	45,232	**388**
1/29/1984	312	833	156	20	44,256	**205**
1/30/1984	311	836	157	18	43,486	**312**
1/31/1984	311	835	158	18	42,980	**445**
2/1/1984	309	836	158	18	42,419	**420**
2/2/1984	308	835	158	12	41,856	**413**
2/3/1984	308	836	157	6.9	41,302	**413**
2/4/1984	307	837	156	5.9	40,777	**427**
2/5/1984	306	836	156	5.9	40,296	**449**
2/6/1984	307	835	156	5.9	39,757	**418**
2/7/1984	311	834	155	5.9	39,353	**480**
2/8/1984	314	830	156	5.9	39,080	**540**
2/9/1984	319	834	155	8.4	39,065	**671**
2/10/1984	320	836	156	10	38,869	**583**
2/11/1984	313	835	156	8.3	38,594	**548**
2/12/1984	308	823	136	10	38,464	**595**
2/13/1984	317	819	127	72	39,433	**1,190**
2/14/1984	320	835	154	33	39,666	**819**
2/15/1984	307	835	155	33	39,920	**844**
2/16/1984	310	834	154	36	40,164	**837**
2/17/1984	301	836	153	29	40,052	**661**
2/18/1984	295	836	154	23	39,849	**616**
2/19/1984	301	837	154	22	39,666	**620**
2/20/1984	302	837	154	21	39,433	**593**
2/21/1984	302	823	154	27	39,297	**633**
2/22/1984	310	838	152	24	39,040	**574**
2/23/1984	314	837	146	21	38,784	**561**
2/24/1984	314	835	146	16	38,524	**552**
2/25/1984	314	837	145	28	38,165	**515**
2/26/1984	310	836	145	28	37,823	**527**
2/27/1984	309	835	146	28	37,497	**536**
2/28/1984	308	837	146	27	37,192	**548**
2/29/1984	306	812	138	26	36,942	**544**
3/1/1984	305	837	146	28	36,683	**575**
3/2/1984	305	837	144	27	36,571	**647**
3/3/1984	311	836	146	26	36,459	**641**
3/4/1984	310	837	147	26	36,269	**604**
3/5/1984	308	837	146	25	36,061	**595**
3/6/1984	308	820	143	23	35,944	**619**
3/7/1984	308	835	145	20	35,882	**661**
3/8/1984	309	837	145	20	35,906	**705**
3/9/1984	312	837	146	24	36,094	**790**
3/10/1984	314	839	145	26	36,284	**792**
3/11/1984	314	839	145	27	36,434	**773**
3/12/1984	307	840	145	25	36,483	**728**
3/13/1984	313	840	138	75	38,809	**1,913**
3/14/1984	315	840	131	115	40,235	**1,490**
3/15/1984	311	838	136	99	40,818	**1,056**
3/16/1984	308	841	135	92	41,055	**879**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res (acre-feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce Releases
3/17/1984	310	841	136	88	41,122	**789**
3/18/1984	306	841	136	87	41,163	**779**
3/19/1984	305	838	136	91	41,498	**929**
3/20/1984	312	839	135	87	42,116	**1,061**
3/21/1984	318	838	134	86	42,896	**1,133**
3/22/1984	309	839	135	82	43,296	**949**
3/23/1984	299	841	135	79	43,550	**884**
3/24/1984	304	839	135	78	43,921	**935**
3/25/1984	304	840	135	76	44,342	**959**
3/26/1984	306	839	133	77	45,264	**1,208**
3/27/1984	312	839	132	75	45,816	**1,012**
3/28/1984	307	839	132	74	46,098	**880**
3/29/1984	304	839	133	74	46,332	**860**
3/30/1984	301	839	133	73	46,419	**788**
3/31/1984	307	837	134	73	46,496	**776**
4/1/1984	311	837	133	80	46,463	**722**
4/2/1984	308	839	4.1	116	46,332	**585**
4/3/1984	300	838	32	188	46,261	**722**
4/4/1984	302	838	129	238	46,087	**815**
4/5/1984	300	835	129	150	45,491	**514**
4/6/1984	300	837	128	43	44,812	**366**
4/7/1984	308	838	128	43	44,336	**461**
4/8/1984	321	832	83	104	44,406	**733**
4/9/1984	320	838	128	79	44,001	**521**
4/10/1984	320	837	128	71	43,635	**531**
4/11/1984	321	838	128	45	43,217	**479**
4/12/1984	321	836	127	33	42,875	**503**
4/13/1984	320	837	140	21	42,644	**562**
4/14/1984	319	840	150	11	42,749	**735**
4/15/1984	320	839	151	10	43,444	**1,030**
4/16/1984	320	838	151	11	44,294	**1,109**
4/17/1984	317	834	151	9.5	44,941	**1,004**
4/18/1984	316	832	151	11	45,286	**852**
4/19/1984	319	835	150	17	45,302	**691**
4/20/1984	315	835	149	18	44,989	**529**
4/21/1984	307	839	149	15	44,864	**633**
4/22/1984	303	837	149	13	44,657	**592**
4/23/1984	313	838	149	11	45,043	**880**
4/24/1984	318	838	151	11	45,447	**886**
4/25/1984	312	838	150	9.3	45,512	**718**
4/26/1984	301	839	150	8.8	45,151	**515**
4/27/1984	301	838	150	8.6	44,619	**427**
4/28/1984	300	836	150	8.2	44,059	**412**
4/29/1984	298	838	149	7.8	43,645	**488**
4/30/1984	295	840	149	7.7	43,444	**600**
5/1/1984	300	832	150	9.9	43,280	**609**
5/2/1984	321	831	150	13	43,444	**756**
5/3/1984	321	837	150	16	44,593	**1,261**
5/4/1984	320	837	150	14	45,707	**1,243**
5/5/1984	315	836	150	9.8	46,190	**924**
5/6/1984	306	838	150	8.3	46,567	**880**
5/7/1984	299	836	150	7.8	47,098	**963**
5/8/1984	299	835	150	7.4	48,208	**1,253**
5/9/1984	305	836	151	7	49,791	**1,487**
5/10/1984	314	837	150	6.6	51,411	**1,496**
5/11/1984	317	834	151	6.6	53,479	**1,717**
5/12/1984	314	834	149	6.8	55,739	**1,815**
5/13/1984	303	835	150	6.6	58,040	**1,849**
5/14/1984	304	834	150	6.2	60,047	**1,698**
5/15/1984	305	832	149	22	61,048	**1,203**
5/16/1984	297	832	148	32	61,129	**756**
5/17/1984	291	831	146	30	61,223	**763**
5/18/1984	304	830	149	29	61,856	**1,023**
						410,286
						x 1.9835
						813,802 **Acre-Feet**

Basic Tributaries Calculation = BSC_{OUT} - BSC_{IN}

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)
3/16/1983	188	319	131	**131**
3/17/1983	201	303	102	**102**
3/18/1983	216	304	88	**88**
3/19/1983	216	300	84	**84**
3/20/1983	216	306	90	**90**
3/21/1983	216	310	94	**94**
3/22/1983	222	307	85	**85**
3/23/1983	226	308	82	**82**
3/24/1983	226	307	81	**81**
3/25/1983	234	303	69	**69**
3/26/1983	240	301	61	**61**
3/27/1983	240	301	61	**61**
3/28/1983	249	300	51	**51**
3/29/1983	257	301	44	**44**
3/30/1983	249	305	56	**56**
3/31/1983	169	317	148	**148**
4/1/1983	184	314	130	**130**
4/2/1983	214	297	83	**83**
4/3/1983	238	300	62	**62**
4/4/1983	237	303	66	**66**
4/5/1983	242	303	61	**61**
4/6/1983	245	313	68	**68**
4/7/1983	245	307	62	**62**
4/8/1983	245	307	62	**62**
4/9/1983	245	307	62	**62**
4/10/1983	244	307	63	**63**
4/11/1983	244	307	63	**63**
4/12/1983	250	307	57	**57**
4/13/1983	254	307	53	**53**
4/14/1983	254	310	56	**56**
4/15/1983	260	310	50	**50**
4/16/1983	266	310	44	**44**
4/17/1983	266	307	41	**41**
4/18/1983	251	307	56	**56**
4/19/1983	230	310	80	**80**
4/20/1983	199	307	108	**108**
4/21/1983	193	310	117	**117**
4/22/1983	220	307	87	**87**
4/23/1983	232	310	78	**78**
4/24/1983	231	290	59	**59**
4/25/1983	231	290	59	**59**
4/26/1983	230	310	80	**80**
4/27/1983	245	310	65	**65**
4/28/1983	217	310	93	**93**
4/29/1983	210	303	93	**93**
4/30/1983	219	315	96	**96**
5/1/1983	218	311	93	**93**
5/2/1983	233	300	67	**67**
5/3/1983	233	312	79	**79**
5/4/1983	229	318	89	**89**
5/5/1983	229	320	91	**91**
5/6/1983	227	317	90	**90**
5/7/1983	227	317	90	**90**
5/8/1983	227	318	91	**91**
5/9/1983	227	318	91	**91**
5/10/1983	227	318	91	**91**
5/11/1983	219	312	93	**93**
5/12/1983	205	315	110	**110**
5/13/1983	193	312	119	**119**
5/14/1983	193	316	123	**123**
5/15/1983	193	320	127	**127**
5/16/1983	180	317	137	**137**
5/17/1983	150	320	170	**170**
5/18/1983	122	320	198	**198**
5/19/1983	103	323	220	**220**
5/20/1983	99	325	226	**226**
5/21/1983	92	325	233	**233**
5/22/1983	58	324	266	**266**

Basic Tributaries Calculation = BSC_{OUT} - BSC_{IN}

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)
5/23/1983	46	324	278	**278**
5/24/1983	38	324	286	**286**
5/25/1983	41	325	284	**284**
5/26/1983	42	325	283	**283**
5/27/1983	43	325	282	**282**
5/28/1983	45	325	280	**280**
5/29/1983	48	324	276	**276**
5/30/1983	49	324	275	**275**
5/31/1983	52	324	272	**272**
6/1/1983	54	322	268	**268**
6/2/1983	55	321	266	**266**
6/3/1983	56	317	261	**261**
6/4/1983	56	320	264	**264**
6/5/1983	55	321	266	**266**
6/6/1983	55	320	265	**265**
6/7/1983	54	319	265	**265**
6/8/1983	54	319	265	**265**
6/9/1983	53	319	266	**266**
6/10/1983	54	319	265	**265**
6/11/1983	54	320	266	**266**
6/12/1983	53	319	266	**266**
6/13/1983	52	318	266	**266**
6/14/1983	52	318	266	**266**
6/15/1983	52	318	266	**266**
6/16/1983	51	317	266	**266**
6/17/1983	51	316	265	**265**
6/18/1983	51	318	267	**267**
6/19/1983	53	312	259	**259**
6/20/1983	99	308	209	**209**
6/21/1983	109	315	206	**206**
6/22/1983	109	317	208	**208**
6/23/1983	110	318	208	**208**
6/24/1983	110	318	208	**208**
6/25/1983	110	317	207	**207**
6/26/1983	110	315	205	**205**
6/27/1983	110	313	203	**203**
6/28/1983	75	287	212	**212**
6/29/1983	130	297	167	**167**
6/30/1983	138	303	165	**165**
7/1/1983	154	300	146	**146**
7/2/1983	174	312	138	**138**
7/3/1983	174	315	141	**141**
7/4/1983	173	312	139	**139**
7/5/1983	173	315	142	**142**
7/6/1983	172	315	143	**143**
7/7/1983	172	307	135	**135**
7/8/1983	193	302	109	**109**
7/9/1983	210	305	95	**95**
7/10/1983	209	305	96	**96**
7/11/1983	231	303	72	**72**
7/12/1983	234	306	72	**72**
7/13/1983	227	310	83	**83**
7/14/1983	229	305	76	**76**
7/15/1983	233	306	73	**73**
7/16/1983	233	306	73	**73**
7/17/1983	233	311	78	**78**
7/18/1983	242	305	63	**63**
7/19/1983	248	302	54	**54**
7/20/1983	248	302	54	**54**
7/21/1983	248	304	56	**56**
7/22/1983	249	304	55	**55**
7/23/1983	255	301	46	**46**
7/24/1983	263	295	32	**32**
7/25/1983	264	301	37	**37**
7/26/1983	264	300	36	**36**
7/27/1983	264	302	38	**38**
7/28/1983	270	300	30	**30**
7/29/1983	276	297	21	**21**

Basic Tributaries Calculation = BSC_{OUT} - BSC_{IN}

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)
7/30/1983	282	298	16	**16**
7/31/1983	289	301	12	**12**
8/1/1983	288	305	17	**17**
8/2/1983	288	304	16	**16**
8/3/1983	288	307	19	**19**
8/4/1983	287	301	14	**14**
8/5/1983	291	302	11	**11**
8/6/1983	295	302	7	**7**
8/7/1983	298	302	4	**4**
8/8/1983	300	303	3	**3**
8/9/1983	299	304	5	**5**
8/10/1983	298	304	6	**6**
8/11/1983	297	303	6	**6**
8/12/1983	300	300	0	**0**
8/13/1983	304	301	**-3**	**0**
8/14/1983	100	239	139	**139**
8/15/1983	22	110	88	**88**
8/16/1983	9.7	59	49	**49**
8/17/1983	0	11	11	**11**
8/18/1983	0	0	0	**0**
8/19/1983	170	40	**-130**	**0**
8/20/1983	305	232	**-73**	**0**
8/21/1983	303	285	**-18**	**0**
8/22/1983	301	310	9	**9**
8/23/1983	299	308	9	**9**
8/24/1983	297	307	10	**10**
8/25/1983	300	303	3	**3**
8/26/1983	300	306	6	**6**
8/27/1983	300	308	8	**8**
8/28/1983	302	310	8	**8**
8/29/1983	300	311	11	**11**
8/30/1983	285	309	24	**24**
8/31/1983	302	308	6	**6**
9/1/1983	300	318	18	**18**
9/2/1983	296	317	21	**21**
9/3/1983	299	316	17	**17**
9/4/1983	299	315	16	**16**
9/5/1983	298	313	15	**15**
9/6/1983	301	312	11	**11**
9/7/1983	304	313	9	**9**
9/8/1983	310	314	4	**4**
9/9/1983	306	315	9	**9**
9/10/1983	297	313	16	**16**
9/11/1983	300	313	13	**13**
9/12/1983	300	311	11	**11**
9/13/1983	300	311	11	**11**
9/14/1983	300	310	10	**10**
9/15/1983	301	310	9	**9**
9/16/1983	301	309	8	**8**
9/17/1983	301	309	8	**8**
9/18/1983	301	309	8	**8**
9/19/1983	301	308	7	**7**
9/20/1983	307	308	1	**1**
9/21/1983	312	308	**-4**	**0**
9/22/1983	309	309	0	**0**
9/23/1983	308	311	3	**3**
9/24/1983	308	311	3	**3**
9/25/1983	308	309	1	**1**
9/26/1983	307	308	1	**1**
9/27/1983	307	308	1	**1**
9/28/1983	295	308	13	**13**
9/29/1983	289	304	15	**15**
9/30/1983	281	319	38	**38**
10/1/1983	298	314	16	**16**
10/2/1983	265	317	52	**52**
10/3/1983	249	311	62	**62**
10/4/1983	72	227	155	**155**
10/5/1983	5.3	129	124	**124**

Basic Tributaries Calculation = BSC_{OUT} - BSC_{IN}

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)
10/6/1983	4.5	73	69	**69**
10/7/1983	113	156	43	**43**
10/8/1983	229	261	32	**32**
10/9/1983	234	260	26	**26**
10/10/1983	239	272	33	**33**
10/11/1983	254	280	26	**26**
10/12/1983	263	280	17	**17**
10/13/1983	266	280	14	**14**
10/14/1983	268	280	12	**12**
10/15/1983	268	280	12	**12**
10/16/1983	267	279	12	**12**
10/17/1983	267	279	12	**12**
10/18/1983	267	279	12	**12**
10/19/1983	267	279	12	**12**
10/20/1983	268	279	11	**11**
10/21/1983	283	291	8	**8**
10/22/1983	296	307	11	**11**
10/23/1983	296	308	12	**12**
10/24/1983	294	308	14	**14**
10/25/1983	298	308	10	**10**
10/26/1983	301	308	7	**7**
10/27/1983	301	307	6	**6**
10/28/1983	301	307	6	**6**
10/29/1983	302	306	4	**4**
10/30/1983	290	316	26	**26**
10/31/1983	242	325	83	**83**
11/1/1983	226	319	93	**93**
11/2/1983	225	304	79	**79**
11/3/1983	267	282	15	**15**
11/4/1983	299	300	1	**1**
11/5/1983	299	307	8	**8**
11/6/1983	297	309	12	**12**
11/7/1983	282	318	36	**36**
11/8/1983	293	317	24	**24**
11/9/1983	286	314	28	**28**
11/10/1983	258	313	55	**55**
11/11/1983	215	326	111	**111**
11/12/1983	203	318	115	**115**
11/13/1983	179	315	136	**136**
11/14/1983	192	279	87	**87**
11/15/1983	230	297	67	**67**
11/16/1983	206	321	115	**115**
11/17/1983	116	315	199	**199**
11/18/1983	110	286	176	**176**
11/19/1983	133	320	187	**187**
11/20/1983	144	253	109	**109**
11/21/1983	159	300	141	**141**
11/22/1983	158	312	154	**154**
11/23/1983	187	300	113	**113**
11/24/1983	115	328	213	**213**
11/25/1983	133	323	190	**190**
11/26/1983	169	327	158	**158**
11/27/1983	165	321	156	**156**
11/28/1983	174	307	133	**133**
11/29/1983	203	301	98	**98**
11/30/1983	212	308	96	**96**
12/1/1983	212	308	96	**96**
12/2/1983	213	313	100	**100**
12/3/1983	211	322	111	**111**
12/4/1983	207	315	108	**108**
12/5/1983	219	302	83	**83**
12/6/1983	227	304	77	**77**
12/7/1983	227	304	77	**77**
12/8/1983	228	309	81	**81**
12/9/1983	206	324	118	**118**
12/10/1983	141	326	185	**185**
12/11/1983	174	324	150	**150**
12/12/1983	190	313	123	**123**

Basic Tributaries Calculation = BSC_{OUT} - BSC_{IN}

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)
12/13/1983	216	311	95	**95**
12/14/1983	206	324	118	**118**
12/15/1983	178	323	145	**145**
12/16/1983	170	301	131	**131**
12/17/1983	175	310	135	**135**
12/18/1983	190	302	112	**112**
12/19/1983	219	305	86	**86**
12/20/1983	214	311	97	**97**
12/21/1983	222	304	82	**82**
12/22/1983	231	305	74	**74**
12/23/1983	232	312	80	**80**
12/24/1983	184	325	141	**141**
12/25/1983	164	335	171	**171**
12/26/1983	162	325	163	**163**
12/27/1983	167	303	136	**136**
12/28/1983	160	308	148	**148**
12/29/1983	160	313	153	**153**
12/30/1983	168	317	149	**149**
12/31/1983	162	285	123	**123**
1/1/1984	161	310	149	**149**
1/2/1984	161	308	147	**147**
1/3/1984	186	304	118	**118**
1/4/1984	201	320	119	**119**
1/5/1984	200	321	121	**121**
1/6/1984	201	315	114	**114**
1/7/1984	201	310	109	**109**
1/8/1984	201	320	119	**119**
1/9/1984	201	320	119	**119**
1/10/1984	201	316	115	**115**
1/11/1984	203	312	109	**109**
1/12/1984	218	310	92	**92**
1/13/1984	223	306	83	**83**
1/14/1984	236	306	70	**70**
1/15/1984	247	306	59	**59**
1/16/1984	259	315	56	**56**
1/17/1984	259	319	60	**60**
1/18/1984	258	317	59	**59**
1/19/1984	257	315	58	**58**
1/20/1984	257	312	55	**55**
1/21/1984	256	310	54	**54**
1/22/1984	259	308	49	**49**
1/23/1984	267	308	41	**41**
1/24/1984	271	312	41	**41**
1/25/1984	270	316	46	**46**
1/26/1984	268	314	46	**46**
1/27/1984	266	313	47	**47**
1/28/1984	265	312	47	**47**
1/29/1984	265	312	47	**47**
1/30/1984	264	311	47	**47**
1/31/1984	264	311	47	**47**
2/1/1984	263	309	46	**46**
2/2/1984	262	308	46	**46**
2/3/1984	261	308	47	**47**
2/4/1984	261	307	46	**46**
2/5/1984	271	306	35	**35**
2/6/1984	281	307	26	**26**
2/7/1984	280	311	31	**31**
2/8/1984	280	314	34	**34**
2/9/1984	269	319	50	**50**
2/10/1984	261	320	59	**59**
2/11/1984	255	313	58	**58**
2/12/1984	251	308	57	**57**
2/13/1984	236	317	81	**81**
2/14/1984	206	320	114	**114**
2/15/1984	207	307	100	**100**
2/16/1984	207	310	103	**103**
2/17/1984	218	301	83	**83**
2/18/1984	238	295	57	**57**

Basic Tributaries Calculation = BSC_{OUT} - BSC_{IN}

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)
2/19/1984	240	301	61	**61**
2/20/1984	240	302	62	**62**
2/21/1984	252	302	50	**50**
2/22/1984	262	310	48	**48**
2/23/1984	260	314	54	**54**
2/24/1984	260	314	54	**54**
2/25/1984	259	314	55	**55**
2/26/1984	258	310	52	**52**
2/27/1984	258	309	51	**51**
2/28/1984	257	308	51	**51**
2/29/1984	257	306	49	**49**
3/1/1984	257	305	48	**48**
3/2/1984	257	305	48	**48**
3/3/1984	256	311	55	**55**
3/4/1984	255	310	55	**55**
3/5/1984	253	308	55	**55**
3/6/1984	253	308	55	**55**
3/7/1984	253	308	55	**55**
3/8/1984	253	309	56	**56**
3/9/1984	252	312	60	**60**
3/10/1984	252	314	62	**62**
3/11/1984	245	314	69	**69**
3/12/1984	241	307	66	**66**
3/13/1984	182	313	131	**131**
3/14/1984	117	315	198	**198**
3/15/1984	167	311	144	**144**
3/16/1984	193	308	115	**115**
3/17/1984	205	310	105	**105**
3/18/1984	206	306	100	**100**
3/19/1984	206	305	99	**99**
3/20/1984	206	312	106	**106**
3/21/1984	195	318	123	**123**
3/22/1984	186	309	123	**123**
3/23/1984	186	299	113	**113**
3/24/1984	195	304	109	**109**
3/25/1984	203	304	101	**101**
3/26/1984	203	306	103	**103**
3/27/1984	203	312	109	**109**
3/28/1984	203	307	104	**104**
3/29/1984	204	304	100	**100**
3/30/1984	213	301	88	**88**
3/31/1984	221	307	86	**86**
4/1/1984	221	311	90	**90**
4/2/1984	221	308	87	**87**
4/3/1984	220	300	80	**80**
4/4/1984	220	302	82	**82**
4/5/1984	220	300	80	**80**
4/6/1984	228	300	72	**72**
4/7/1984	237	308	71	**71**
4/8/1984	235	321	86	**86**
4/9/1984	233	320	87	**87**
4/10/1984	230	320	90	**90**
4/11/1984	230	321	91	**91**
4/12/1984	230	321	91	**91**
4/13/1984	230	320	90	**90**
4/14/1984	221	319	98	**98**
4/15/1984	214	320	106	**106**
4/16/1984	200	320	120	**120**
4/17/1984	192	317	125	**125**
4/18/1984	193	316	123	**123**
4/19/1984	194	319	125	**125**
4/20/1984	194	315	121	**121**
4/21/1984	193	307	114	**114**
4/22/1984	196	303	107	**107**
4/23/1984	200	313	113	**113**
4/24/1984	199	318	119	**119**
4/25/1984	196	312	116	**116**
4/26/1984	203	301	98	**98**

Basic Tributaries Calculation = BSC_{OUT} - BSC_{IN}

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	
4/27/1984	211	301	90	**90**	
4/28/1984	211	300	89	**89**	
4/29/1984	210	298	88	**88**	
4/30/1984	209	295	86	**86**	
5/1/1984	218	300	82	**82**	
5/2/1984	210	321	111	**111**	
5/3/1984	184	321	137	**137**	
5/4/1984	174	320	146	**146**	
5/5/1984	174	315	141	**141**	
5/6/1984	175	306	131	**131**	
5/7/1984	175	299	124	**124**	
5/8/1984	175	299	124	**124**	
5/9/1984	176	305	129	**129**	
5/10/1984	176	314	138	**138**	
5/11/1984	167	317	150	**150**	
5/12/1984	143	314	171	**171**	
5/13/1984	141	303	162	**162**	
5/14/1984	154	304	150	**150**	
5/15/1984	155	305	150	**150**	
5/16/1984	168	297	129	**129**	
5/17/1984	191	291	100	**100**	
5/18/1984	192	304	112	**112**	
	77,396	**110,969**	**33,574**	**33,802**	**5/19/83 - 5/18/84**
x	1.9835	1.9835	1.9835	1.9835	
	153,514	**220,107**	**66,593**	**67,045**	acre-feet

Step 4: Calculate Tributaries Remaining after Spaulding Storage Collection

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	From Lower Division Analysis: Tributaries Water Stored In Rollins Sheet 3D Col 17	Combie Sheet 3G Col 12	Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
3/16/83	556	260	1,776	27%	71	**189**	N	S	T	**189**
3/17/83	292	202	1,502	17%	35	**168**	O	T	O	**168**
3/18/83	72	175	1,290	5%	9	**166**		O		**166**
3/19/83	-	167	1,131	0%	0	**167**	S	R	T	**167**
3/20/83	-	179	1,087	0%	0	**179**	T	A	H	**179**
3/21/83	-	186	1,020	0%	0	**186**	O	G	I	**186**
3/22/83	-	169	996	0%	0	**169**	R	E	S	**169**
3/23/83	-	163	904	0%	0	**163**	A			**163**
3/24/83	-	161	909	0%	0	**161**	G	A	C	**161**
3/25/83	-	137	803	0%	0	**137**	E	M	A	**137**
3/26/83	-	121	771	0%	0	**121**		O	L	**121**
3/27/83	-	121	797	0%	0	**121**	I	U	C	**121**
3/28/83	-	101	711	0%	0	**101**	N	N	U	**101**
3/29/83	-	87	690	0%	0	**87**		T	L	**87**
3/30/83	-	111	879	0%	0	**111**	J	S	A	**111**
3/31/83	-	294	3,192	0%	0	**294**	U		T	**294**
4/1/83	-	258	1,890	0%	0	**258**	N	N	I	**258**
4/2/83	-	165	1,597	0%	0	**165**	E	O	O	**165**
4/3/83	-	123	1,190	0%	0	**123**		T	N	**123**
4/4/83	-	131	1,052	0%	0	**131**	T			**131**
4/5/83	-	121	928	0%	0	**121**	H	R		**121**
4/6/83	-	135	871	0%	0	**135**	E	E		**135**
4/7/83	-	123	808	0%	0	**123**	R	L		**123**
4/8/83	-	123	986	0%	0	**123**	E	A		**123**
4/9/83	-	123	1,140	0%	0	**123**	F	V		**123**
4/10/83	-	125	1,049	0%	0	**125**	O	A		**125**
4/11/83	-	125	862	0%	0	**125**	R	N		**125**
4/12/83	-	113	758	0%	0	**113**	E	T		**113**
4/13/83	-	105	685	0%	0	**105**				**105**
4/14/83	-	111	559	0%	0	**111**				**111**
4/15/83	-	99	560	0%	0	**99**				**99**
4/16/83	-	87	749	0%	0	**87**				**87**
4/17/83	-	81	951	0%	0	**81**				**81**
4/18/83	-	111	1,110	0%	0	**111**				**111**
4/19/83	96	159	1,439	6%	10	**149**				**149**
4/20/83	548	214	1,905	26%	55	**159**				**159**
4/21/83	287	232	1,628	15%	36	**196**				**196**
4/22/83	320	173	1,665	17%	30	**143**				**143**
4/23/83	1,684	155	1,771	87%	135	**19**				**19**
4/24/83	717	117	1,449	46%	54	**63**				**63**
4/25/83	-	117	1,184	0%	0	**117**				**117**
4/26/83	-	159	996	-	0	**159**				**159**
4/27/83	-	129	972	-	0	**129**				**129**
4/28/83	-	184	1,367	-	0	**184**				**184**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Tributaries Water Stored In: Combie Sheet 3G Col 12	Tributaries Water Stored In: Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
4/29/83	-	184	1,502	-	0	**184**				**184**
4/30/83	-	190	1,229	-	0	**190**				**190**
5/1/83	-	184	996	-	0	**184**				**184**
5/2/83	-	133	998	-	0	**133**				**133**
5/3/83	-	157	1,298	-	0	**157**				**157**
5/4/83	-	177	1,625	-	0	**177**				**177**
5/5/83	-	180	1,369	-	0	**180**				**180**
5/6/83	-	179	1,008	-	0	**179**				**179**
5/7/83	-	179	1,134	-	0	**179**				**179**
5/8/83	66	180	1,383	4%	8	**173**				**173**
5/9/83	62	180	1,381	4%	7	**173**				**173**
5/10/83	261	180	1,586	15%	27	**154**				**154**
5/11/83	144	184	1,473	9%	16	**168**				**168**
5/12/83	569	218	1,882	27%	59	**159**				**159**
5/13/83	889	236	2,218	36%	86	**151**				**151**
5/14/83	1,266	244	2,581	45%	109	**135**				**135**
5/15/83	2,025	252	3,348	56%	142	**110**				**110**
5/16/83	1,902	272	3,243	54%	147	**125**				**125**
5/17/83	1,688	337	3,027	50%	169	**168**				**168**
5/18/83	2,281	393	3,610	57%	224	**169**				**169**
5/19/83	3,510	436	4,837	67%	290	**146**				**146**
5/20/83	4,271	448	5,624	70%	315	**133**				**133**
5/21/83	4,438	462	5,813	71%	327	**135**				**135**
5/22/83	4,512	528	5,883	70%	371	**156**				**156**
5/23/83	4,708	551	6,083	71%	391	**160**				**160**
5/24/83	5,149	567	6,545	72%	411	**157**				**157**
5/25/83	5,327	563	6,721	73%	412	**151**				**151**
5/26/83	2,317	561	7,016	31%	172	**390**				**390**
5/27/83	1,114	559	9,841	11%	60	**499**				**499**
5/28/83	39	555	9,538	0.4%	2	**553**				**553**
5/29/83	26	547	9,678	0.3%	1	**546**				**546**
5/30/83	-	545	8,586	-	0	**545**				**545**
5/31/83	-	540	8,407	-	0	**540**				**540**
6/1/83	-	532	6,872	-	0	**532**				**532**
6/2/83	-	528	5,461	-	0	**528**				**528**
6/3/83	509	518	6,325	7%	39	**479**				**479**
6/4/83	298	524	7,324	4%	20	**504**				**504**
6/5/83	-	528	7,449	-	0	**528**				**528**
6/6/83	-	526	7,458	-	0	**526**				**526**
6/7/83	-	526	7,268	-	0	**526**				**526**
6/8/83	-	526	6,683	-	0	**526**				**526**
6/9/83	305	528	6,777	4%	22	**506**				**506**
6/10/83	997	526	7,424	13%	66	**460**				**460**
6/11/83	716	528	8,838	8%	40	**487**				**487**
6/12/83	-	528	6,541	-	0	**528**				**528**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Tributaries Water Stored In: Combie Sheet 3G Col 12	Tributaries Water Stored In: Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
6/13/83	53	528	6,309	1%	4	**524**				**524**
6/14/83	275	528	6,858	4%	20	**508**				**508**
6/15/83	310	528	7,217	4%	21	**506**				**506**
6/16/83	489	528	6,447	7%	37	**491**				**491**
6/17/83	1,544	526	7,076	20%	107	**419**				**419**
6/18/83	14	530	6,530	0.2%	1	**529**				**529**
6/19/83	-	514	5,539	-	0	**514**				**514**
6/20/83	508	415	5,078	9%	38	**376**				**376**
6/21/83	1,373	409	5,578	23%	94	**315**				**315**
6/22/83	1,233	413	6,636	17%	72	**340**				**340**
6/23/83	247	413	7,870	3%	12	**400**				**400**
6/24/83	-	413	7,736	-	0	**413**				**413**
6/25/83	991	411	6,969	13%	55	**355**				**355**
6/26/83	35	407	7,340	0%	2	**405**				**405**
6/27/83	-	403	7,136	-	0	**403**				**403**
6/28/83	-	421	6,486	-	0	**421**				**421**
6/29/83	269	331	5,686	4%	15	**316**				**316**
6/30/83	381	327	4,772	7%	24	**303**				**303**
7/1/83	-	290	5,150	-	0	**290**				**290**
7/2/83	-	274	7,447	-	0	**274**				**274**
7/3/83	69	280	5,298	1%	3	**276**				**276**
7/4/83	416	276	4,431	9%	24	**251**				**251**
7/5/83	70	282	4,093	2%	5	**277**				**277**
7/6/83	70	284	4,293	2%	4	**279**				**279**
7/7/83	-	268	5,076	-	0	**268**				**268**
7/8/83	-	216	3,724	-	0	**216**				**216**
7/9/83	-	188	2,888	-	0	**188**				**188**
7/10/83	138	190	2,314	6%	10	**180**				**180**
7/11/83	626	143	2,705	22%	31	**111**				**111**
7/12/83	405	143	3,007	13%	18	**124**				**124**
7/13/83	-	165	3,498	-	0	**165**				**165**
7/14/83	-	151	3,876	-	0	**151**				**151**
7/15/83	-	145	3,897	-	0	**145**				**145**
7/16/83	-	145	3,820	-	0	**145**				**145**
7/17/83	-	155	3,091	-	0	**155**				**155**
7/18/83	-	125	2,667	-	0	**125**				**125**
7/19/83	-	107	2,128	-	0	**107**				**107**
7/20/83	-	107	1,675	-	0	**107**				**107**
7/21/83	-	111	1,523	-	0	**111**				**111**
7/22/83	-	109	1,681	-	0	**109**				**109**
7/23/83	-	91	1,320	-	0	**91**				**91**
7/24/83	-	63	1,673	-	0	**63**				**63**
7/25/83	-	73	1,537	-	0	**73**				**73**
7/26/83	-	71	2,151	-	0	**71**				**71**
7/27/83	-	75	339	-	0	**75**				**75**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Combie Sheet 3G Col 12	Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
7/28/83	-	60	1,139	-	0	**60**				**60**
7/29/83	-	42	1,159	-	0	**42**				**42**
7/30/83	-	32	1,175	-	0	**32**				**32**
7/31/83	-	24	1,151	-	0	**24**				**24**
8/1/83	-	34	1,131	-	0	**34**				**34**
8/2/83	-	32	1,524	-	0	**32**				**32**
8/3/83	-	38	1,471	-	0	**38**				**38**
8/4/83	-	28	1,409	-	0	**28**				**28**
8/5/83	-	22	1,254	-	0	**22**				**22**
8/6/83	-	14	943	-	0	**14**				**14**
8/7/83	-	8	914	-	0	**8**				**8**
8/8/83	-	6	906	-	0	**6**				**6**
8/9/83	-	10	1,115	-	0	**10**				**10**
8/10/83	-	12	1,196	-	0	**12**				**12**
8/11/83	-	12	1,016	-	0	**12**				**12**
8/12/83	-	0	271	-	0	**0**				**0**
8/13/83	-	0	297	-	0	**0**				**0**
8/14/83	-	276	232	-	0	**276**				**276**
8/15/83	-	175	641	-	0	**175**				**175**
8/16/83	-	98	1,125	-	0	**98**				**98**
8/17/83	-	22	1,151	-	0	**22**				**22**
8/18/83	-	0	1,111	-	0	**0**				**0**
8/19/83	-	0	1,133	-	0	**0**				**0**
8/20/83	-	0	1,197	-	0	**0**				**0**
8/21/83	-	0	1,184	-	0	**0**				**0**
8/22/83	-	18	1,216	-	0	**18**				**18**
8/23/83	-	18	1,159	-	0	**18**				**18**
8/24/83	-	20	1,067	-	0	**20**				**20**
8/25/83	-	6	1,096	-	0	**6**				**6**
8/26/83	-	12	760	-	0	**12**				**12**
8/27/83	-	16	400	-	0	**16**				**16**
8/28/83	-	16	60	-	0	**16**				**16**
8/29/83	-	22	582	-	0	**22**				**22**
8/30/83	-	48	958	-	0	**48**				**48**
8/31/83	-	12	1,024	-	0	**12**				**12**
9/1/83	-	36	1,102	-	0	**36**				**36**
9/2/83	-	42	1,110	-	0	**42**				**42**
9/3/83	-	34	1,002	-	0	**34**				**34**
9/4/83	-	32	996	-	0	**32**				**32**
9/5/83	-	30	973	-	0	**30**				**30**
9/6/83	-	22	967	-	0	**22**				**22**
9/7/83	-	18	962	-	0	**18**				**18**
9/8/83	-	8	954	-	0	**8**				**8**
9/9/83	-	18	926	-	0	**18**				**18**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Combie Sheet 3G Col 12	Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
9/10/83	-	32	995	-	0	**32**				**32**
9/11/83	-	26	947	-	0	**26**				**26**
9/12/83	-	22	1,667	-	0	**22**				**22**
9/13/83	-	22	908	-	0	**22**				**22**
9/14/83	-	20	912	-	0	**20**				**20**
9/15/83	-	18	897	-	0	**18**				**18**
9/16/83	-	16	932	-	0	**16**				**16**
9/17/83	-	16	862	-	0	**16**				**16**
9/18/83	-	16	871	-	0	**16**				**16**
9/19/83	-	14	751	-	0	**14**				**14**
9/20/83	-	2	782	-	0	**2**				**2**
9/21/83	-	0	787	-	0	**0**				**0**
9/22/83	-	0	817	-	0	**0**				**0**
9/23/83	-	6	753	-	0	**6**				**6**
9/24/83	-	6	790	-	0	**6**				**6**
9/25/83	-	2	776	-	0	**2**				**2**
9/26/83	-	2	628	-	0	**2**				**2**
9/27/83	-	2	292	-	0	**2**				**2**
9/28/83	-	26	570	-	0	**26**				**26**
9/29/83	-	30	598	-	0	**30**				**30**
9/30/83	-	75	746	-	0	**75**				**75**
10/1/83	-	32	621	-	0	**32**				**32**
10/2/83	-	103	619	-	0	**103**				**103**
10/3/83	-	123	567	-	0	**123**				**123**
10/4/83	-	307	360	-	0	**307**				**307**
10/5/83	-	245	481	-	0	**245**				**245**
10/6/83	-	136	784	-	0	**136**				**136**
10/7/83	-	85	713	-	0	**85**				**85**
10/8/83	-	63	764	-	0	**63**				**63**
10/9/83	-	52	838	-	0	**52**				**52**
10/10/83	-	65	717	-	0	**65**				**65**
10/11/83	-	52	712	-	0	**52**				**52**
10/12/83	-	34	748	-	0	**34**				**34**
10/13/83	-	28	771	-	0	**28**				**28**
10/14/83	-	24	712	-	0	**24**				**24**
10/15/83	-	24	732	-	0	**24**				**24**
10/16/83	-	24	738	-	0	**24**				**24**
10/17/83	-	24	738	-	0	**24**				**24**
10/18/83	-	24	653	-	0	**24**				**24**
10/19/83	-	24	31	-	0	**24**				**24**
10/20/83	-	22	254	-	0	**22**				**22**
10/21/83	-	16	109	-	0	**16**				**16**
10/22/83	-	22	212	-	0	**22**				**22**
10/23/83	-	24	197	-	0	**24**				**24**
10/24/83	-	28	157	-	0	**28**				**28**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Tributaries Water Stored In: Combie Sheet 3G Col 12	Tributaries Water Stored In: Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
10/25/83	-	20	180	-	0	**20**				**20**
10/26/83	-	14	238	-	0	**14**				**14**
10/27/83	-	12	150	-	0	**12**				**12**
10/28/83	-	12	129	-	0	**12**				**12**
10/29/83	-	8	238	-	0	**8**				**8**
10/30/83	403	52	1,607	24%	13	**39**				**39**
10/31/83	1,319	165	3,087	41%	67	**98**				**98**
11/1/83	-	184	3,354	-	0	**184**				**184**
11/2/83	-	157	1,389	-	0	**157**				**157**
11/3/83	-	30	593	-	0	**30**				**30**
11/4/83	-	2	477	-	0	**2**				**2**
11/5/83	-	16	433	-	0	**16**				**16**
11/6/83	-	24	666	-	0	**24**				**24**
11/7/83	-	71	1,672	-	0	**71**				**71**
11/8/83	-	48	646	-	0	**48**				**48**
11/9/83	-	56	765	-	0	**56**				**56**
11/10/83	2,753	109	3,967	68%	74	**35**				**35**
11/11/83	2,696	220	7,690	34%	75	**145**				**145**
11/12/83	-	228	4,089	-	0	**228**				**228**
11/13/83	-	270	2,228	-	0	**270**				**270**
11/14/83	-	173	1,394	-	0	**173**				**173**
11/15/83	-	133	1,245	-	0	**133**				**133**
11/16/83	-	228	4,257	-	0	**228**				**228**
11/17/83	-	395	14,952	-	0	**395**				**395**
11/18/83	-	349	4,031	-	0	**349**				**349**
11/19/83	-	371	4,709	-	0	**371**				**371**
11/20/83	-	216	5,091	-	0	**216**				**216**
11/21/83	-	280	1,903	-	0	**280**				**280**
11/22/83	-	305	832	-	0	**305**				**305**
11/23/83	-	224	1,506	-	0	**224**				**224**
11/24/83	-	422	9,389	-	0	**422**				**422**
11/25/83	-	377	3,882	-	0	**377**				**377**
11/26/83	-	313	1,840	-	0	**313**				**313**
11/27/83	-	309	1,242	-	0	**309**				**309**
11/28/83	-	264	998	-	0	**264**				**264**
11/29/83	-	194	819	-	0	**194**				**194**
11/30/83	-	190	789	-	0	**190**				**190**
12/1/83	-	190	756	-	0	**190**				**190**
12/2/83	-	198	845	-	0	**198**				**198**
12/3/83	-	220	1,096	-	0	**220**				**220**
12/4/83	-	214	785	-	0	**214**				**214**
12/5/83	-	165	777	-	0	**165**				**165**
12/6/83	-	153	727	-	0	**153**				**153**
12/7/83	-	153	685	-	0	**153**				**153**
12/8/83	-	161	919	-	0	**161**				**161**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Tributaries Water Stored In: Combie Sheet 3G Col 12	Tributaries Water Stored In: Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
12/9/83	-	234	2,021	-	0	**234**				**234**
12/10/83	-	367	1,970	-	0	**367**				**367**
12/11/83	-	298	1,707	-	0	**298**				**298**
12/12/83	-	244	1,038	-	0	**244**				**244**
12/13/83	-	188	948	-	0	**188**				**188**
12/14/83	-	234	1,561	-	0	**234**				**234**
12/15/83	-	288	1,686	-	0	**288**				**288**
12/16/83	-	260	1,463	-	0	**260**				**260**
12/17/83	-	268	1,469	-	0	**268**				**268**
12/18/83	-	222	987	-	0	**222**				**222**
12/19/83	-	171	893	-	0	**171**				**171**
12/20/83	-	192	695	-	0	**192**				**192**
12/21/83	-	163	1,189	-	0	**163**				**163**
12/22/83	-	147	13	-	0	**147**				**147**
12/23/83	-	159	677	-	0	**159**				**159**
12/24/83	-	280	3,191	-	0	**280**				**280**
12/25/83	-	339	11,199	-	0	**339**				**339**
12/26/83	-	323	8,306	-	0	**323**				**323**
12/27/83	-	270	5,698	-	0	**270**				**270**
12/28/83	-	294	2,786	-	0	**294**				**294**
12/29/83	-	303	1,749	-	0	**303**				**303**
12/30/83	-	296	6,456	-	0	**296**				**296**
12/31/83	-	244	4,934	-	0	**244**				**244**
1/1/84	-	296	2,143	-	0	**296**				**296**
1/2/84	-	292	1,459	-	0	**292**				**292**
1/3/84	-	234	1,216	-	0	**234**				**234**
1/4/84	-	236	1,590	-	0	**236**				**236**
1/5/84	-	240	1,726	-	0	**240**				**240**
1/6/84	-	226	1,631	-	0	**226**				**226**
1/7/84	-	216	1,274	-	0	**216**				**216**
1/8/84	-	236	1,121	-	0	**236**				**236**
1/9/84	-	236	969	-	0	**236**				**236**
1/10/84	-	228	910	-	0	**228**				**228**
1/11/84	-	216	758	-	0	**216**				**216**
1/12/84	-	182	782	-	0	**182**				**182**
1/13/84	-	165	590	-	0	**165**				**165**
1/14/84	-	139	629	-	0	**139**				**139**
1/15/84	-	117	563	-	0	**117**				**117**
1/16/84	-	111	562	-	0	**111**				**111**
1/17/84	-	119	534	-	0	**119**				**119**
1/18/84	-	117	530	-	0	**117**				**117**
1/19/84	-	115	499	-	0	**115**				**115**
1/20/84	-	109	578	-	0	**109**				**109**
1/21/84	-	107	554	-	0	**107**				**107**
1/22/84	-	97	576	-	0	**97**				**97**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Tributaries Water Stored In: Combie Sheet 3G Col 12	Tributaries Water Stored In: Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
1/23/84	-	81	590	-	0	**81**				**81**
1/24/84	-	81	456	-	0	**81**				**81**
1/25/84	-	91	703	-	0	**91**				**91**
1/26/84	-	91	1,026	-	0	**91**				**91**
1/27/84	-	93	(51)	-	0	**93**				**93**
1/28/84	-	93	769	-	0	**93**				**93**
1/29/84	-	93	406	-	0	**93**				**93**
1/30/84	-	93	618	-	0	**93**				**93**
1/31/84	-	93	882	-	0	**93**				**93**
2/1/84	-	91	833	-	0	**91**				**91**
2/2/84	-	91	819	-	0	**91**				**91**
2/3/84	-	93	818	-	0	**93**				**93**
2/4/84	-	91	847	-	0	**91**				**91**
2/5/84	-	69	891	-	0	**69**				**69**
2/6/84	-	52	829	-	0	**52**				**52**
2/7/84	-	61	953	-	0	**61**				**61**
2/8/84	-	67	1,072	-	0	**67**				**67**
2/9/84	-	99	1,331	-	0	**99**				**99**
2/10/84	-	117	1,157	-	0	**117**				**117**
2/11/84	-	115	1,086	-	0	**115**				**115**
2/12/84	-	113	1,181	-	0	**113**				**113**
2/13/84	-	161	2,359	-	0	**161**				**161**
2/14/84	-	226	1,625	-	0	**226**				**226**
2/15/84	-	198	1,674	-	0	**198**				**198**
2/16/84	-	204	1,660	-	0	**204**				**204**
2/17/84	-	165	1,310	-	0	**165**				**165**
2/18/84	-	113	1,221	-	0	**113**				**113**
2/19/84	-	121	1,229	-	0	**121**				**121**
2/20/84	-	123	1,175	-	0	**123**				**123**
2/21/84	-	99	1,256	-	0	**99**				**99**
2/22/84	-	95	1,139	-	0	**95**				**95**
2/23/84	-	107	1,113	-	0	**107**				**107**
2/24/84	-	107	1,095	-	0	**107**				**107**
2/25/84	-	109	1,022	-	0	**109**				**109**
2/26/84	-	103	1,044	-	0	**103**				**103**
2/27/84	-	101	1,062	-	0	**101**				**101**
2/28/84	-	101	1,087	-	0	**101**				**101**
2/29/84	-	97	1,079	-	0	**97**				**97**
3/1/84	-	95	1,141	-	0	**95**				**95**
3/2/84	-	95	1,282	-	0	**95**				**95**
3/3/84	-	109	1,270	-	0	**109**				**109**
3/4/84	-	109	1,198	-	0	**109**				**109**
3/5/84	-	109	1,180	-	0	**109**				**109**
3/6/84	-	109	1,228	-	0	**109**				**109**
3/7/84	-	109	1,311	-	0	**109**				**109**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Tributaries Water Stored In: Combie Sheet 3G Col 12	Tributaries Water Stored In: Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
3/8/84	24	111	1,399	2%	2	**109**				**109**
3/9/84	188	119	1,567	11%	13	**106**				**106**
3/10/84	190	123	1,571	11%	14	**109**				**109**
3/11/84	150	137	1,532	9%	12	**125**				**125**
3/12/84	49	131	1,443	3%	4	**127**				**127**
3/13/84	2,326	260	3,794	57%	149	**111**				**111**
3/14/84	1,426	393	2,955	43%	167	**225**				**225**
3/15/84	583	286	2,094	24%	70	**216**				**216**
3/16/84	237	228	1,744	12%	27	**201**				**201**
3/17/84	67	208	1,565	4%	8	**200**				**200**
3/18/84	41	198	1,544	2%	5	**194**				**194**
3/19/84	335	196	1,842	16%	32	**164**				**164**
3/20/84	618	210	2,104	27%	56	**154**				**154**
3/21/84	780	244	2,248	31%	76	**168**				**168**
3/22/84	400	244	1,882	19%	46	**198**				**198**
3/23/84	254	224	1,754	13%	29	**195**				**195**
3/24/84	371	216	1,855	18%	39	**177**				**177**
3/25/84	421	200	1,903	20%	40	**160**				**160**
3/26/84	922	204	2,396	35%	72	**132**				**132**
3/27/84	552	216	2,008	25%	54	**163**				**163**
3/28/84	282	206	1,746	14%	30	**176**				**176**
3/29/84	234	198	1,706	12%	24	**174**				**174**
3/30/84	87	175	1,563	5%	9	**166**				**166**
3/31/84	77	171	1,539	5%	8	**163**				**163**
4/1/84	-	179	1,433	-	0	**179**				**179**
4/2/84	-	173	1,160	-	0	**173**				**173**
4/3/84	-	159	1,432	-	0	**159**				**159**
4/4/84	-	163	1,617	-	0	**163**				**163**
4/5/84	-	159	1,019	-	0	**159**				**159**
4/6/84	-	143	725	-	0	**143**				**143**
4/7/84	-	141	914	-	0	**141**				**141**
4/8/84	-	171	1,454	-	0	**171**				**171**
4/9/84	-	173	1,033	-	0	**173**				**173**
4/10/84	-	179	1,054	-	0	**179**				**179**
4/11/84	-	180	951	-	0	**180**				**180**
4/12/84	-	180	997	-	0	**180**				**180**
4/13/84	-	179	1,114	-	0	**179**				**179**
4/14/84	105	194	1,458	6%	12	**182**				**182**
4/15/84	531	210	2,044	24%	50	**161**				**161**
4/16/84	-	238	2,199	-	0	**238**				**238**
4/17/84	-	248	1,991	-	0	**248**				**248**
4/18/84	-	244	1,690	-	0	**244**				**244**
4/19/84	-	248	1,371	-	0	**248**				**248**
4/20/84	-	240	1,050	-	0	**240**				**240**
4/21/84	-	226	1,256	-	0	**226**				**226**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Tributaries Water Stored In: Combie Sheet 3G Col 12	Tributaries Water Stored In: Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
4/22/84	-	212	1,174	-	0	**212**				**212**
4/23/84	-	224	1,745	-	0	**224**				**224**
4/24/84	-	236	1,757	-	0	**236**				**236**
4/25/84	-	230	1,424	-	0	**230**				**230**
4/26/84	-	194	1,021	-	0	**194**				**194**
4/27/84	-	179	848	-	0	**179**				**179**
4/28/84	-	177	817	-	0	**177**				**177**
4/29/84	-	175	968	-	0	**175**				**175**
4/30/84	-	171	1,191	-	0	**171**				**171**
5/1/84	-	163	1,208	-	0	**163**				**163**
5/2/84	164	220	1,499	10%	21	**199**				**199**
5/3/84	1,149	272	2,502	41%	113	**159**				**159**
5/4/84	1,114	290	2,465	40%	117	**172**				**172**
5/5/84	483	280	1,833	23%	64	**216**				**216**
5/6/84	377	260	1,746	19%	49	**211**				**211**
5/7/84	531	246	1,909	25%	61	**185**				**185**
5/8/84	1,110	246	2,485	41%	100	**146**				**146**
5/9/84	1,583	256	2,950	49%	126	**130**				**130**
5/10/84	1,620	274	2,968	50%	137	**137**				**137**
5/11/84	2,068	298	3,406	56%	166	**131**				**131**
5/12/84	2,260	339	3,600	57%	195	**145**				**145**
5/13/84	2,301	321	3,667	58%	185	**136**				**136**
5/14/84	2,007	298	3,368	55%	163	**135**				**135**
5/15/84	1,001	298	2,385	37%	111	**187**				**187**
5/16/84	81	256	1,499	5%	12	**244**				**244**
5/17/84	94	198	1,514	5%	11	**187**				**187**
5/18/84	633	222	2,029	28%	62	**160**				**160**
5/19-5/18:	**84,749**	**67,045**	**813,802**		**6,508**	**60,537**				**60,537**
			Σ ✓	(AF Stored in Spaulding)		"Taken from Source" (Not stored in Spaulding)				

Step 5: Split Remaining Tribs D/d & Impair Rucker Ck

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%	Rucker Creek Direct Diversion by PG&E	Rucker Creek Direct Diversion by NID	Rucker Ck NID 30-day Avg (af) (49.6 max)	Final Remaining Tribs D/d Appropriation Under Combined Rts	
4/19/83	149	48	9	61	9	22	-	22		149	
4/20/83	159	51	10	65	10	24	-	24	N/A	159	
4/21/83	196	63	12	80	12	29	-	29	N/A	196	
4/22/83	143	46	9	58	9	21	-	21	N/A	143	
4/23/83	19	6	1	8	1	3	-	3	N/A	19	
4/24/83	63	20	4	26	4	10	-	10	N/A	63	
4/25/83	117	37	7	48	7	18	-	18	N/A	117	
4/26/83	159	51	10	65	10	24	-	24	N/A	159	
4/27/83	129	41	8	53	8	19	-	19	N/A	129	
4/28/83	184	59	11	76	11	28	-	28	N/A	184	
4/29/83	184	59	11	76	11	28	-	28	N/A	184	
4/30/83	190	61	11	78	11	29	-	29	N/A	190	
5/1/83	184	59	11	76	11	28	-	28	N/A	184	
5/2/83	133	43	8	54	8	20	-	20	N/A	133	
5/3/83	157	50	9	64	9	24	-	24	N/A	157	
5/4/83	177	56	11	72	11	26	-	26	N/A	177	
5/5/83	180	58	11	74	11	27	-	27	N/A	180	
5/6/83	179	57	11	73	11	27	-	27	N/A	179	
5/7/83	179	57	11	73	11	27	-	27	N/A	179	
5/8/83	173	55	10	71	10	26	-	26	N/A	173	
5/9/83	173	55	10	71	10	26	-	26	N/A	173	
5/10/83	154	49	9	63	9	23	-	23	N/A	154	
5/11/83	168	54	10	69	10	25	-	25	N/A	168	
5/12/83	159	51	10	65	10	24	-	24	N/A	159	
5/13/83	151	48	9	62	9	23	-	23	N/A	151	
5/14/83	135	43	8	55	8	20	-	20	N/A	135	
5/15/83	110	35	7	45	7	17	-	17	N/A	110	
5/16/83	125	40	7	51	7	19	-	19	N/A	125	
5/17/83	168	54	10	69	10	25	-	25	N/A	168	
5/18/83	169	54	10	69	10	25	-	25	23	169	
5/19/83	146	47	9	60	9	22	-	22	23	146	
5/20/83	133	43	8	55	8	20	-	20	23	133	
5/21/83	135	43	8	55	8	20	-	20	22	135	
5/22/83	156	50	9	64	9	23	-	23	22	156	
5/23/83	160	51	10	66	10	24	-	24	23	160	
5/24/83	157	50	9	64	9	23	-	23	24	157	
5/25/83	151	48	9	62	9	23	-	23	24	151	
5/26/83	390	125	23	160	23	58	-	58	25	390	
5/27/83	499	160	30	205	30	75	-	75	27	499	
5/28/83	553	177	33	227	33	83	-	83	29	553	
5/29/83	546	175	33	224	33	82	-	82	30	546	
5/30/83	545	175	33	224	33	82	-	82	32	545	
5/31/83	540	173	32	221	32	81	-	81	34	540	
6/1/83	532	170	32	218	32	80	-	80	36	532	
6/2/83	528	169	32	216	32	79	-	79	38	528	
6/3/83	479	153	29	196	29	72	-	72	39	479	
6/4/83	504	161	30	207	30	76	-	76	41	504	
6/5/83	528	169	32	216	32	79	-	79	43	528	
6/6/83	526	168	32	216	32	79	-	79	44	526	PG&E
6/7/83	526	168	32	216	32	79	-	79	46	526	Running
6/8/83	526	168	32	216	32	79	-	79	48	526	Total
6/9/83	506	162	30	207	30	76	4	72	**49.6**	501	4
6/10/83	460	147	28	188	28	69	44	25	**49.6**	416	48
6/11/83	487	156	29	200	29	73	49	24	**49.6**	438	97
6/12/83	528	169	32	216	32	79	57	23	**49.6**	471	154
6/13/83	524	168	31	215	31	79	58	20	**49.6**	465	212
6/14/83	508	163	30	208	30	76	60	17	**49.6**	448	272
6/15/83	506	162	30	208	30	76	57	19	**49.6**	449	329
6/16/83	491	157	29	201	29	74	48	25	**49.6**	442	377
6/17/83	419	134	25	172	25	63	37	25	**49.6**	381	415
6/18/83	529	169	32	217	32	79	57	22	**49.6**	471	472
6/19/83	514	164	31	211	31	77	57	20	**49.6**	457	529
6/20/83	376	120	23	154	23	56	36	20	**49.6**	340	566
6/21/83	315	101	19	129	19	47	24	23	**49.6**	291	589
6/22/83	340	109	20	140	20	51	27	24	**49.6**	313	616
6/23/83	400	128	24	164	24	60	37	23	**49.6**	364	653
6/24/83	413	132	25	169	25	62	39	23	**49.6**	373	**692**
6/25/83	355	114	21	146	21	53	-	53	49.4	355	
6/26/83	405	130	24	166	24	61	-	61	49.0	405	
6/27/83	403	129	24	165	24	60	-	60	48	403	
6/28/83	421	135	25	172	25	63	-	63	48	421	
6/29/83	316	101	19	130	19	47	-	47	46	316	
6/30/83	303	97	18	124	18	45	-	45	45	303	
7/1/83	290	93	17	119	17	43	-	43	44	290	
7/2/83	274	88	16	112	16	41	-	41	43	274	
7/3/83	276	88	17	113	17	41	-	41	42	276	
7/4/83	251	80	15	103	15	38	-	38	40	251	
7/5/83	277	89	17	114	17	42	-	42	39	277	
7/6/83	279	89	17	115	17	42	-	42	38	279	
7/7/83	268	86	16	110	16	40	-	40	37	268	
7/8/83	216	69	13	89	13	32	-	32	35	216	
7/9/83	188	60	11	77	11	28	-	28	34	188	
7/10/83	180	58	11	74	11	27	-	27	34	180	
7/11/83	111	36	7	46	7	17	-	17	34	111	
7/12/83	124	40	7	51	7	19	-	19	33	124	
7/13/83	165	53	10	67	10	25	-	25	34	165	

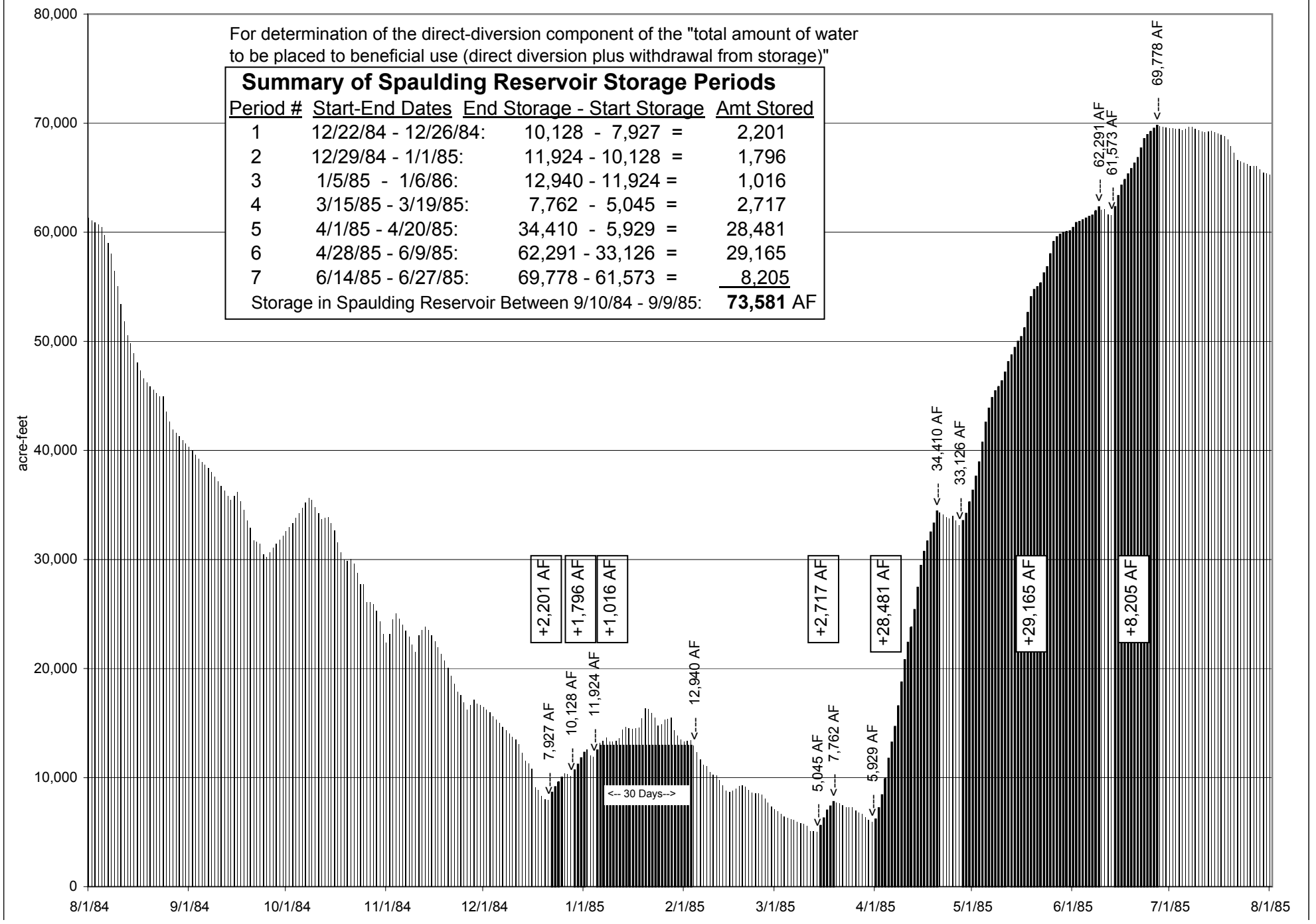
	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%	Rucker Creek Direct Diversion by PG&E	by NID	NID 30-day Avg (af) (49.6 max)	Final Remaining Tribs D/d Appropriation Under Combined Rts
7/14/83	151	48	9	62	9	23	-	23	34	151
7/15/83	145	46	9	59	9	22	-	22	34	145
7/16/83	145	46	9	59	9	22	-	22	34	145
7/17/83	155	50	9	63	9	23	-	23	34	155
7/18/83	125	40	7	51	7	19	-	19	34	125
7/19/83	107	34	6	44	6	16	-	16	33	107
7/20/83	107	34	6	44	6	16	-	16	33	107
7/21/83	111	36	7	46	7	17	-	17	33	111
7/22/83	109	35	7	45	7	16	-	16	33	109
7/23/83	91	29	5	37	5	14	-	14	32	91
7/24/83	63	20	4	26	4	10	-	10	32	63
7/25/83	73	23	4	30	4	11	-	11	31	73
7/26/83	71	23	4	29	4	11	-	11	29	71
7/27/83	75	24	5	31	5	11	-	11	27	75
7/28/83	60	19	4	24	4	9	-	9	26	60
7/29/83	42	13	2	17	2	6	-	6	24	42
7/30/83	32	10	2	13	2	5	-	5	23	32
7/31/83	24	8	1	10	1	4	-	4	21	24
8/1/83	34	11	2	14	2	5	-	5	20	34
8/2/83	32	10	2	13	2	5	-	5	19	32
8/3/83	38	12	2	15	2	6	-	6	18	38
8/4/83	28	9	2	11	2	4	-	4	17	28
8/5/83	22	7	1	9	1	3	-	3	15	22
8/6/83	14	4.4	0.8	5.7	0.8	2.1	-	2	14	14
8/7/83	8	2.5	0.5	3.3	0.5	1.2	-	1	13	8
8/8/83	6	1.9	0.4	2.4	0.4	0.9	-	1	12	6
8/9/83	10	3.2	0.6	4.1	0.6	1.5	-	1	11	10
8/10/83	12	3.8	0.7	4.9	0.7	1.8	-	2	11	12
8/11/83	12	3.8	0.7	4.9	0.7	1.8	-	2	10	12
8/12/83	0	0	0	0	0	0	-	0	10	0
8/13/83	0	0	0	0	0	0	-	0	9	0
8/14/83	276	88	17	113	17	41	-	41	9	276
8/15/83	175	56	10	72	10	26	-	26	10	175
8/16/83	98	31	6	40	6	15	-	15	9	98
8/17/83	22	7	1	9	1	3	-	3	9	22
8/18/83	-	-	-	-	-	-	-	-	8	-
8/19/83	-	-	-	-	-	-	-	-	8	-
8/20/83	-	-	-	-	-	-	-	-	7	-
8/21/83	-	-	-	-	-	-	-	-	7	-
8/22/83	18	6	1	7	1	3	-	3	6	18
8/23/83	18	6	1	7	1	3	-	3	6	18
8/24/83	20	6	1	8	1	3	-	3	6	20
8/25/83	6	2	0	2	0	1	-	1	5	6
8/26/83	12	4	1	5	1	2	-	2	5	12
8/27/83	16	5	1	7	1	2	-	2	5	16
8/28/83	16	5	1	7	1	2	-	2	5	16
8/29/83	22	7	1	9	1	3	-	3	5	22
8/30/83	48	15	3	20	3	7	-	7	5	48
8/31/83	12	4	1	5	1	2	-	2	5	12
9/1/83	36	11	2	15	2	5	-	5	5	36
9/2/83	42	13	2	17	2	6	-	6	5	42
9/3/83	34	11	2	14	2	5	-	5	5	34
9/4/83	32	10	2	13	2	5	-	5	5	32
9/5/83	30	10	2	12	2	4	-	4	5	30
9/6/83	22	7	1	9	1	3	-	3	5	22
9/7/83	18	6	1	7	1	3	-	3	5	18
9/8/83	8	3	0	3	0	1	-	1	5	8
9/9/83	18	6	1	7	1	3	-	3	5	18
9/10/83	32	10	2	13	2	5	-	5	5	32
9/11/83	26	8	2	11	2	4	-	4	5	26
9/12/83	22	7	1	9	1	3	-	3	5	22
9/13/83	22	7	1	9	1	3	-	3	4	22
9/14/83	20	6	1	8	1	3	-	3	3	20
9/15/83	18	6	1	7	1	3	-	3	3	18
9/16/83	16	5	1	7	1	2	-	2	3	16
9/17/83	16	5	1	7	1	2	-	2	3	16
9/18/83	16	5	1	7	1	2	-	2	3	16
9/19/83	14	4	1	6	1	2	-	2	3	14
9/20/83	2	1	0	1	0	0	-	0	3	2
9/21/83	0	0	0	0	0	0	-	0	3	0
9/22/83	0	0	0	0	0	0	-	0	3	0
9/23/83	6	2	0	2	0	1	-	1	3	6
9/24/83	6	2	0	2	0	1	-	1	3	6
9/25/83	2	1	0	1	0	0	-	0	3	2
9/26/83	2	1	0	1	0	0	-	0	3	2
9/27/83	2	1	0	1	0	0	-	0	3	2
9/28/83	26	8	2	11	2	4	-	4	3	26
9/29/83	30	10	2	12	2	4	-	4	3	30
9/30/83	75	24	5	31	5	11	-	11	3	75
10/1/83	32	10	2	13	2	5	-	5	3	32
10/2/83	103	33	6	42	6	15	-	15	3	103
10/3/83	123	39	7	50	7	18	-	18	4	123
10/4/83	307	98	18	126	18	46	-	46	5	307
10/5/83	245	79	15	101	15	37	-	37	6	245
10/6/83	136	43	8	56	8	20	-	20	7	136
10/7/83	85	27	5	35	5	13	-	13	7	85
10/8/83	63	20	4	26	4	10	-	10	7	63

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%	Rucker Creek Direct Diversion by PG&E	by NID	NID 30-day Avg (af) (49.6 max)	Final Remaining Tribs D/d Appropriation Under Combined Rts
10/9/83	52	17	3	21	3	8	-	8	7	52
10/10/83	65	21	4	27	4	10	-	10	8	65
10/11/83	52	17	3	21	3	8	-	8	8	52
10/12/83	34	11	2	14	2	5	-	5	8	34
10/13/83	28	9	2	11	2	4	-	4	8	28
10/14/83	24	8	1	10	1	4	-	4	8	24
10/15/83	24	8	1	10	1	4	-	4	8	24
10/16/83	24	8	1	10	1	4	-	4	8	24
10/17/83	24	8	1	10	1	4	-	4	8	24
10/18/83	24	8	1	10	1	4	-	4	8	24
10/19/83	24	8	1	10	1	4	-	4	8	24
10/20/83	22	7	1	9	1	3	-	3	8	22
10/21/83	16	5	1	7	1	2	-	2	8	16
10/22/83	22	7	1	9	1	3	-	3	8	22
10/23/83	24	8	1	10	1	4	-	4	8	24
10/24/83	28	9	2	11	2	4	-	4	9	28
10/25/83	20	6	1	8	1	3	-	3	9	20
10/26/83	14	4	1	6	1	2	-	2	9	14
10/27/83	12	4	1	5	1	2	-	2	9	12
10/28/83	12	4	1	5	1	2	-	2	9	12
10/29/83	8	3	0	3	0	1	-	1	9	8
10/30/83	39	12	2	16	2	6	-	6	8	39
10/31/83	98	31	6	40	6	15	-	15	9	98
11/1/83	184	59	11	76	11	28	-	28	9	184
11/2/83	157	50	9	64	9	24	-	24	9	157
11/3/83	30	10	2	12	2	4	-	4	8	30
11/4/83	2	1	0	1	0	0	-	0	7	2
11/5/83	16	5	1	7	1	2	-	2	6	16
11/6/83	24	8	1	10	1	4	-	4	6	24
11/7/83	71	23	4	29	4	11	-	11	6	71
11/8/83	48	15	3	20	3	7	-	7	6	48
11/9/83	56	18	3	23	3	8	-	8	6	56
11/10/83	35	11	2	15	2	5	-	5	6	35
11/11/83	145	46	9	60	9	22	-	22	6	145
11/12/83	228	73	14	94	14	34	-	34	7	228
11/13/83	270	86	16	111	16	40	-	40	8	270
11/14/83	173	55	10	71	10	26	-	26	9	173
11/15/83	133	43	8	54	8	20	-	20	10	133
11/16/83	228	73	14	94	14	34	-	34	11	228
11/17/83	395	126	24	162	24	59	-	59	13	395
11/18/83	349	112	21	143	21	52	-	52	14	349
11/19/83	371	119	22	152	22	56	-	56	16	371
11/20/83	216	69	13	89	13	32	-	32	17	216
11/21/83	280	89	17	115	17	42	-	42	18	280
11/22/83	305	98	18	125	18	46	-	46	20	305
11/23/83	224	72	13	92	13	34	-	34	21	224
11/24/83	422	135	25	173	25	63	-	63	23	422
11/25/83	377	121	23	155	23	57	-	57	25	377
11/26/83	313	100	19	128	19	47	-	47	26	313
11/27/83	309	99	19	127	19	46	-	46	28	309
11/28/83	264	84	16	108	16	40	-	40	29	264
11/29/83	194	62	12	80	12	29	-	29	30	194
11/30/83	190	61	11	78	11	29	-	29	30	190
12/1/83	190	61	11	78	11	29	-	29	30	190
12/2/83	198	63	12	81	12	30	-	30	30	198
12/3/83	220	70	13	90	13	33	-	33	31	220
12/4/83	214	69	13	88	13	32	-	32	32	214
12/5/83	165	53	10	67	10	25	-	25	33	165
12/6/83	153	49	9	63	9	23	-	23	34	153
12/7/83	153	49	9	63	9	23	-	23	34	153
12/8/83	161	51	10	66	10	24	-	24	35	161
12/9/83	234	75	14	96	14	35	-	35	36	234
12/10/83	367	117	22	150	22	55	-	55	37	367
12/11/83	298	95	18	122	18	45	-	45	38	298
12/12/83	244	78	15	100	15	37	-	37	38	244
12/13/83	188	60	11	77	11	28	-	28	38	188
12/14/83	234	75	14	96	14	35	-	35	38	234
12/15/83	288	92	17	118	17	43	-	43	39	288
12/16/83	260	83	16	107	16	39	-	39	39	260
12/17/83	268	86	16	110	16	40	-	40	38	268
12/18/83	222	71	13	91	13	33	-	33	38	222
12/19/83	171	55	10	70	10	26	-	26	37	171
12/20/83	192	62	12	79	12	29	-	29	36	192
12/21/83	163	52	10	67	10	24	-	24	36	163
12/22/83	147	47	9	60	9	22	-	22	35	147
12/23/83	159	51	10	65	10	24	-	24	35	159
12/24/83	280	89	17	115	17	42	-	42	34	280
12/25/83	339	109	20	139	20	51	-	51	34	339
12/26/83	323	103	19	133	19	48	-	48	34	323
12/27/83	270	86	16	111	16	40	-	40	34	270
12/28/83	294	94	18	120	18	44	-	44	34	294
12/29/83	303	97	18	124	18	46	-	46	34	303
12/30/83	296	95	18	121	18	44	-	44	35	296
12/31/83	244	78	15	100	15	37	-	37	35	244
1/1/84	296	95	18	121	18	44	-	44	36	296
1/2/84	292	93	17	120	17	44	-	44	36	292
1/3/84	234	75	14	96	14	35	-	35	36	234

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%	Rucker Creek Direct Diversion by PG&E	by NID	NID 30-day Avg (af) (49.6 max)	Final Remaining Tribs D/d Appropriation Under Combined Rts
1/4/84	236	76	14	97	14	35	-	35	37	236
1/5/84	240	77	14	98	14	36	-	36	37	240
1/6/84	226	72	14	93	14	34	-	34	37	226
1/7/84	216	69	13	89	13	32	-	32	38	216
1/8/84	236	76	14	97	14	35	-	35	38	236
1/9/84	236	76	14	97	14	35	-	35	37	236
1/10/84	228	73	14	94	14	34	-	34	37	228
1/11/84	216	69	13	89	13	32	-	32	36	216
1/12/84	182	58	11	75	11	27	-	27	36	182
1/13/84	165	53	10	67	10	25	-	25	36	165
1/14/84	139	44	8	57	8	21	-	21	35	139
1/15/84	117	37	7	48	7	18	-	18	35	117
1/16/84	111	36	7	46	7	17	-	17	34	111
1/17/84	119	38	7	49	7	18	-	18	33	119
1/18/84	117	37	7	48	7	18	-	18	33	117
1/19/84	115	37	7	47	7	17	-	17	33	115
1/20/84	109	35	7	45	7	16	-	16	32	109
1/21/84	107	34	6	44	6	16	-	16	32	107
1/22/84	97	31	6	40	6	15	-	15	32	97
1/23/84	81	26	5	33	5	12	-	12	31	81
1/24/84	81	26	5	33	5	12	-	12	30	81
1/25/84	91	29	5	37	5	14	-	14	28	91
1/26/84	91	29	5	37	5	14	-	14	28	91
1/27/84	93	30	6	38	6	14	-	14	27	93
1/28/84	93	30	6	38	6	14	-	14	26	93
1/29/84	93	30	6	38	6	14	-	14	25	93
1/30/84	93	30	6	38	6	14	-	14	24	93
1/31/84	93	30	6	38	6	14	-	14	23	93
2/1/84	91	29	5	37	5	14	-	14	22	91
2/2/84	91	29	5	37	5	14	-	14	21	91
2/3/84	93	30	6	38	6	14	-	14	20	93
2/4/84	91	29	5	37	5	14	-	14	20	91
2/5/84	69	22	4	28	4	10	-	10	19	69
2/6/84	52	17	3	21	3	8	-	8	18	52
2/7/84	61	20	4	25	4	9	-	9	17	61
2/8/84	67	22	4	28	4	10	-	10	16	67
2/9/84	99	32	6	41	6	15	-	15	16	99
2/10/84	117	37	7	48	7	18	-	18	15	117
2/11/84	115	37	7	47	7	17	-	17	15	115
2/12/84	113	36	7	46	7	17	-	17	15	113
2/13/84	161	51	10	66	10	24	-	24	15	161
2/14/84	226	72	14	93	14	34	-	34	15	226
2/15/84	198	63	12	81	12	30	-	30	16	198
2/16/84	204	65	12	84	12	31	-	31	16	204
2/17/84	165	53	10	67	10	25	-	25	16	165
2/18/84	113	36	7	46	7	17	-	17	16	113
2/19/84	121	39	7	50	7	18	-	18	16	121
2/20/84	123	39	7	50	7	18	-	18	16	123
2/21/84	99	32	6	41	6	15	-	15	16	99
2/22/84	95	30	6	39	6	14	-	14	16	95
2/23/84	107	34	6	44	6	16	-	16	17	107
2/24/84	107	34	6	44	6	16	-	16	17	107
2/25/84	109	35	7	45	7	16	-	16	17	109
2/26/84	103	33	6	42	6	15	-	15	17	103
2/27/84	101	32	6	41	6	15	-	15	17	101
2/28/84	101	32	6	41	6	15	-	15	17	101
2/29/84	97	31	6	40	6	15	-	15	17	97
3/1/84	95	30	6	39	6	14	-	14	17	95
3/2/84	95	30	6	39	6	14	-	14	17	95
3/3/84	109	35	7	45	7	16	-	16	17	109
3/4/84	109	35	7	45	7	16	-	16	17	109
3/5/84	109	35	7	45	7	16	-	16	17	109
3/6/84	109	35	7	45	7	16	-	16	17	109
3/7/84	109	35	7	45	7	16	-	16	18	109
3/8/84	109	35	7	45	7	16	-	16	18	109
3/9/84	106	34	6	43	6	16	-	16	18	106
3/10/84	109	35	7	45	7	16	-	16	18	109
3/11/84	125	40	7	51	7	19	-	19	18	125
3/12/84	127	41	8	52	8	19	-	19	18	127
3/13/84	111	35	7	45	7	17	-	17	18	111
3/14/84	225	72	14	92	14	34	-	34	19	225
3/15/84	216	69	13	88	13	32	-	32	19	216
3/16/84	201	64	12	82	12	30	-	30	19	201
3/17/84	200	64	12	82	12	30	-	30	19	200
3/18/84	194	62	12	79	12	29	-	29	19	194
3/19/84	164	53	10	67	10	25	-	25	19	164
3/20/84	154	49	9	63	9	23	-	23	19	154
3/21/84	168	54	10	69	10	25	-	25	19	168
3/22/84	198	63	12	81	12	30	-	30	20	198
3/23/84	195	63	12	80	12	29	-	29	20	195
3/24/84	177	57	11	73	11	27	-	27	21	177
3/25/84	160	51	10	66	10	24	-	24	21	160
3/26/84	132	42	8	54	8	20	-	20	21	132
3/27/84	163	52	10	67	10	24	-	24	21	163
3/28/84	176	56	11	72	11	26	-	26	22	176
3/29/84	174	56	10	71	10	26	-	26	22	174
3/30/84	166	53	10	68	10	25	-	25	22	166

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%	Rucker Creek Direct Diversion by PG&E	by NID	NID 30-day Avg (af) (49.6 max)	Final Remaining Tribs D/d Appropriation Under Combined Rts
3/31/84	163	52	10	67	10	24	-	24	23	163
4/1/84	179	57	11	73	11	27	-	27	23	179
4/2/84	173	55	10	71	10	26	-	26	24	173
4/3/84	159	51	10	65	10	24	-	24	24	159
4/4/84	163	52	10	67	10	24	-	24	24	163
4/5/84	159	51	10	65	10	24	-	24	24	159
4/6/84	143	46	9	59	9	21	-	21	24	143
4/7/84	141	45	8	58	8	21	-	21	25	141
4/8/84	171	55	10	70	10	26	-	26	25	171
4/9/84	173	55	10	71	10	26	-	26	25	173
4/10/84	179	57	11	73	11	27	-	27	26	179
4/11/84	180	58	11	74	11	27	-	27	26	180
4/12/84	180	58	11	74	11	27	-	27	26	180
4/13/84	179	57	11	73	11	27	-	27	26	179
4/14/84	182	58	11	75	11	27	-	27	26	182
4/15/84	161	51	10	66	10	24	-	24	26	161
4/16/84	238	76	14	98	14	36	-	36	26	238
4/17/84	248	79	15	102	15	37	-	37	26	248
4/18/84	244	78	15	100	15	37	-	37	26	244
4/19/84	248	79	15	102	15	37	-	37	27	248
4/20/84	240	77	14	98	14	36	-	36	27	240
4/21/84	226	72	14	93	14	34	-	34	27	226
4/22/84	212	68	13	87	13	32	-	32	27	212
4/23/84	224	72	13	92	13	34	-	34	28	224
4/24/84	236	76	14	97	14	35	-	35	28	236
4/25/84	230	74	14	94	14	35	-	35	29	230
4/26/84	194	62	12	80	12	29	-	29	29	194
4/27/84	179	57	11	73	11	27	-	27	29	179
4/28/84	177	56	11	72	11	26	-	26	29	177
4/29/84	175	56	10	72	10	26	-	26	29	175
4/30/84	171	55	10	70	10	26	-	26	29	171
5/1/84	163	52	10	67	10	24	-	24	29	163
5/2/84	199	64	12	82	12	30	-	30	29	199
5/3/84	159	51	10	65	10	24	-	24	29	159
5/4/84	172	55	10	71	10	26	-	26	29	172
5/5/84	216	69	13	88	13	32	-	32	29	216
5/6/84	211	68	13	87	13	32	-	32	30	211
5/7/84	185	59	11	76	11	28	-	28	30	185
5/8/84	146	47	9	60	9	22	-	22	30	146
5/9/84	130	41	8	53	8	19	-	19	29	130
5/10/84	137	44	8	56	8	21	-	21	29	137
5/11/84	131	42	8	54	8	20	-	20	29	131
5/12/84	145	46	9	59	9	22	-	22	29	145
5/13/84	136	43	8	56	8	20	-	20	29	136
5/14/84	135	43	8	55	8	20	-	20	28	135
5/15/84	187	60	11	76	11	28	-	28	28	187
5/16/84	244	78	15	100	15	37	-	37	28	244
5/17/84	187	60	11	77	11	28	-	28	28	187
5/18/84	160	51	10	65	10	24	-	24	28	160
Daily Max (AF/Day):	177	33	227	33	83					**59,845**
Combined P/L Limits (AF/d):	< 198.4 (= 100 cfs)	< 69.4 (= 35 cfs)	> 218 (30-d avg < 110)	< 49.6 (= 25cfs)	>> 49.6 **>> 25 cfs!**					

Step 1: Identify Storage Periods in Spaulding Reservoir Between 9/10/84 - 9/9/85



Step 2: Calculate Spaulding Inflow

9/10/84 - 9/9/85

Inflow = ΔS - Imports + Outflow + Exports

	BSC @ Jordon Ck Siphon (cfs)	Drum Canal (cfs)	S. Yuba Canal (cfs)	S. Yuba R. (cfs)	Spaulding Res. (acre-Feet)	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce & other Releases
USGS Gage #	11416100	11414170	11414200	11414250	11414140	

Note: Negative Natural Inflows occur only on D/d or drawdown days, IOW no negative natural inflows occurred on days of Spaulding Res. storage collection.
Storage collection days shown as shaded, as reflected on Spaulding storage graph.

9/9/84					37,581	
9/10/84	295	816	68	9	37,148	**379**
9/11/84	292	815	69	9	36,732	**391**
9/12/84	284	811	69	9	36,274	**374**
9/13/84	286	815	67	7	35,814	**371**
9/14/84	291	734	69	6	35,448	**333**
9/15/84	292	278	75	5	35,829	**258**
9/16/84	283	235	79	6	36,157	**202**
9/17/84	277	688	79	6	35,329	**79**
9/18/84	276	705	78	6	34,505	**98**
9/19/84	275	772	80	6	33,554	**104**
9/20/84	261	764	82	6	32,899	**261**
9/21/84	259	665	80	6	31,770	**(77)**
9/22/84	241	263	79	6	31,606	**24**
9/23/84	235	272	82	6	31,416	**29**
9/24/84	234	679	82	6	30,429	**35**
9/25/84	233	78	79	6	30,246	**(162)**
9/26/84	235	0	78	7	30,652	**54**
9/27/84	235	0	78	7	31,042	**46**
9/28/84	235	0	78	7	31,430	**45**
9/29/84	235	0	78	6	31,793	**32**
9/30/84	236	0	79	6	32,195	**52**
10/1/84	240	0	79	6	32,580	**39**
10/2/84	239	0	75	6	32,954	**30**
10/3/84	240	0	68	6	33,335	**26**
10/4/84	269	0	66	5	33,784	**29**
10/5/84	279	0	66	6	34,254	**30**
10/6/84	280	0	67	6	34,738	**37**
10/7/84	281	0	66	5	35,238	**42**
10/8/84	280	50	67	6	35,665	**58**
10/9/84	279	328	70	5	35,424	**3**
10/10/84	282	573	67	6	34,757	**27**
10/11/84	290	550	67	9	34,250	**80**
10/12/84	288	517	66	7	33,718	**34**
10/13/84	290	193	68	6	33,821	**29**
10/14/84	286	191	69	5	33,887	**13**
10/15/84	210	438	69	6	33,302	**8**
10/16/84	121	589	69	8	32,636	**209**
10/17/84	205	590	66	8	31,543	**(92)**
10/18/84	178	594	64	6	30,661	**42**
10/19/84	249	590	63	6	29,972	**62**
10/20/84	288	335	63	6	29,879	**69**
10/21/84	293	191	63	6	30,051	**53**
10/22/84	292	505	64	6	29,593	**52**
10/23/84	186	588	63	6	28,745	**43**
10/24/84	91	583	64	6	27,689	**29**
10/25/84	88	583	66	6	27,689	**567**
10/26/84	90	482	64	6	26,072	**(353)**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res. (acre-Feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce & other Releases
10/27/84	91	195	61	6	26,051	**160**
10/28/84	88	196	72	5	25,878	**98**
10/29/84	86	493	79	6	25,300	**200**
10/30/84	83	603	78	6	24,330	**115**
10/31/84	117	726	79	6	23,178	**113**
11/1/84	165	592	79	6	22,328	**83**
11/2/84	192	580	68	17	23,131	**878**
11/3/84	311	206	56	12	24,506	**656**
11/4/84	312	201	63	8	25,027	**223**
11/5/84	312	621	72	7	24,571	**158**
11/6/84	314	822	73	9	24,038	**321**
11/7/84	306	823	70	9	23,480	**315**
11/8/84	297	810	62	12	22,921	**305**
11/9/84	294	810	60	11	22,190	**218**
11/10/84	293	809	61	11	21,514	**247**
11/11/84	312	789	52	32	23,061	**1,341**
11/12/84	310	783	49	14	23,528	**771**
11/13/84	316	774	42	31	23,824	**680**
11/14/84	313	779	48	21	23,547	**395**
11/15/84	307	795	53	12	23,049	**302**
11/16/84	303	790	53	11	22,510	**279**
11/17/84	305	798	53	10	21,945	**271**
11/18/84	306	804	54	11	21,350	**263**
11/19/84	303	806	54	9	20,702	**240**
11/20/84	301	804	53	8	20,072	**247**
11/21/84	302	802	55	8	19,333	**191**
11/22/84	301	814	54	8	18,596	**203**
11/23/84	300	813	54	8	17,835	**191**
11/24/84	305	785	47	30	17,523	**400**
11/25/84	305	788	56	17	16,892	**238**
11/26/84	301	787	55	12	16,194	**201**
11/27/84	306	669	53	39	16,646	**683**
11/28/84	324	635	45	50	17,126	**648**
11/29/84	319	773	43	20	16,777	**341**
11/30/84	315	780	41	14	16,673	**468**
12/1/84	312	804	39	12	16,463	**437**
12/2/84	309	813	38	11	16,205	**423**
12/3/84	307	791	44	10	15,965	**417**
12/4/84	304	808	37	10	15,639	**386**
12/5/84	302	811	37	9	15,314	**391**
12/6/84	303	804	37	8	14,985	**381**
12/7/84	303	806	37	8	14,652	**380**
12/8/84	303	799	37	8	14,357	**392**
12/9/84	302	793	38	7	14,002	**357**
12/10/84	304	783	47	10	13,747	**407**
12/11/84	304	780	47	11	13,481	**400**
12/12/84	303	780	40	10	13,075	**322**
12/13/84	288	773	39	9	12,250	**117**
12/14/84	285	753	54	8	11,507	**156**
12/15/84	300	770	62	8	11,291	**431**
12/16/84	307	800	61	8	10,831	**330**
12/17/84	306	799	61	8	9,105	**(309)**
12/18/84	304	585	61	7	8,838	**214**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res. (acre-Feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce & other Releases
12/19/84	303	474	61	7	8,284	**(40)**
12/20/84	301	480	61	7	8,009	**108**
12/21/84	302	343	54	7	7,927	**60**
12/22/84	303	82	50	7	8,619	**184**
12/23/84	303	84	49	7	9,137	**98**
12/24/84	302	86	49	7	9,581	**63**
12/25/84	301	87	49	7	10,017	**61**
12/26/84	299	320	48	6	10,377	**257**
12/27/84	298	426	49	7	10,317	**153**
12/28/84	297	271	42	6	10,128	**(73)**
12/29/84	296	77	36	6	10,667	**95**
12/30/84	295	78	35	6	11,205	**95**
12/31/84	293	80	35	6	11,789	**122**
1/1/85	292	81	35	6	12,288	**81**
1/2/85	293	352	36	6	12,541	**228**
1/3/85	297	526	37	6	12,027	**13**
1/4/85	298	344	36	6	11,924	**36**
1/5/85	299	72	35	6	12,503	**106**
1/6/85	299	73	36	6	13,197	**166**
1/7/85	269	262	52	7	13,374	**141**
1/8/85	307	379	58	7	13,648	**275**
1/9/85	302	380	55	7	13,306	**(32)**
1/10/85	300	380	47	7	13,310	**136**
1/11/85	299	240	38	6	13,377	**19**
1/12/85	297	72	37	6	13,601	**(69)**
1/13/85	298	74	37	6	14,387	**215**
1/14/85	298	249	37	6	14,602	**102**
1/15/85	298	383	37	6	14,499	**76**
1/16/85	298	391	37	6	14,479	**126**
1/17/85	299	390	37	6	14,526	**157**
1/18/85	300	279	37	6	14,549	**33**
1/19/85	301	82	37	6	15,409	**257**
1/20/85	301	82	37	6	16,366	**306**
1/21/85	227	335	57	6	16,273	**124**
1/22/85	251	501	75	5	15,921	**153**
1/23/85	237	498	78	5	15,456	**110**
1/24/85	234	490	77	5	14,758	**(14)**
1/25/85	232	327	75	6	14,855	**225**
1/26/85	226	82	75	6	15,321	**172**
1/27/85	222	82	75	5	15,388	**(26)**
1/28/85	223	436	79	6	15,463	**335**
1/29/85	222	593	78	6	14,357	**(103)**
1/30/85	218	588	75	5	13,829	**184**
1/31/85	218	462	76	5	13,504	**162**
2/1/85	219	256	63	6	13,284	**(5)**
2/2/85	220	186	58	6	13,387	**82**
2/3/85	219	240	62	6	13,407	**99**
2/4/85	219	470	62	6	12,940	**83**
2/5/85	219	571	60	6	12,301	**95**
2/6/85	201	576	57	6	11,621	**95**
2/7/85	121	404	60	6	11,155	**114**
2/8/85	93	295	63	13	11,030	**215**
2/9/85	119	289	63	16	10,468	**(34)**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res. (acre-Feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce & other Releases
2/10/85	188	294	63	16	10,227	**63**
2/11/85	185	297	63	16	10,191	**173**
2/12/85	126	353	60	10	9,782	**91**
2/13/85	120	400	53	7	9,297	**96**
2/14/85	102	399	66	8	8,764	**102**
2/15/85	106	225	51	14	8,648	**126**
2/16/85	110	127	52	19	8,798	**164**
2/17/85	113	128	51	20	8,961	**168**
2/18/85	114	134	51	22	9,184	**205**
2/19/85	116	237	51	22	9,283	**244**
2/20/85	119	346	51	22	9,129	**222**
2/21/85	117	383	50	17	8,838	**186**
2/22/85	108	348	51	18	8,619	**199**
2/23/85	105	283	51	18	8,574	**224**
2/24/85	104	282	50	19	8,574	**247**
2/25/85	105	408	51	15	8,445	**304**
2/26/85	106	482	50	8	8,058	**238**
2/27/85	108	514	50	7	7,708	**287**
2/28/85	109	531	50	7	7,329	**288**
3/1/85	113	454	64	7	7,100	**297**
3/2/85	116	387	69	8	6,927	**260**
3/3/85	117	381	69	7	6,661	**206**
3/4/85	135	381	73	7	6,403	**196**
3/5/85	211	382	75	7	6,283	**192**
3/6/85	230	373	75	7	6,191	**179**
3/7/85	234	376	75	7	6,090	**173**
3/8/85	230	379	75	7	5,955	**163**
3/9/85	228	376	75	7	5,830	**167**
3/10/85	228	373	75	7	5,732	**178**
3/11/85	216	371	73	7	5,545	**141**
3/12/85	125	373	74	8	5,092	**102**
3/13/85	111	381	73	10	5,062	**338**
3/14/85	110	383	70	10	5,045	**344**
3/15/85	106	283	70	10	5,590	**532**
3/16/85	114	140	71	10	6,273	**451**
3/17/85	112	141	71	11	6,984	**469**
3/18/85	116	371	66	12	7,366	**526**
3/19/85	121	322	37	12	7,762	**450**
3/20/85	119	499	36	11	7,678	**385**
3/21/85	120	521	36	11	7,638	**428**
3/22/85	123	534	36	10	7,437	**355**
3/23/85	123	531	35	9	7,240	**353**
3/24/85	129	503	36	11	7,253	**428**
3/25/85	187	460	36	11	7,253	**320**
3/26/85	155	497	48	10	6,997	**270**
3/27/85	224	494	58	10	6,825	**251**
3/28/85	233	496	57	9	6,644	**238**
3/29/85	205	491	57	9	6,376	**217**
3/30/85	190	491	42	9	6,107	**217**
3/31/85	135	491	33	12	5,929	**311**
4/1/85	132	491	34	19	6,177	**537**
4/2/85	138	480	35	25	7,209	**922**
4/3/85	154	469	36	24	8,395	**973**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res. (acre-Feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce & other Releases
4/4/85	165	467	35	24	9,907	**1,123**
4/5/85	189	480	35	22	11,739	**1,272**
4/6/85	205	707	35	18	13,226	**1,305**
4/7/85	208	705	17	15	14,668	**1,256**
4/8/85	214	469	3	13	16,552	**1,221**
4/9/85	207	409	2.8	12	18,726	**1,313**
4/10/85	179	422	2.8	11	20,788	**1,296**
4/11/85	162	470	2.8	10	22,367	**1,117**
4/12/85	160	582	2.9	9	23,776	**1,144**
4/13/85	171	771	3.3	9	25,373	**1,417**
4/14/85	198	780	3.2	8	27,417	**1,624**
4/15/85	207	787	3.2	8	29,430	**1,606**
4/16/85	212	786	3.2	6	30,705	**1,226**
4/17/85	189	605	3	7	31,670	**913**
4/18/85	161	504	2.8	7	32,475	**759**
4/19/85	162	531	17	7	33,302	**810**
4/20/85	134	99	36	7	34,410	**566**
4/21/85	171	730	33	7	34,321	**554**
4/22/85	179	838	34	8	34,118	**598**
4/23/85	134	841	35	7	33,840	**609**
4/24/85	137	841	37	7	33,769	**712**
4/25/85	129	577	34	6	34,004	**607**
4/26/85	120	848	41	6	33,568	**555**
4/27/85	118	851	46	6	33,126	**562**
4/28/85	128	845	47	6	33,540	**979**
4/29/85	134	722	53	6	34,198	**979**
4/30/85	114	592	56	6	35,243	**1,067**
5/1/85	115	847	56	6	36,318	**1,336**
5/2/85	154	844	58	6	37,596	**1,398**
5/3/85	158	654	59	6	38,905	**1,220**
5/4/85	150	141	59	5	40,711	**966**
5/5/85	131	134	61	5	42,544	**993**
5/6/85	140	480	64	5	43,836	**1,061**
5/7/85	138	554	65	5	44,807	**976**
5/8/85	131	554	64	6	45,437	**810**
5/9/85	124	556	65	6	45,816	**694**
5/10/85	116	383	66	6	46,343	**604**
5/11/85	108	86	66	6	47,142	**453**
5/12/85	109	95	66	5	48,102	**541**
5/13/85	105	475	66	6	48,731	**759**
5/14/85	104	528	68	6	49,403	**837**
5/15/85	104	571	67	6	49,966	**823**
5/16/85	104	574	67	6	50,396	**759**
5/17/85	104	273	67	5	51,210	**652**
5/18/85	103	97	69	5	52,625	**782**
5/19/85	99	95	67	6	54,053	**789**
5/20/85	96	429	68	6	54,730	**749**
5/21/85	95	581	69	6	54,966	**680**
5/22/85	117	580	70	6	55,334	**724**
5/23/85	136	338	74	6	56,240	**738**
5/24/85	173	499	74	6	56,805	**690**
5/25/85	173	97	75	8	57,997	**608**
5/26/85	210	97	75	6	59,128	**538**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res. (acre-Feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce & other Releases
5/27/85	213	407	75	6	59,547	**486**
5/28/85	203	404	75	6	59,787	**403**
5/29/85	138	319	76	6	59,960	**350**
5/30/85	134	287	76	6	60,047	**279**
5/31/85	128	309	75	6	60,097	**287**
6/1/85	124	102	74	6	60,407	**214**
6/2/85	124	101	74	6	60,854	**282**
6/3/85	126	297	76	6	60,948	**300**
6/4/85	122	256	75	6	61,104	**293**
6/5/85	121	260	76	6	61,273	**306**
6/6/85	119	264	76	6	61,429	**305**
6/7/85	117	265	77	6	61,542	**288**
6/8/85	115	97	76	6	61,950	**269**
6/9/85	113	97	77	9	62,291	**242**
6/10/85	109	374	79	9	62,051	**232**
6/11/85	102	293	82	6	62,114	**311**
6/12/85	99	343	83	8	61,592	**72**
6/13/85	119	254	82	8	61,573	**216**
6/14/85	124	242	84	6	62,322	**586**
6/15/85	126	94	84	7	63,324	**564**
6/16/85	126	93	85	10	64,276	**542**
6/17/85	125	308	85	6	64,809	**543**
6/18/85	122	296	86	6	65,320	**524**
6/19/85	125	296	86	8	65,812	**513**
6/20/85	128	303	86	9	66,307	**519**
6/21/85	130	279	87	13	66,817	**506**
6/22/85	129	92	88	8	67,690	**499**
6/23/85	149	91	89	6	68,551	**471**
6/24/85	149	342	88	6	68,923	**474**
6/25/85	147	386	88	6	69,203	**474**
6/26/85	156	378	89	6	69,497	**465**
6/27/85	181	405	87	5	69,778	**458**
6/28/85	209	615	89	6	69,704	**463**
6/29/85	223	608	89	6	69,658	**456**
6/30/85	230	613	87	6	69,597	**445**
7/1/85	241	611	82	5	69,551	**434**
7/2/85	246	623	80	5	69,517	**445**
7/3/85	246	618	81	6	69,490	**445**
7/4/85	245	607	83	6	69,457	**434**
7/5/85	243	625	82	6	69,370	**426**
7/6/85	243	501	81	6	69,490	**405**
7/7/85	242	499	81	6	69,611	**405**
7/8/85	241	607	82	6	69,611	**454**
7/9/85	240	611	81	6	69,464	**384**
7/10/85	240	607	83	6	69,363	**405**
7/11/85	241	616	84	6	69,257	**412**
7/12/85	242	606	82	6	69,163	**405**
7/13/85	243	499	82	6	69,243	**384**
7/14/85	243	501	80	6	69,310	**378**
7/15/85	241	611	80	6	69,197	**399**
7/16/85	241	608	80	6	69,043	**375**
7/17/85	243	606	80	6	68,916	**384**
7/18/85	244	608	82	6	68,777	**381**

USGS Gage #	BSC @ Jordon Ck Siphon (cfs) 11416100	Drum Canal (cfs) 11414170	S. Yuba Canal (cfs) 11414200	S. Yuba R. (cfs) 11414250	Spaulding Res. (acre-Feet) 11414140	Spaulding Res. Calculated Nat Inflow (cfs). Includes Fourdyce & other Releases
7/19/85	244	523	86	5	68,511	**236**
7/20/85	245	399	85	5	67,875	**(76)**
7/21/85	246	347	85	5	67,276	**(111)**
7/22/85	247	487	85	5	66,588	**(17)**
7/23/85	248	599	87	8	66,463	**383**
7/24/85	248	576	85	12	66,372	**379**
7/25/85	247	604	79	11	66,209	**365**
7/26/85	247	615	69	6	66,053	**364**
7/27/85	248	504	77	6	66,066	**345**
7/28/85	248	505	85	8	66,033	**333**
7/29/85	246	613	88	14	65,773	**338**
7/30/85	244	647	89	9	65,462	**344**
7/31/85	243	507	86	6	65,371	**310**
8/1/85	240	510	86	6	65,281	**317**
8/2/85	237	515	86	6	65,145	**301**
8/3/85	235	517	87	6	65,016	**310**
8/4/85	133	509	86	6	64,687	**302**
8/5/85	0	504	84	6	64,077	**286**
8/6/85	0	501	82	6	63,534	**315**
8/7/85	0	502	84	6	62,854	**249**
8/8/85	0	507	84	6	62,158	**246**
8/9/85	0	505	85	6	61,023	**23**
8/10/85	0	501	85	6	59,886	**18**
8/11/85	0	497	84	6	58,754	**16**
8/12/85	0	498	84	6	57,633	**23**
8/13/85	0	503	84	6	56,486	**14**
8/14/85	0	508	84	6	55,370	**35**
8/15/85	0	502	84	6	54,205	**4**
8/16/85	63	501	84	5	53,199	**20**
8/17/85	231	503	85	5	52,538	**29**
8/18/85	258	501	85	5	51,892	**8**
8/19/85	258	505	84	5	51,239	**7**
8/20/85	253	502	84	5	50,578	**5**
8/21/85	242	500	82	6	49,915	**11**
8/22/85	246	498	82	6	49,285	**22**
8/23/85	252	500	80	6	48,636	**7**
8/24/85	255	500	79	9	47,997	**11**
8/25/85	263	504	81	6	47,527	**91**
8/26/85	284	631	82	6	46,643	**(10)**
8/27/85	289	801	81	6	45,442	**(7)**
8/28/85	279	800	81	6	44,139	**(49)**
8/29/85	266	803	82	6	42,990	**46**
8/30/85	267	664	81	6	42,069	**20**
8/31/85	267	211	80	6	42,012	**1**
9/1/85	266	213	80	6	41,981	**18**
9/2/85	263	212	82	7	41,913	**3**
9/3/85	265	529	85	6	41,235	**13**
9/4/85	263	617	82	6	40,429	**36**
9/5/85	263	601	77	6	39,615	**11**
9/6/85	263	488	75	6	39,055	**24**
9/7/85	257	163	74	6	39,156	**37**
9/8/85	275	162	68	8	39,393	**82**
9/9/85	300	481	64	7	39,448	**280**

Step 3 - Basic Tributaries Calculation = BSC_{OUT} - BSC_{IN}

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	BSC Canal Leakage (cfs)
9/9/1984					
9/10/1984	331	295	(36)	-	(36)
9/11/1984	313	292	(21)	-	(21)
9/12/1984	303	284	(19)	-	(19)
9/13/1984	307	286	(21)	-	(21)
9/14/1984	309	291	(18)	-	(18)
9/15/1984	289	292	3	**3**	-
9/16/1984	275	283	8	**8**	-
9/17/1984	275	277	2	**2**	-
9/18/1984	276	276	-	-	-
9/19/1984	267	275	8	**8**	-
9/20/1984	260	261	1	**1**	-
9/21/1984	243	259	16	**16**	-
9/22/1984	229	241	12	**12**	-
9/23/1984	229	235	6	**6**	-
9/24/1984	229	234	5	**5**	-
9/25/1984	229	233	4	**4**	-
9/26/1984	230	235	5	**5**	-
9/27/1984	230	235	5	**5**	-
9/28/1984	229	235	6	**6**	-
9/29/1984	230	235	5	**5**	-
9/30/1984	228	236	8	**8**	-
10/1/1984	229	240	11	**11**	-
10/2/1984	229	239	10	**10**	-
10/3/1984	258	240	(18)	-	(18)
10/4/1984	287	269	(18)	-	(18)
10/5/1984	287	279	(8)	-	(8)
10/6/1984	286	280	(6)	-	(6)
10/7/1984	286	281	(5)	-	(5)
10/8/1984	286	280	(6)	-	(6)
10/9/1984	286	279	(7)	-	(7)
10/10/1984	286	282	(4)	-	(4)
10/11/1984	289	290	1	**1**	-
10/12/1984	294	288	(6)	-	(6)
10/13/1984	300	290	(10)	-	(10)
10/14/1984	300	286	(14)	-	(14)
10/15/1984	166	210	44	**44**	-
10/16/1984	136	121	(15)	-	(15)
10/17/1984	170	205	35	**35**	-
10/18/1984	178	178	-	-	-
10/19/1984	303	249	(54)	-	(54)
10/20/1984	303	288	(15)	-	(15)
10/21/1984	302	293	(9)	-	(9)
10/22/1984	302	292	(10)	-	(10)
10/23/1984	82	186	104	**104**	-
10/24/1984	2	91	89	**89**	-
10/25/1984	2	88	86	**86**	-
10/26/1984	2	90	88	**88**	-

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	Canal Leakage (cfs)
10/27/1984	7.3	91	84	**84**	-
10/28/1984	5.3	88	83	**83**	-
10/29/1984	8.1	86	78	**78**	-
10/30/1984	74	83	9	**9**	-
10/31/1984	118	117	(1)	**-**	(1)
11/1/1984	118	165	47	**47**	-
11/2/1984	172	192	20	**20**	-
11/3/1984	260	311	51	**51**	-
11/4/1984	270	312	42	**42**	-
11/5/1984	267	312	45	**45**	-
11/6/1984	271	314	43	**43**	-
11/7/1984	270	306	36	**36**	-
11/8/1984	278	297	19	**19**	-
11/9/1984	285	294	9	**9**	-
11/10/1984	304	293	(11)	**-**	(11)
11/11/1984	283	312	29	**29**	-
11/12/1984	269	310	41	**41**	-
11/13/1984	287	316	29	**29**	-
11/14/1984	283	313	30	**30**	-
11/15/1984	281	307	26	**26**	-
11/16/1984	291	303	12	**12**	-
11/17/1984	296	305	9	**9**	-
11/18/1984	294	306	12	**12**	-
11/19/1984	290	303	13	**13**	-
11/20/1984	294	301	7	**7**	-
11/21/1984	297	302	5	**5**	-
11/22/1984	294	301	7	**7**	-
11/23/1984	292	300	8	**8**	-
11/24/1984	293	305	12	**12**	-
11/25/1984	291	305	14	**14**	-
11/26/1984	296	301	5	**5**	-
11/27/1984	305	306	1	**1**	-
11/28/1984	303	324	21	**21**	-
11/29/1984	298	319	21	**21**	-
11/30/1984	297	315	18	**18**	-
12/1/1984	295	312	17	**17**	-
12/2/1984	294	309	15	**15**	-
12/3/1984	293	307	14	**14**	-
12/4/1984	291	304	13	**13**	-
12/5/1984	295	302	7	**7**	-
12/6/1984	298	303	5	**5**	-
12/7/1984	297	303	6	**6**	-
12/8/1984	295	303	8	**8**	-
12/9/1984	293	302	9	**9**	-
12/10/1984	292	304	12	**12**	-
12/11/1984	291	304	13	**13**	-
12/12/1984	289	303	14	**14**	-
12/13/1984	263	288	25	**25**	-
12/14/1984	304	285	(19)	**-**	(19)

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	Canal Leakage (cfs)
12/15/1984	298	300	2	**2**	-
12/16/1984	297	307	10	**10**	-
12/17/1984	295	306	11	**11**	-
12/18/1984	293	304	11	**11**	-
12/19/1984	292	303	11	**11**	-
12/20/1984	296	301	5	**5**	-
12/21/1984	304	302	(2)	**-**	(2)
12/22/1984	302	303	1	**1**	-
12/23/1984	299	303	4	**4**	-
12/24/1984	297	302	5	**5**	-
12/25/1984	295	301	6	**6**	-
12/26/1984	293	299	6	**6**	-
12/27/1984	291	298	7	**7**	-
12/28/1984	289	297	8	**8**	-
12/29/1984	288	296	8	**8**	-
12/30/1984	286	295	9	**9**	-
12/31/1984	284	293	9	**9**	-
1/1/1985	282	292	10	**10**	-
1/2/1985	295	293	(2)	**-**	(2)
1/3/1985	299	297	(2)	**-**	(2)
1/4/1985	299	298	(1)	**-**	(1)
1/5/1985	298	299	1	**1**	-
1/6/1985	298	299	1	**1**	-
1/7/1985	265	269	4	**4**	-
1/8/1985	298	307	9	**9**	-
1/9/1985	298	302	4	**4**	-
1/10/1985	298	300	2	**2**	-
1/11/1985	298	299	1	**1**	-
1/12/1985	297	297	-	**-**	-
1/13/1985	296	298	2	**2**	-
1/14/1985	296	298	2	**2**	-
1/15/1985	296	298	2	**2**	-
1/16/1985	295	298	3	**3**	-
1/17/1985	295	299	4	**4**	-
1/18/1985	295	300	5	**5**	-
1/19/1985	294	301	7	**7**	-
1/20/1985	294	301	7	**7**	-
1/21/1985	184	227	43	**43**	-
1/22/1985	208	251	43	**43**	-
1/23/1985	210	237	27	**27**	-
1/24/1985	210	234	24	**24**	-
1/25/1985	204	232	28	**28**	-
1/26/1985	198	226	28	**28**	-
1/27/1985	199	222	23	**23**	-
1/28/1985	199	223	24	**24**	-
1/29/1985	199	222	23	**23**	-
1/30/1985	199	218	19	**19**	-
1/31/1985	199	218	19	**19**	-
2/1/1985	199	219	20	**20**	-

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	Canal Leakage (cfs)
2/2/1985	199	220	21	**21**	-
2/3/1985	199	219	20	**20**	-
2/4/1985	200	219	19	**19**	-
2/5/1985	200	219	19	**19**	-
2/6/1985	132	201	69	**69**	-
2/7/1985	78	121	43	**43**	-
2/8/1985	127	93	(34)	**-**	(34)
2/9/1985	179	119	(60)	**-**	(60)
2/10/1985	179	188	9	**9**	-
2/11/1985	130	185	55	**55**	-
2/12/1985	99	126	27	**27**	-
2/13/1985	83	120	37	**37**	-
2/14/1985	80	102	22	**22**	-
2/15/1985	86	106	20	**20**	-
2/16/1985	87	110	23	**23**	-
2/17/1985	86	113	27	**27**	-
2/18/1985	87	114	27	**27**	-
2/19/1985	87	116	29	**29**	-
2/20/1985	88	119	31	**31**	-
2/21/1985	82	117	35	**35**	-
2/22/1985	75	108	33	**33**	-
2/23/1985	75	105	30	**30**	-
2/24/1985	75	104	29	**29**	-
2/25/1985	76	105	29	**29**	-
2/26/1985	76	106	30	**30**	-
2/27/1985	76	108	32	**32**	-
2/28/1985	80	109	29	**29**	-
3/1/1985	85	113	28	**28**	-
3/2/1985	85	116	31	**31**	-
3/3/1985	85	117	32	**32**	-
3/4/1985	158	135	(23)	**-**	(23)
3/5/1985	198	211	13	**13**	-
3/6/1985	197	230	33	**33**	-
3/7/1985	197	234	37	**37**	-
3/8/1985	196	230	34	**34**	-
3/9/1985	196	228	32	**32**	-
3/10/1985	195	228	33	**33**	-
3/11/1985	138	216	78	**78**	-
3/12/1985	74	125	51	**51**	-
3/13/1985	78	111	33	**33**	-
3/14/1985	81	110	29	**29**	-
3/15/1985	75	106	31	**31**	-
3/16/1985	77	114	37	**37**	-
3/17/1985	81	112	31	**31**	-
3/18/1985	81	116	35	**35**	-
3/19/1985	81	121	40	**40**	-
3/20/1985	81	119	38	**38**	-
3/21/1985	81	120	39	**39**	-
3/22/1985	81	123	42	**42**	-

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	Canal Leakage (cfs)
3/23/1985	81	123	42	**42**	-
3/24/1985	119	129	10	**10**	-
3/25/1985	126	187	61	**61**	-
3/26/1985	154	155	1	**1**	-
3/27/1985	198	224	26	**26**	-
3/28/1985	176	233	57	**57**	-
3/29/1985	150	205	55	**55**	-
3/30/1985	123	190	67	**67**	-
3/31/1985	84	135	51	**51**	-
4/1/1985	83	132	49	**49**	-
4/2/1985	83	138	55	**55**	-
4/3/1985	80	154	74	**74**	-
4/4/1985	80	165	85	**85**	-
4/5/1985	80	189	109	**109**	-
4/6/1985	80	205	125	**125**	-
4/7/1985	80	208	128	**128**	-
4/8/1985	80	214	134	**134**	-
4/9/1985	38	207	169	**169**	-
4/10/1985	6.3	179	173	**173**	-
4/11/1985	6.1	162	156	**156**	-
4/12/1985	6.2	160	154	**154**	-
4/13/1985	6.9	171	164	**164**	-
4/14/1985	7.7	198	190	**190**	-
4/15/1985	8	207	199	**199**	-
4/16/1985	7.8	212	204	**204**	-
4/17/1985	7.9	189	181	**181**	-
4/18/1985	8.1	161	153	**153**	-
4/19/1985	9.5	162	153	**153**	-
4/20/1985	8.5	134	126	**126**	-
4/21/1985	93	171	78	**78**	-
4/22/1985	23	179	156	**156**	-
4/23/1985	9	134	125	**125**	-
4/24/1985	8.9	137	128	**128**	-
4/25/1985	8.6	129	120	**120**	-
4/26/1985	7.6	120	112	**112**	-
4/27/1985	6.7	118	111	**111**	-
4/28/1985	7.2	128	121	**121**	-
4/29/1985	7.7	134	126	**126**	-
4/30/1985	8.1	114	106	**106**	-
5/1/1985	8.7	115	106	**106**	-
5/2/1985	9.4	154	145	**145**	-
5/3/1985	10	158	148	**148**	-
5/4/1985	11	150	139	**139**	-
5/5/1985	12	131	119	**119**	-
5/6/1985	12	140	128	**128**	-
5/7/1985	13	138	125	**125**	-
5/8/1985	14	131	117	**117**	-
5/9/1985	15	124	109	**109**	-
5/10/1985	15	116	101	**101**	-

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	Canal Leakage (cfs)
5/11/1985	16	108	92	**92**	-
5/12/1985	16	109	93	**93**	-
5/13/1985	17	105	88	**88**	-
5/14/1985	18	104	86	**86**	-
5/15/1985	18	104	86	**86**	-
5/16/1985	17	104	87	**87**	-
5/17/1985	18	104	86	**86**	-
5/18/1985	19	103	84	**84**	-
5/19/1985	20	99	79	**79**	-
5/20/1985	21	96	75	**75**	-
5/21/1985	43	95	52	**52**	-
5/22/1985	64	117	53	**53**	-
5/23/1985	101	136	35	**35**	-
5/24/1985	109	173	64	**64**	-
5/25/1985	143	173	30	**30**	-
5/26/1985	163	210	47	**47**	-
5/27/1985	161	213	52	**52**	-
5/28/1985	118	203	85	**85**	-
5/29/1985	89	138	49	**49**	-
5/30/1985	87	134	47	**47**	-
5/31/1985	86	128	42	**42**	-
6/1/1985	85	124	39	**39**	-
6/2/1985	84	124	40	**40**	-
6/3/1985	84	126	42	**42**	-
6/4/1985	82	122	40	**40**	-
6/5/1985	83	121	38	**38**	-
6/6/1985	83	119	36	**36**	-
6/7/1985	83	117	34	**34**	-
6/8/1985	83	115	32	**32**	-
6/9/1985	81	113	32	**32**	-
6/10/1985	76	109	33	**33**	-
6/11/1985	72	102	30	**30**	-
6/12/1985	91	99	8	**8**	-
6/13/1985	106	119	13	**13**	-
6/14/1985	106	124	18	**18**	-
6/15/1985	106	126	20	**20**	-
6/16/1985	106	126	20	**20**	-
6/17/1985	105	125	20	**20**	-
6/18/1985	102	122	20	**20**	-
6/19/1985	115	125	10	**10**	-
6/20/1985	114	128	14	**14**	-
6/21/1985	129	130	1	**1**	-
6/22/1985	143	129	(14)	**-**	(14)
6/23/1985	141	149	8	**8**	-
6/24/1985	138	149	11	**11**	-
6/25/1985	135	147	12	**12**	-
6/26/1985	182	156	(26)	**-**	(26)
6/27/1985	185	181	(4)	**-**	(4)
6/28/1985	213	209	(4)	**-**	(4)

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	Canal Leakage (cfs)
6/29/1985	224	223	(1)	**-**	(1)
6/30/1985	236	230	(6)	**-**	(6)
7/1/1985	244	241	(3)	**-**	(3)
7/2/1985	242	246	4	**4**	-
7/3/1985	241	246	5	**5**	-
7/4/1985	241	245	4	**4**	-
7/5/1985	240	243	3	**3**	-
7/6/1985	239	243	4	**4**	-
7/7/1985	238	242	4	**4**	-
7/8/1985	238	241	3	**3**	-
7/9/1985	238	240	2	**2**	-
7/10/1985	238	240	2	**2**	-
7/11/1985	240	241	1	**1**	-
7/12/1985	242	242	-	**-**	-
7/13/1985	241	243	2	**2**	-
7/14/1985	241	243	2	**2**	-
7/15/1985	239	241	2	**2**	-
7/16/1985	239	241	2	**2**	-
7/17/1985	238	243	5	**5**	-
7/18/1985	237	244	7	**7**	-
7/19/1985	238	244	6	**6**	-
7/20/1985	239	245	6	**6**	-
7/21/1985	241	246	5	**5**	-
7/22/1985	242	247	5	**5**	-
7/23/1985	242	248	6	**6**	-
7/24/1985	242	248	6	**6**	-
7/25/1985	243	247	4	**4**	-
7/26/1985	242	247	5	**5**	-
7/27/1985	242	248	6	**6**	-
7/28/1985	241	248	7	**7**	-
7/29/1985	240	246	6	**6**	-
7/30/1985	238	244	6	**6**	-
7/31/1985	236	243	7	**7**	-
8/1/1985	235	240	5	**5**	-
8/2/1985	233	237	4	**4**	-
8/3/1985	230	235	5	**5**	-
8/4/1985	83	133	50	**50**	-
8/5/1985	0.37	0	(0)	**-**	(0.4)
8/6/1985	0.37	0	(0)	**-**	(0.4)
8/7/1985	0.37	0	(0)	**-**	(0.4)
8/8/1985	0.37	0	(0)	**-**	(0.4)
8/9/1985	0.37	0	(0)	**-**	(0.4)
8/10/1985	0.37	0	(0)	**-**	(0.4)
8/11/1985	0.37	0	(0)	**-**	(0.4)
8/12/1985	0.37	0	(0)	**-**	(0.4)
8/13/1985	0.37	0	(0)	**-**	(0.4)
8/14/1985	0.2	0	(0)	**-**	(0.2)
8/15/1985	0	0	-	**-**	-
8/16/1985	117	63	(54)	**-**	(54)

USGS Gage #	BSC Intake (cfs) 11416000	BSC @ Jordon Ck Siphon (cfs) 11416100	Col. D = Col. C - Col. B	Calculated Tributaries Diversion (negatives zeroed out & ignored)	Canal Leakage (cfs)
8/17/1985	255	231	(24)	**-**	(24)
8/18/1985	250	258	8	**8**	-
8/19/1985	247	258	11	**11**	-
8/20/1985	245	253	8	**8**	-
8/21/1985	238	242	4	**4**	-
8/22/1985	255	246	(9)	**-**	(9)
8/23/1985	254	252	(2)	**-**	(2)
8/24/1985	251	255	4	**4**	-
8/25/1985	248	263	15	**15**	-
8/26/1985	255	284	29	**29**	-
8/27/1985	257	289	32	**32**	-
8/28/1985	255	279	24	**24**	-
8/29/1985	254	266	12	**12**	-
8/30/1985	255	267	12	**12**	-
8/31/1985	255	267	12	**12**	-
9/1/1985	252	266	14	**14**	-
9/2/1985	251	263	12	**12**	-
9/3/1985	251	265	14	**14**	-
9/4/1985	250	263	13	**13**	-
9/5/1985	250	263	13	**13**	-
9/6/1985	250	263	13	**13**	-
9/7/1985	250	257	7	**7**	-
9/8/1985	258	275	17	**17**	-
9/9/1985	263	300	37	**37**	-
9/10/84 - 9/9/85:	64,496	75,532		11,661	(626)
x	1.9835	1.9835	x	1.9835	x 1.9835
	127,928	149,818	=	**23,130** acre-feet	(1,241) acre-feet
	Diff.:	21,890			

Step 4: Calculate Tributaries Remaining after Spaulding Storage Collection

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	From Lower Division Analysis: Tributaries Water Stored In Rollins Sheet 3D Col 17	Combie Sheet 3G Col 12	Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)
9/9/84	-	-	-		-	-				**0**
9/10/84	-	-	752		-	-	S		S	**0**
9/11/84	-	-	776		-	-	T		T	**0**
9/12/84	-	-	742		-	-	O		O	**0**
9/13/84	-	-	736		-	-	R		R	**0**
9/14/84	-	-	661		-	-	A		A	**0**
9/15/84	-	6	512		-	6	G		G	**6**
9/16/84	-	16	401		-	16	E		E	**16**
9/17/84	-	4	156		-	4				**4**
9/18/84	-	-	194		-	-	N		N	**0**
9/19/84	-	16	205		-	16	O		O	**16**
9/20/84	-	2	517		-	2	T		T	**2**
9/21/84	-	32	(153)		-	32				**32**
9/22/84	-	24	48		-	24	A		A	**24**
9/23/84	-	12	58		-	12	V		V	**12**
9/24/84	-	10	70		-	10	A		A	**10**
9/25/84	-	8	(321)		-	8	I		I	**8**
9/26/84	-	10	108		-	10	L		L	**10**
9/27/84	-	10	91		-	10	A		A	**10**
9/28/84	-	12	89		-	12	B		B	**12**
9/29/84	-	10	63		-	10	L		L	**10**
9/30/84	-	16	103		-	16	E		E	**16**
10/1/84	-	22	78		-	22	-	-	-	**22**
10/2/84	-	20	60		-	20	-	-	-	**20**
10/3/84	-	-	51		-	-	-	-	-	**0**
10/4/84	-	-	57		-	-	-	-	-	**0**
10/5/84	-	-	59		-	-	-	-	-	**0**
10/6/84	-	-	73		-	-	-	-	-	**0**
10/7/84	-	-	84		-	-	-	-	-	**0**
10/8/84	-	-	115		-	-	-	-	-	**0**
10/9/84	-	-	6		-	-	-	-	-	**0**
10/10/84	-	-	54		-	-	-	-	-	**0**
10/11/84	-	2	159		-	2	-	-	-	**2**
10/12/84	-	-	67		-	-	-	-	-	**0**
10/13/84	-	-	57		-	-	-	-	-	**0**
10/14/84	-	-	25		-	-	-	-	-	**0**
10/15/84	-	87	15		-	87	-	-	-	**87**
10/16/84	-	-	414		-	-	-	-	-	**0**
10/17/84	-	69	(183)		-	69	-	-	2	**67**
10/18/84	-	-	83		-	-	-	-	-	**0**
10/19/84	-	-	124		-	-	-	-	-	**0**
10/20/84	-	-	138		-	-	-	-	-	**0**
10/21/84	-	-	106		-	-	-	-	-	**0**
10/22/84	-	-	103		-	-	-	-	-	**0**
10/23/84	-	206	86		-	206	-	-	2	**204**
10/24/84	-	177	58		-	177	-	-	2	**175**
10/25/84	-	171	1,124		-	171	-	-	2	**169**
10/26/84	-	175	(701)		-	175	-	-	3	**172**
10/27/84	-	166	318		-	166	-	-	5	**161**
10/28/84	-	164	194		-	164	-	-	3	**161**
10/29/84	-	155	397		-	155	113	-	2	**40**
10/30/84	-	18	227		-	18	16	-	-	**2**
10/31/84	-	-	224		-	-	-	-	-	**0**
11/1/84	-	93	165		-	93	84	-	2	**7**
11/2/84	-	40	1,741		-	40	36	-	1	**3**
11/3/84	-	101	1,302		-	101	70	-	12	**19**
11/4/84	-	83	442		-	83	50	-	2	**31**
11/5/84	-	89	314		-	89	72	-	2	**15**
11/6/84	-	85	637		-	85	78	-	2	**5**
11/7/84	-	71	624		-	71	65	-	2	**4**
11/8/84	-	38	605		-	38	34	-	1	**3**
11/9/84	-	18	433		-	18	15	-	-	**3**
11/10/84	-	-	490		-	-	-	-	-	**0**
11/11/84	-	58	2,660		-	58	53	-	2	**3**
11/12/84	-	81	1,530		-	81	76	-	3	**2**
11/13/84	-	58	1,349		-	58	55	-	2	**1**
11/14/84	-	60	784		-	60	56	-	2	**2**
11/15/84	-	52	599		-	52	41	-	1	**10**
11/16/84	-	24	554		-	24	22	-	-	**2**
11/17/84	-	18	537		-	18	16	-	-	**2**
11/18/84	-	24	522		-	24	22	-	-	**2**
11/19/84	-	26	475		-	26	22	1	1	**2**
11/20/84	-	14	489		-	14	12	-	-	**2**
11/21/84	-	10	378		-	10	9	-	-	**1**
11/22/84	-	14	404		-	14	9	-	-	**5**
11/23/84	-	16	379		-	16	8	2	1	**5**
11/24/84	-	24	793		-	24	19	1	1	**3**
11/25/84	-	28	472		-	28	2	2	1	**23**
11/26/84	-	10	399		-	10	-	-	1	**9**
11/27/84	-	2	1,354		-	2	-	-	-	**2**
11/28/84	-	42	1,285		-	42	-	-	2	**40**
11/29/84	-	42	676		-	42	-	-	1	**41**
11/30/84	-	36	927		-	36	-	-	1	**35**
12/1/84	-	34	867		-	34	-	-	1	**33**
12/2/84	-	30	839		-	30	-	-	1	**29**
12/3/84	-	28	827		-	28	-	-	1	**27**
12/4/84	-	26	766		-	26	-	-	-	**26**
12/5/84	-	14	775		-	14	-	-	-	**14**
12/6/84	-	10	755		-	10	-	-	-	**10**
12/7/84	-	12	754		-	12	-	-	-	**12**
12/8/84	-	16	777		-	16	-	-	-	**16**
12/9/84	-	18	709		-	18	-	-	-	**18**
12/10/84	-	24	807		-	24	-	-	-	**24**
12/11/84	-	26	793		-	26	-	-	1	**25**
12/12/84	-	28	639		-	28	-	-	-	**28**
12/13/84	-	50	232		-	50	-	-	-	**50**
12/14/84	-	-	308		-	-	-	-	-	**0**
12/15/84	-	4	855		-	4	-	-	-	**4**
12/16/84	-	20	655		-	20	-	-	-	**20**
12/17/84	-	22	(612)		-	22	-	-	-	**22**

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Combie Sheet 3G Col 12	Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)	
12/18/84	-	22	425		-	22	-	-	-	**22**	
12/19/84	-	22	(80)		-	22	-	-	-	**22**	
12/20/84	-	10	215		-	10	-	-	-	**10**	
12/21/84	-	-	120		-	-	-	-	-	**0**	Orig.
12/22/84	692	2	366	**100%**	2	-	-	-	-	**0**	values
12/23/84	518	8	194	**100%**	8	-	-	-	-	**0**	1
12/24/84	444	10	126	**100%**	10	-	-	-	-	**0**	2
12/25/84	436	12	122	**100%**	12	-	-	-	-	**0**	2
12/26/84	111	12	510	21%	3	9	-	-	1	**8**	
12/27/84	-	14	304		-	14	-	-	1	**13**	
12/28/84	-	16	(145)		-	16	-	-	2	**14**	
12/29/84	539	16	188	**100%**	16	-	-	-	-	**0**	1
12/30/84	538	18	189	**100%**	18	-	-	-	-	**0**	1
12/31/84	584	18	243	**100%**	18	-	-	-	-	**0**	1
1/1/85	135	20	161	**100%**	20	-	-	-	-	**0**	
1/2/85	-	-	453		-	-	-	-	-	**0**	
1/3/85	-	-	25		-	-	-	-	-	**0**	
1/4/85	-	-	71		-	-	-	-	-	**0**	
1/5/85	579	2	210	**100%**	2	-	-	-	-	**0**	
1/6/85	437	2	329	**100%**	2	-	-	-	-	**0**	
1/7/85	-	8	281		-	8	-	-	-	**8**	
1/8/85	-	18	546		-	18	-	-	-	**18**	
1/9/85	-	8	(64)		-	8	-	-	-	**8**	
1/10/85	-	4	269		-	4	-	-	-	**4**	
1/11/85	-	2	38		-	2	-	-	-	**2**	
1/12/85	-	-	(137)		-	-	-	-	-	**0**	
1/13/85	-	4	427		-	4	-	-	-	**4**	
1/14/85	-	4	203		-	4	-	-	-	**4**	
1/15/85	-	4	151		-	4	-	-	-	**4**	
1/16/85	-	6	249		-	6	-	-	-	**6**	
1/17/85	-	8	312		-	8	-	-	-	**8**	
1/18/85	-	10	66		-	10	-	-	-	**10**	
1/19/85	-	14	510		-	14	-	-	-	**14**	
1/20/85	-	14	607		-	14	-	-	-	**14**	
1/21/85	-	85	245		-	85	-	-	-	**85**	
1/22/85	-	85	303		-	85	-	-	-	**85**	
1/23/85	-	54	218		-	54	-	-	-	**54**	
1/24/85	-	48	(27)		-	48	-	-	-	**48**	
1/25/85	-	56	445		-	56	-	-	-	**56**	
1/26/85	-	56	340		-	56	-	-	-	**56**	
1/27/85	-	46	(51)		-	46	-	-	-	**46**	
1/28/85	-	48	665		-	48	-	-	-	**48**	
1/29/85	-	46	(204)		-	46	-	-	-	**46**	
1/30/85	-	38	365		-	38	-	-	-	**38**	
1/31/85	-	38	320		-	38	-	-	-	**38**	
2/1/85	-	40	(11)		-	40	-	-	8	**32**	
2/2/85	-	42	162		-	42	-	-	6	**36**	
2/3/85	-	40	196		-	40	-	-	5	**35**	
2/4/85	-	38	165		-	38	28	-	2	**8**	
2/5/85	-	38	189		-	38	32	-	-	**6**	
2/6/85	-	137	188		-	137	117	-	-	**20**	
2/7/85	-	85	226		-	85	78	-	5	**2**	
2/8/85	-	-	426		-	-	-	-	-	**0**	
2/9/85	-	-	(68)		-	-	-	-	-	**0**	
2/10/85	-	18	126		-	18	-	-	2	**16**	
2/11/85	-	109	343		-	109	-	-	10	**99**	
2/12/85	-	54	180		-	54	-	-	4	**50**	
2/13/85	-	73	190		-	73	-	-	4	**69**	
2/14/85	-	44	202		-	44	-	-	3	**41**	
2/15/85	-	40	249		-	40	-	-	4	**36**	
2/16/85	-	46	325		-	46	-	-	8	**38**	
2/17/85	-	54	334		-	54	-	-	9	**45**	
2/18/85	-	54	407		-	54	-	-	9	**45**	
2/19/85	-	58	484		-	58	-	-	5	**53**	
2/20/85	-	61	441		-	61	-	-	4	**57**	
2/21/85	-	69	370		-	69	-	-	3	**66**	
2/22/85	-	65	394		-	65	-	-	4	**61**	
2/23/85	-	60	445		-	60	-	-	3	**57**	
2/24/85	-	58	490		-	58	-	-	4	**54**	
2/25/85	-	58	603		-	58	-	-	3	**55**	
2/26/85	-	60	473		-	60	-	-	2	**58**	
2/27/85	-	63	569		-	63	-	-	2	**61**	
2/28/85	-	58	571		-	58	-	-	1	**57**	
3/1/85	-	56	589		-	56	23	-	2	**31**	
3/2/85	-	61	516		-	61	17	-	3	**41**	
3/3/85	-	63	408		-	63	-	-	3	**60**	
3/4/85	-	-	388		-	-	-	-	-	**0**	
3/5/85	-	26	381		-	26	5	-	3	**18**	
3/6/85	-	65	354		-	65	24	-	7	**34**	
3/7/85	-	73	343		-	73	41	-	7	**25**	
3/8/85	-	67	323		-	67	46	-	6	**15**	
3/9/85	-	63	331		-	63	30	-	7	**26**	
3/10/85	-	65	352		-	65	27	-	8	**30**	
3/11/85	-	155	279		-	155	-	-	16	**139**	
3/12/85	-	101	202		-	101	-	-	1	**100**	
3/13/85	-	65	670		-	65	-	-	-	**65**	
3/14/85	-	58	683		-	58	-	-	1	**57**	
3/15/85	545	61	1,055	49%	30	31	-	-	-	**31**	
3/16/85	683	73	895	71%	52	22	-	-	-	**22**	
3/17/85	711	61	931	72%	44	17	-	-	-	**17**	
3/18/85	382	69	1,043	34%	24	46	-	-	-	**46**	
3/19/85	396	79	892	41%	32	47	-	-	-	**47**	
3/20/85	-	75	763		-	75	15	-	1	**59**	
3/21/85	-	77	849		-	77	-	-	3	**74**	
3/22/85	-	83	705		-	83	39	-	2	**42**	
3/23/85	-	83	700		-	83	-	-	3	**80**	
3/24/85	-	20	848		-	20	9	-	1	**10**	
3/25/85	-	121	635		-	121	52	14	6	**49**	
3/26/85	-	2	536		-	2	1	-	-	**1**	
3/27/85	-	52	497		-	52	33	1	-	**18**	
3/28/85	-	113	472		-	113	69	-	8	**36**	
3/29/85	-	109	430		-	109	54	-	2	**53**	

	Spaulding Collection to Storage (AF)	Spaulding Reservoir Sources: Calc Tribs Div. (conv cfs --> AF)	Spaulding Reservoir Sources: Nat. Inflow + Fourdyce Releases (conv cfs --> AF)	% stored	Water from Tributaries Stored in Spaulding under Sr. Rights	Tributaries Water Remaining for Appropriation under NID Water Rts (AF)	Tributaries Water Stored In: Rollins Sheet 3D Col 17	Combie Sheet 3G Col 12	Scotts Flat Sheet 4D Col 12	Tributaries Water Remaining for D/d Appropriation under NID Water Rts (AF)	
3/30/85	-	133	430		-	133	67	-	1	**65**	
3/31/85	-	101	617		-	101	45	-	-	**56**	Orig. values
4/1/85	248	97	1,065	21%	21	76	45	-	2	**29**	61
4/2/85	1,032	109	1,829	53%	58	51	**49**	-	2	**0**	70
4/3/85	1,186	147	1,930	57%	84	63	**62**	-	1	**0**	83
4/4/85	1,512	169	2,228	63%	106	62	**60**	-	2	**0**	104
4/5/85	1,832	216	2,522	67%	145	72	**71**	-	1	**0**	151
4/6/85	1,487	248	2,588	52%	130	118	**118**	-	-	**0**	153
4/7/85	1,442	254	2,491	53%	133	121	**121**	-	-	**0**	
4/8/85	1,884	266	2,422	70%	186	79	64	-	-	**15**	
4/9/85	2,174	335	2,604	74%	248	87	-	-	-	**87**	
4/10/85	2,062	343	2,571	71%	242	100	-	-	-	**100**	
4/11/85	1,579	309	2,215	63%	193	116	-	-	-	**116**	
4/12/85	1,409	305	2,270	55%	167	138	-	-	-	**138**	
4/13/85	1,597	325	2,811	51%	166	160	135	-	-	**25**	
4/14/85	2,044	377	3,221	57%	214	163	38	-	-	**125**	
4/15/85	2,013	395	3,185	56%	222	173	-	-	-	**173**	
4/16/85	1,275	405	2,432	45%	182	223	-	-	-	**223**	
4/17/85	965	359	1,810	44%	160	199	-	-	-	**199**	
4/18/85	805	303	1,505	45%	135	168	-	-	-	**168**	
4/19/85	827	302	1,606	43%	131	171	-	-	-	**171**	
4/20/85	1,108	249	1,123	81%	201	48	-	-	-	**48**	
4/21/85	-	155	1,099		-	155	-	-	-	**155**	
4/22/85	-	309	1,187		-	309	-	-	-	**309**	
4/23/85	-	248	1,208		-	248	-	-	-	**248**	
4/24/85	-	254	1,412		-	254	-	-	-	**254**	
4/25/85	-	239	1,203		-	239	-	-	-	**239**	
4/26/85	-	223	1,101		-	223	-	-	-	**223**	
4/27/85	-	221	1,115		-	221	-	-	-	**221**	
4/28/85	414	240	1,941	19%	45	194	-	-	-	**194**	
4/29/85	658	251	1,941	30%	75	175	-	-	-	**175**	
4/30/85	1,045	210	2,116	45%	94	116	-	-	-	**116**	
5/1/85	1,075	211	2,649	38%	79	132	-	-	-	**132**	
5/2/85	1,278	287	2,773	42%	120	167	-	-	-	**167**	
5/3/85	1,309	294	2,421	48%	142	152	-	-	-	**152**	
5/4/85	1,806	276	1,916	82%	227	49	-	-	-	**49**	
5/5/85	1,833	236	1,970	83%	196	40	-	-	-	**40**	
5/6/85	1,292	254	2,104	55%	139	115	-	-	-	**115**	
5/7/85	971	248	1,936	44%	110	138	-	-	-	**138**	
5/8/85	630	232	1,607	34%	80	153	-	-	-	**153**	
5/9/85	379	216	1,376	24%	51	165	-	-	-	**165**	
5/10/85	527	200	1,199	38%	75	125	-	-	-	**125**	
5/11/85	799	182	898	74%	135	47	-	-	-	**47**	
5/12/85	960	184	1,074	76%	141	44	-	-	-	**44**	
5/13/85	629	175	1,505	37%	65	109	-	-	-	**109**	
5/14/85	672	171	1,660	37%	63	108	-	-	-	**108**	
5/15/85	563	171	1,633	31%	53	117	-	-	-	**117**	
5/16/85	430	173	1,506	26%	44	128	-	-	-	**128**	
5/17/85	814	171	1,293	56%	95	76	-	-	4	**72**	
5/18/85	1,415	167	1,550	82%	137	29	-	-	-	**29**	
5/19/85	1,428	157	1,564	83%	130	27	-	-	-	**27**	
5/20/85	677	149	1,485	41%	62	87	-	-	-	**87**	
5/21/85	236	103	1,348	16%	17	86	-	-	-	**86**	
5/22/85	368	105	1,436	24%	25	80	-	-	-	**80**	
5/23/85	906	69	1,465	59%	41	28	-	-	-	**28**	
5/24/85	565	127	1,370	38%	48	79	-	-	-	**79**	
5/25/85	1,192	60	1,205	94%	56	3	-	-	-	**3**	
5/26/85	1,131	93	1,067	97%	91	2	-	-	-	**2**	
5/27/85	419	103	964	39%	41	63	-	-	-	**63**	
5/28/85	240	169	799	25%	42	127	-	-	-	**127**	
5/29/85	173	97	694	22%	21	76	-	-	-	**76**	
5/30/85	87	93	553	13%	13	81	-	-	-	**81**	
5/31/85	50	83	569	8%	6	77	-	-	-	**77**	
6/1/85	310	77	424	62%	48	30	-	-	-	**30**	
6/2/85	447	79	560	70%	55	24	-	-	-	**24**	
6/3/85	94	83	596	14%	12	72	-	-	-	**72**	
6/4/85	156	79	582	24%	19	61	-	-	-	**61**	
6/5/85	169	75	607	25%	19	57	-	-	-	**57**	
6/6/85	156	71	605	23%	16	55	-	-	-	**55**	
6/7/85	113	67	570	18%	12	55	-	-	-	**55**	
6/8/85	408	63	534	68%	43	20	-	-	-	**20**	
6/9/85	341	63	479	63%	40	24	-	-	-	**24**	
6/10/85	-	65	460		-	65	-	-	-	**65**	
6/11/85	-	60	617		-	60	-	-	-	**60**	
6/12/85	-	16	143		-	16	-	-	-	**16**	
6/13/85	-	26	427		-	26	-	-	-	**26**	
6/14/85	749	36	1,162	63%	22	13	-	-	-	**13**	
6/15/85	1,002	40	1,119	86%	34	5	-	-	-	**5**	
6/16/85	952	40	1,075	85%	34	6	-	-	-	**6**	
6/17/85	533	40	1,077	48%	19	21	-	-	-	**21**	
6/18/85	511	40	1,039	47%	19	21	-	-	-	**21**	
6/19/85	492	20	1,017	47%	9	10	-	-	-	**10**	
6/20/85	495	28	1,030	47%	13	15	-	-	-	**15**	
6/21/85	510	2	1,004	51%	1	1	-	-	-	**1**	
6/22/85	873	-	990	88%	0	-	-	-	-	**0**	
6/23/85	861	16	933	91%	14	1	-	-	-	**1**	
6/24/85	372	22	940	39%	8	13	-	-	-	**13**	
6/25/85	280	24	940	29%	7	17	-	-	-	**17**	
6/26/85	294	-	922	32%	0	-	-	-	-	**0**	
6/27/85	281	-	909	31%	0	-	-	-	-	**0**	
6/28/85	-	-	End of Storage Collection in Spaulding			-	-	-	-	**0**	
6/29/85	-	-				-	-	-	-	**0**	
6/30/85	-	-				-	-	-	-	**0**	
7/1/85	-	-				-	-	-	-	**0**	
7/2/85	-	8				8	5	-	-	**3**	
7/3/85	-	10				10	-	-	-	**10**	
7/4/85	-	8				8	-	-	-	**8**	
7/5/85	-	6				6	-	-	-	**6**	
7/6/85	-	8				8	-	-	-	**8**	
7/7/85	-	8				8	-	-	-	**8**	
7/8/85	-	6				6	-	-	-	**6**	
7/9/85	-	4				4	-	-	-	**4**	

	Spaulding	Spaulding Reservoir Sources			Water from	Tributaries Water	Tributaries Water Stored In			Tributaries Water
	Collection to	Calc Tribs Div.	Nat. Inflow + Fourdyce	%	Tributaries Stored	Remaining for	Rollins	Combie	Scotts Flat	Remaining for D/d
	Storage (AF)	(conv cfs --> AF)	Releases (conv cfs --> AF)	stored	in Spaulding	Appropriation under	Sheet 3D	Sheet 3G	Sheet 4D	Appropriation under
					under Sr. Rights	NID Water Rts (AF)	Col 17	Col 12	Col 12	NID Water Rts (AF)
7/10/85	-	4				4	-	-	-	**4**
7/11/85	-	2				2	-	-	-	**2**
7/12/85	-	-				-	-	-	-	**0**
7/13/85	-	4				4	-	-	-	**4**
7/14/85	-	4				4	-	-	-	**4**
7/15/85	-	4				4	-	-	-	**4**
7/16/85	-	4				4	-	-	-	**4**
7/17/85	-	10				10	-	-	-	**10**
7/18/85	-	14				14	-	-	-	**14**
7/19/85	-	12				12	-	-	-	**12**
7/20/85	-	12				12	-	-	-	**12**
7/21/85	-	10				10	-	-	-	**10**
7/22/85	-	10				10	-	-	-	**10**
7/23/85	-	12				12	-	-	-	**12**
7/24/85	-	12				12	-	-	-	**12**
7/25/85	-	8				8	-	-	-	**8**
7/26/85	-	10				10	-	-	-	**10**
7/27/85	-	12				12	-	-	-	**12**
7/28/85	-	14				14	-	-	-	**14**
7/29/85	-	12				12	-	-	-	**12**
7/30/85	-	12				12	-	-	-	**12**
7/31/85	-	14				14	-	-	-	**14**
8/1/85	-	10				10	-	-	-	**10**
8/2/85	-	8				8	-	-	-	**8**
8/3/85	-	10				10	-	-	-	**10**
8/4/85	-	99				99	-	-	-	**99**
8/5/85	-	-				-	-	-	-	**0**
8/6/85	-	-				-	-	-	-	**0**
8/7/85	-	-				-	-	-	-	**0**
8/8/85	-	-				-	-	-	-	**0**
8/9/85	-	-				-	-	-	-	**0**
8/10/85	-	-				-	-	-	-	**0**
8/11/85	-	-				-	-	-	-	**0**
8/12/85	-	-				-	-	-	-	**-**
8/13/85	-	-				-	-	-	-	**-**
8/14/85	-	-				-	-	-	-	**0**
8/15/85	-	-				-	-	-	-	**0**
8/16/85	-	-				-	-	-	-	**0**
8/17/85	-	-				-	-	-	-	**0**
8/18/85	-	16				16	-	-	-	**16**
8/19/85	-	22				22	-	-	-	**22**
8/20/85	-	16				16	-	-	-	**16**
8/21/85	-	8				8	-	-	-	**8**
8/22/85	-	-				-	-	-	-	**0**
8/23/85	-	-				-	-	-	-	**0**
8/24/85	-	8				8	-	-	-	**8**
8/25/85	-	30				30	-	-	-	**30**
8/26/85	-	58				58	-	-	-	**58**
8/27/85	-	63				63	-	-	-	**63**
8/28/85	-	48				48	-	-	-	**48**
8/29/85	-	24				24	-	-	-	**24**
8/30/85	-	24				24	-	-	-	**24**
8/31/85	-	24				24	-	-	-	**24**
9/1/85	-	28				28	-	-	-	**28**
9/2/85	-	24				24	-	-	-	**24**
9/3/85	-	28				28	-	-	-	**28**
9/4/85	-	26				26	-	-	-	**26**
9/5/85	-	26				26	-	-	-	**26**
9/6/85	-	26				26	-	-	-	**26**
9/7/85	-	14				14	-	-	-	**14**
9/8/85	-	34				34	-	-	-	**34**
9/9/85	-	73				73	-	-	-	**73**
9/10 - 9/9:	73,581	23,130	Σ ✓		6,622	16,508	2,674	21	285	**13,528**
					(af Stored in Spaulding)	"Taken from Source"				
						(Not stored in Spaulding)			Σ ✓	16,508

Step 5: Split Remaining Tribs D/d & Check for Exceedances

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%
9/9/1984						
9/10/1984	-	-	-	-	-	-
9/11/1984	-	-	-	-	-	-
9/12/1984	-	-	-	-	-	-
9/13/1984	-	-	-	-	-	-
9/14/1984	-	-	-	-	-	-
9/15/1984	6	1.9	0.4	2.4	0.4	0.9
9/16/1984	16	5	1	7	1	2
9/17/1984	4	1.3	0.2	1.6	0.2	0.6
9/18/1984	-	-	-	-	-	-
9/19/1984	16	5	1	7	1	2
9/20/1984	2	0.6	0.1	0.8	0.1	0.3
9/21/1984	32	10	2	13	2	5
9/22/1984	24	8	1	10	1	4
9/23/1984	12	4	1	5	1	2
9/24/1984	10	3	1	4	1	1
9/25/1984	8	2.5	0.5	3.3	0.5	1.2
9/26/1984	10	3	1	4	1	1
9/27/1984	10	3	1	4	1	1
9/28/1984	12	4	1	5	1	2
9/29/1984	10	3	1	4	1	1
9/30/1984	16	5	1	7	1	2
10/1/1984	22	7	1	9	1	3
10/2/1984	20	6	1	8	1	3
10/3/1984	-	-	-	-	-	-
10/4/1984	-	-	-	-	-	-
10/5/1984	-	-	-	-	-	-
10/6/1984	-	-	-	-	-	-
10/7/1984	-	-	-	-	-	-
10/8/1984	-	-	-	-	-	-
10/9/1984	-	-	-	-	-	-
10/10/1984	-	-	-	-	-	-
10/11/1984	2	0.6	0.1	0.8	0.1	0.3
10/12/1984	-	-	-	-	-	-
10/13/1984	-	-	-	-	-	-
10/14/1984	-	-	-	-	-	-
10/15/1984	87	28	5	36	5	13
10/16/1984	-	-	-	-	-	-
10/17/1984	67	22	4	28	4	10
10/18/1984	-	-	-	-	-	-
10/19/1984	-	-	-	-	-	-
10/20/1984	-	-	-	-	-	-
10/21/1984	-	-	-	-	-	-
10/22/1984	-	-	-	-	-	-
10/23/1984	204	65	12	84	12	31
10/24/1984	175	56	10	72	10	26
10/25/1984	169	54	10	69	10	25
10/26/1984	172	55	10	70	10	26
10/27/1984	161	52	10	66	10	24
10/28/1984	161	52	10	66	10	24
10/29/1984	40	13	2	16	2	6
10/30/1984	2	0.6	0.1	0.8	0.1	0.3
10/31/1984	-	-	-	-	-	-
11/1/1984	7	2.3	0.4	3.0	0.4	1.1
11/2/1984	3	0.9	0.2	1.1	0.2	0.4
11/3/1984	19	6	1	8	1	3
11/4/1984	31	10	2	13	2	5
11/5/1984	15	5	1	6	1	2
11/6/1984	5	1.7	0.3	2.2	0.3	0.8
11/7/1984	4	1.4	0.3	1.8	0.3	0.7
11/8/1984	3	0.9	0.2	1.1	0.2	0.4
11/9/1984	3	0.9	0.2	1.2	0.2	0.4
11/10/1984	-	-	-	-	-	-
11/11/1984	3	0.8	0.2	1.0	0.2	0.4
11/12/1984	2	0.7	0.1	1.0	0.1	0.3
11/13/1984	1	0.2	0.0	0.2	0.0	0.1
11/14/1984	2	0.5	0.1	0.6	0.1	0.2
11/15/1984	10	3	1	4	1	1
11/16/1984	2	0.6	0.1	0.7	0.1	0.3
11/17/1984	2	0.6	0.1	0.8	0.1	0.3
11/18/1984	2	0.6	0.1	0.7	0.1	0.3
11/19/1984	2	0.6	0.1	0.7	0.1	0.3
11/20/1984	2	0.6	0.1	0.8	0.1	0.3
11/21/1984	1	0.3	0.1	0.4	0.1	0.1

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%
11/22/1984	5	1.6	0.3	2.0	0.3	0.7
11/23/1984	5	1.6	0.3	2.0	0.3	0.7
11/24/1984	3	0.9	0.2	1.1	0.2	0.4
11/25/1984	23	7	1	9	1	3
11/26/1984	9	3	1	4	1	1
11/27/1984	2	0.6	0.1	0.8	0.1	0.3
11/28/1984	40	13	2	16	2	6
11/29/1984	41	13	2	17	2	6
11/30/1984	35	11	2	14	2	5
12/1/1984	33	10	2	13	2	5
12/2/1984	29	9	2	12	2	4
12/3/1984	27	9	2	11	2	4
12/4/1984	26	8	2	11	2	4
12/5/1984	14	4	1	6	1	2
12/6/1984	10	3	1	4	1	1
12/7/1984	12	4	1	5	1	2
12/8/1984	16	5	1	7	1	2
12/9/1984	18	6	1	7	1	3
12/10/1984	24	8	1	10	1	4
12/11/1984	25	8	1	10	1	4
12/12/1984	28	9	2	11	2	4
12/13/1984	50	16	3	20	3	7
12/14/1984	-	-	-	-	-	-
12/15/1984	4	1.3	0.2	1.6	0.2	0.6
12/16/1984	20	6	1	8	1	3
12/17/1984	22	7	1	9	1	3
12/18/1984	22	7	1	9	1	3
12/19/1984	22	7	1	9	1	3
12/20/1984	10	3	1	4	1	1
12/21/1984	-	-	-	-	-	-
12/22/1984	-	-	-	-	-	-
12/23/1984	-	-	-	-	-	-
12/24/1984	-	-	-	-	-	-
12/25/1984	-	-	-	-	-	-
12/26/1984	8	2.7	0.5	3.4	0.5	1.3
12/27/1984	13	4	1	5	1	2
12/28/1984	14	4	1	6	1	2
12/29/1984	-	-	-	-	-	-
12/30/1984	-	-	-	-	-	-
12/31/1984	-	-	-	-	-	-
1/1/1985	-	-	-	-	-	-
1/2/1985	-	-	-	-	-	-
1/3/1985	-	-	-	-	-	-
1/4/1985	-	-	-	-	-	-
1/5/1985	-	-	-	-	-	-
1/6/1985	-	-	-	-	-	-
1/7/1985	8	3	0.5	3	0.5	1
1/8/1985	18	6	1	7	1	3
1/9/1985	8	3	0.5	3	0.5	1
1/10/1985	4	1.3	0.2	1.6	0.2	0.6
1/11/1985	2	0.6	0.1	0.8	0.1	0.3
1/12/1985	-	-	-	-	-	-
1/13/1985	4	1.3	0.2	1.6	0.2	0.6
1/14/1985	4	1.3	0.2	1.6	0.2	0.6
1/15/1985	4	1.3	0.2	1.6	0.2	0.6
1/16/1985	6	1.9	0.4	2.4	0.4	0.9
1/17/1985	8	2.5	0.5	3.3	0.5	1.2
1/18/1985	10	3	1	4	1	1
1/19/1985	14	4	1	6	1	2
1/20/1985	14	4	1	6	1	2
1/21/1985	85	27	5	35	5	13
1/22/1985	85	27	5	35	5	13
1/23/1985	54	17	3	22	3	8
1/24/1985	48	15	3	20	3	7
1/25/1985	56	18	3	23	3	8
1/26/1985	56	18	3	23	3	8
1/27/1985	46	15	3	19	3	7
1/28/1985	48	15	3	20	3	7
1/29/1985	46	15	3	19	3	7
1/30/1985	38	12	2	15	2	6
1/31/1985	38	12	2	15	2	6
2/1/1985	32	10	2	13	2	5
2/2/1985	36	11	2	15	2	5
2/3/1985	35	11	2	14	2	5
2/4/1985	8	2	0.5	3	0.5	1

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%
2/5/1985	6	2	0.3	2	0.3	1
2/6/1985	20	6	1	8	1	3
2/7/1985	2	0.7	0.1	0.9	0.1	0.3
2/8/1985	-	-	-	-	-	-
2/9/1985	-	-	-	-	-	-
2/10/1985	16	5	1	6	1	2
2/11/1985	99	32	6	41	6	15
2/12/1985	50	16	3	20	3	7
2/13/1985	69	22	4	28	4	10
2/14/1985	41	13	2	17	2	6
2/15/1985	36	11	2	15	2	5
2/16/1985	38	12	2	15	2	6
2/17/1985	45	14	3	18	3	7
2/18/1985	45	14	3	18	3	7
2/19/1985	53	17	3	22	3	8
2/20/1985	57	18	3	24	3	9
2/21/1985	66	21	4	27	4	10
2/22/1985	61	20	4	25	4	9
2/23/1985	57	18	3	23	3	8
2/24/1985	54	17	3	22	3	8
2/25/1985	55	17	3	22	3	8
2/26/1985	58	18	3	24	3	9
2/27/1985	61	20	4	25	4	9
2/28/1985	57	18	3	23	3	8
3/1/1985	31	10	2	13	2	5
3/2/1985	41	13	2	17	2	6
3/3/1985	60	19	4	25	4	9
3/4/1985	-	-	-	-	-	-
3/5/1985	18	6	1	7	1	3
3/6/1985	34	11	2	14	2	5
3/7/1985	25	8	2	10	2	4
3/8/1985	15	5	1	6	1	2
3/9/1985	26	8	2	11	2	4
3/10/1985	30	10	2	12	2	5
3/11/1985	139	44	8	57	8	21
3/12/1985	100	32	6	41	6	15
3/13/1985	65	21	4	27	4	10
3/14/1985	57	18	3	23	3	8
3/15/1985	31	10	2	13	2	5
3/16/1985	22	7	1	9	1	3
3/17/1985	17	6	1	7	1	3
3/18/1985	46	15	3	19	3	7
3/19/1985	47	15	3	19	3	7
3/20/1985	59	19	4	24	4	9
3/21/1985	74	24	4	30	4	11
3/22/1985	42	14	3	17	3	6
3/23/1985	80	26	5	33	5	12
3/24/1985	10	3	1	4	1	1
3/25/1985	49	16	3	20	3	7
3/26/1985	1	0.3	0.1	0.4	0.1	0.1
3/27/1985	18	6	1	7	1	3
3/28/1985	36	12	2	15	2	5
3/29/1985	53	17	3	22	3	8
3/30/1985	65	21	4	27	4	10
3/31/1985	56	18	3	23	3	8
4/1/1985	29	9	2	12	2	4
4/2/1985	-	-	-	-	-	-
4/3/1985	-	-	-	-	-	-
4/4/1985	-	-	-	-	-	-
4/5/1985	-	-	-	-	-	-
4/6/1985	-	-	-	-	-	-
4/7/1985	-	-	-	-	-	-
4/8/1985	15	5	1	6	1	2
4/9/1985	87	28	5	36	5	13
4/10/1985	100	32	6	41	6	15
4/11/1985	116	37	7	47	7	17
4/12/1985	138	44	8	57	8	21
4/13/1985	25	8	1	10	1	4
4/14/1985	125	40	8	51	8	19
4/15/1985	173	55	10	71	10	26
4/16/1985	223	71	13	91	13	33
4/17/1985	199	64	12	82	12	30
4/18/1985	168	54	10	69	10	25
4/19/1985	171	55	10	70	10	26
4/20/1985	48	15	3	20	3	7

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%
4/21/1985	155	50	9	63	9	23
4/22/1985	309	99	19	127	19	46
4/23/1985	248	79	15	102	15	37
4/24/1985	254	81	15	104	15	38
4/25/1985	239	76	14	98	14	36
4/26/1985	223	71	13	91	13	33
4/27/1985	221	71	13	91	13	33
4/28/1985	194	62	12	80	12	29
4/29/1985	175	56	11	72	11	26
4/30/1985	116	37	7	47	7	17
5/1/1985	132	42	8	54	8	20
5/2/1985	167	53	10	68	10	25
5/3/1985	152	49	9	62	9	23
5/4/1985	49	16	3	20	3	7
5/5/1985	40	13	2	16	2	6
5/6/1985	115	37	7	47	7	17
5/7/1985	138	44	8	56	8	21
5/8/1985	153	49	9	63	9	23
5/9/1985	165	53	10	68	10	25
5/10/1985	125	40	7	51	7	19
5/11/1985	47	15	3	19	3	7
5/12/1985	44	14	3	18	3	7
5/13/1985	109	35	7	45	7	16
5/14/1985	108	35	6	44	6	16
5/15/1985	117	38	7	48	7	18
5/16/1985	128	41	8	53	8	19
5/17/1985	72	23	4	29	4	11
5/18/1985	29	9	2	12	2	4
5/19/1985	27	9	2	11	2	4
5/20/1985	87	28	5	36	5	13
5/21/1985	86	28	5	35	5	13
5/22/1985	80	26	5	33	5	12
5/23/1985	28	9	2	12	2	4
5/24/1985	79	25	5	32	5	12
5/25/1985	3	1.1	0.2	1.4	0.2	0.5
5/26/1985	2	0.7	0.1	1.0	0.1	0.4
5/27/1985	63	20	4	26	4	9
5/28/1985	127	41	8	52	8	19
5/29/1985	76	24	5	31	5	11
5/30/1985	81	26	5	33	5	12
5/31/1985	77	25	5	32	5	12
6/1/1985	30	9	2	12	2	4
6/2/1985	24	8	1	10	1	4
6/3/1985	72	23	4	29	4	11
6/4/1985	61	19	4	25	4	9
6/5/1985	57	18	3	23	3	9
6/6/1985	55	18	3	23	3	8
6/7/1985	55	18	3	23	3	8
6/8/1985	20	6	1	8	1	3
6/9/1985	24	8	1	10	1	4
6/10/1985	65	21	4	27	4	10
6/11/1985	60	19	4	24	4	9
6/12/1985	16	5	1	7	1	2
6/13/1985	26	8	2	11	2	4
6/14/1985	13	4	1	5	1	2
6/15/1985	5	2	0	2	0	1
6/16/1985	6	2	0	2	0	1
6/17/1985	21	7	1	8	1	3
6/18/1985	21	7	1	9	1	3
6/19/1985	10	3	1	4	1	2
6/20/1985	15	5	1	6	1	2
6/21/1985	1	0.3	0.1	0.4	0.1	0.1
6/22/1985	-	-	-	-	-	-
6/23/1985	1	0.5	0.1	0.6	0.1	0.2
6/24/1985	13	4	1	5	1	2
6/25/1985	17	5	1	7	1	3
6/26/1985	-	-	-	-	-	-
6/27/1985	-	-	-	-	-	-
6/28/1985	-	-	-	-	-	-
6/29/1985	-	-	-	-	-	-
6/30/1985	-	-	-	-	-	-
7/1/1985	-	-	-	-	-	-
7/2/1985	3	0.9	0.2	1.2	0.2	0.4
7/3/1985	10	3	1	4	1	1
7/4/1985	8	3	0.5	3	0.5	1

	Remaining Tribs (acre-feet)	Col. C Texas Ck 32%	Col. D Clear Ck 6%	Col. E Fall Ck 41%	Col. F Trap Ck 6%	Col. G Rucker Ck 15%
7/5/1985	6	2	0.4	2	0.4	1
7/6/1985	8	3	0.5	3	0.5	1
7/7/1985	8	3	0.5	3	0.5	1
7/8/1985	6	1.9	0.4	2.4	0.4	0.9
7/9/1985	4	1.3	0.2	1.6	0.2	0.6
7/10/1985	4	1.3	0.2	1.6	0.2	0.6
7/11/1985	2	0.6	0.1	0.8	0.1	0.3
7/12/1985	-	-	-	-	-	-
7/13/1985	4	1.3	0.2	1.6	0.2	0.6
7/14/1985	4	1.3	0.2	1.6	0.2	0.6
7/15/1985	4	1.3	0.2	1.6	0.2	0.6
7/16/1985	4	1.3	0.2	1.6	0.2	0.6
7/17/1985	10	3	1	4	1	1
7/18/1985	14	4	1	6	1	2
7/19/1985	12	4	1	5	1	2
7/20/1985	12	4	1	5	1	2
7/21/1985	10	3	1	4	1	1
7/22/1985	10	3	1	4	1	1
7/23/1985	12	4	1	5	1	2
7/24/1985	12	4	1	5	1	2
7/25/1985	8	2.5	0.5	3.3	0.5	1.2
7/26/1985	10	3	1	4	1	1
7/27/1985	12	4	1	5	1	2
7/28/1985	14	4	1	6	1	2
7/29/1985	12	4	1	5	1	2
7/30/1985	12	4	1	5	1	2
7/31/1985	14	4	1	6	1	2
8/1/1985	10	3	1	4	1	1
8/2/1985	8	2.5	0.5	3.3	0.5	1.2
8/3/1985	10	3	1	4	1	1
8/4/1985	99	32	6	41	6	15
8/5/1985	-	-	-	-	-	-
8/6/1985	-	-	-	-	-	-
8/7/1985	-	-	-	-	-	-
8/8/1985	-	-	-	-	-	-
8/9/1985	-	-	-	-	-	-
8/10/1985	-	-	-	-	-	-
8/11/1985	-	-	-	-	-	-
8/12/1985	-	-	-	-	-	-
8/13/1985	-	-	-	-	-	-
8/14/1985	-	-	-	-	-	-
8/15/1985	-	-	-	-	-	-
8/16/1985	-	-	-	-	-	-
8/17/1985	-	-	-	-	-	-
8/18/1985	16	5	1	7	1	2
8/19/1985	22	7	1	9	1	3
8/20/1985	16	5	1	7	1	2
8/21/1985	8	2.5	0.5	3.3	0.5	1.2
8/22/1985	-	-	-	-	-	-
8/23/1985	-	-	-	-	-	-
8/24/1985	8	2.5	0.5	3.3	0.5	1.2
8/25/1985	30	10	2	12	2	4
8/26/1985	58	18	3	24	3	9
8/27/1985	63	20	4	26	4	10
8/28/1985	48	15	3	20	3	7
8/29/1985	24	8	1	10	1	4
8/30/1985	24	8	1	10	1	4
8/31/1985	24	8	1	10	1	4
9/1/1985	28	9	2	11	2	4
9/2/1985	24	8	1	10	1	4
9/3/1985	28	9	2	11	2	4
9/4/1985	26	8	2	11	2	4
9/5/1985	26	8	2	11	2	4
9/6/1985	26	8	2	11	2	4
9/7/1985	14	4.4	0.8	5.7	0.8	2.1
9/8/1985	34	11	2	14	2	5
9/9/1985	73	23	4	30	4	11
	Daily Max (AF/d):	99	19	127	19	46
	Combined P/L Limits (AF/d):	< 198.4 (= 100 cfs)	< 69.4 (= 35 cfs)	< 218 (= 110 cfs)	< 49.6 (= 25cfs)	< 49.6 (= 25cfs)

No Exceedances of P/L Limits

No Impairment Necessary

Percent Consumptive Use Calculation

	Bear River Canal		Deer Creek System Deliveries to NID						Total		
	Total BRC	NID Delivery	Combie Phase 1 Canal BR301	Cascade Canal DC102	D-S Canal DC145	Newtown Canal DC131	Tunnel Canal DC140	Keystone Canal DC127	Deer Creek Deliveries	Power Only	**Consumptive Use (& Incidental Power)**
	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(Percent)	**(Percent)**
3/15/83	758	6	48	59	7	11	15	0	92	84%	**16%**
3/16/83	778	3	48	59	7	8	15	0	89	85%	**15%**
3/17/83	807	3	48	59	6	8	15	0	88	85%	**15%**
3/18/83	843	9	48	66	6	8	15	0	95	85%	**15%**
3/19/83	843	3	48	70	6	8	15	0	98	85%	**15%**
3/20/83	797	3	48	70	6	8	14	0	98	84%	**16%**
3/21/83	787	3	48	70	6	8	14	0	98	84%	**16%**
3/22/83	789	6	48	70	6	8	14	0	98	84%	**16%**
3/23/83	752	3	48	70	6	0	14	0	89	84%	**16%**
3/24/83	752	6	48	69	6	0	14	0	89	84%	**16%**
3/25/83	752	5	48	69	6	11	14	0	99	83%	**17%**
3/26/83	803	3	48	69	6	11	14	0	99	84%	**16%**
3/27/83	845	6	48	69	6	11	14	0	99	85%	**15%**
3/28/83	843	3	48	69	6	11	13	0	99	85%	**15%**
3/29/83	873	6	48	69	6	11	13	0	98	85%	**15%**
3/30/83	897	3	48	69	6	11	12	0	98	86%	**14%**
3/31/83	899	6	48	69	7	11	15	0	102	85%	**15%**
4/1/83	897	6	48	72	8	11	15	0	106	85%	**15%**
4/2/83	899	5	48	72	9	11	15	0	107	85%	**15%**
4/3/83	897	3	48	72	10	11	15	0	108	85%	**15%**
4/4/83	897	6	48	17	11	11	15	0	55	89%	**11%**
4/5/83	835	3	48	5	11	11	15	0	42	90%	**10%**
4/6/83	897	6	48	14	11	11	15	0	51	90%	**10%**
4/7/83	897	5	46	42	11	11	14	1	79	87%	**13%**
4/8/83	899	8	45	41	11	11	14	1	78	87%	**13%**
4/9/83	899	6	46	40	11	11	14	1	77	87%	**13%**
4/10/83	899	4	92	42	11	11	14	1	80	84%	**16%**
4/11/83	897	7	92	43	11	11	14	1	81	83%	**17%**
4/12/83	901	7	92	43	11	11	14	1	81	83%	**17%**
4/13/83	218	8	90	43	11	13	14	1	82	54%	**46%**
4/14/83	962	5	92	42	11	15	14	1	84	84%	**16%**
4/15/83	970	7	149	42	11	15	28	1	98	79%	**21%**
4/16/83	970	7	149	43	11	17	28	1	100	79%	**21%**
4/17/83	970	6	149	46	11	18	28	1	104	79%	**21%**
4/18/83	972	7	149	47	11	18	28	1	105	79%	**21%**
4/19/83	966	7	149	46	18	17	28	1	110	78%	**22%**
4/20/83	962	8	149	46	19	17	28	1	111	78%	**22%**
4/21/83	958	7	149	47	18	17	28	1	111	78%	**22%**
4/22/83	956	107	149	43	18	17	28	1	107	70%	**30%**
4/23/83	906	106	149	40	18	17	28	1	103	69%	**31%**
4/24/83	835	107	149	40	18	18	28	1	104	67%	**33%**
4/25/83	910	106	149	37	18	18	28	1	102	69%	**31%**
4/26/83	946	108	149	35	17	18	28	1	99	70%	**30%**
4/27/83	944	106	149	35	17	19	28	1	101	70%	**30%**
4/28/83	849	109	109	36	18	19	28	0	101	70%	**30%**
4/29/83	819	110	109	37	18	18	28	0	101	69%	**31%**
4/30/83	817	109	109	37	18	19	28	0	102	69%	**31%**
5/1/83	895	110	109	37	16	20	28	0	101	71%	**29%**
5/2/83	956	136	109	36	21	20	28	0	106	70%	**30%**
5/3/83	958	135	109	36	21	20	28	0	105	70%	**30%**
5/4/83	958	146	109	36	23	20	28	0	108	69%	**31%**
5/5/83	958	134	109	37	23	20	28	0	108	70%	**30%**
5/6/83	956	134	109	38	24	20	28	0	110	70%	**30%**
5/7/83	956	132	109	37	24	20	28	0	109	70%	**30%**
5/8/83	954	135	109	37	24	20	28	1	109	70%	**30%**
5/9/83	952	134	109	37	23	20	28	1	109	70%	**30%**
5/10/83	950	148	109	37	25	20	28	1	111	69%	**31%**
5/11/83	952	147	109	37	27	20	28	1	113	69%	**31%**
5/12/83	950	148	120	37	29	19	28	1	114	68%	**32%**
5/13/83	948	148	120	38	30	25	28	2	122	67%	**33%**
5/14/83	946	160	120	45	30	25	28	2	129	66%	**34%**
5/15/83	946	158	120	50	30	25	28	2	134	66%	**34%**
5/16/83	946	159	120	51	30	25	28	2	135	65%	**35%**
5/17/83	944	165	146	57	30	25	28	2	141	63%	**37%**
5/18/83	944	165	146	61	30	23	30	2	146	63%	**37%**
5/19/83	942	165	149	64	36	23	33	2	158	62%	**38%**
5/20/83	942	165	228	66	42	22	33	2	164	58%	**42%**
5/21/83	940	165	228	65	43	22	33	2	165	58%	**42%**
5/22/83	940	141	232	66	45	26	33	2	171	59%	**41%**
5/23/83	938	187	232	66	54	29	33	2	184	55%	**45%**
5/24/83	944	188	232	65	62	29	33	2	192	55%	**45%**
5/25/83	950	287	232	70	66	29	33	2	201	48%	**52%**
5/26/83	950	286	249	74	66	29	33	2	205	47%	**53%**
5/27/83	950	287	249	77	65	29	33	2	207	47%	**53%**
5/28/83	948	287	249	74	63	29	33	2	202	47%	**53%**
5/29/83	948	346	249	75	73	29	33	2	212	43%	**57%**
5/30/83	946	345	249	75	73	29	33	2	212	43%	**57%**
5/31/83	944	355	249	75	69	28	35	2	209	42%	**58%**
6/1/83	942	306	249	72	69	28	35	2	206	46%	**54%**
6/2/83	942	307	249	67	69	28	35	2	201	46%	**54%**
6/3/83	940	276	249	66	70	28	34	2	200	48%	**52%**
6/4/83	940	276	249	67	70	28	34	2	201	48%	**52%**
6/5/83	938	276	249	69	71	28	34	2	204	48%	**52%**
6/6/83	922	227	256	74	87	28	34	2	226	50%	**50%**
6/7/83	910	228	256	84	87	28	35	2	236	49%	**51%**
6/8/83	910	222	256	89	97	28	35	2	251	49%	**51%**
6/9/83	910	194	256	88	98	30	35	2	253	51%	**49%**
6/10/83	912	172	256	84	98	30	41	2	255	52%	**48%**
6/11/83	912	172	256	76	98	30	41	2	247	52%	**48%**
6/12/83	912	172	256	74	103	30	41	2	250	52%	**48%**
6/13/83	785	174	256	74	103	28	41	2	247	47%	**53%**
6/14/83	904	155	256	71	105	28	41	2	246	53%	**47%**
6/15/83	908	155	256	72	111	29	40	2	254	53%	**47%**
6/16/83	910	154	256	78	108	30	39	2	257	53%	**47%**
6/17/83	910	155	256	82	108	30	41	2	263	53%	**47%**
6/18/83	912	164	256	86	109	30	41	2	268	52%	**48%**
6/19/83	914	164	256	86	109	30	41	2	269	52%	**48%**
6/20/83	914	214	256	88	109	30	41	2	270	49%	**51%**
6/21/83	916	214	262	88	110	30	41	2	271	48%	**52%**
6/22/83	918	215	262	88	110	30	41	2	271	48%	**52%**
6/23/83	918	233	262	88	110	30	41	2	271	47%	**53%**
6/24/83	920	236	262	86	111	30	41	2	270	47%	**53%**