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DISTRICT COURT - SRBA
Fifth Judicial District
County of Twin Falls - State of Idaho
APR 16 2012
By _____ Clerk
_____ Deputy Clerk

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT

OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	**Subcase Nos. Attachment A**
Case No. 39576	)	**AFFIDAVIT OF TRAVIS L. THOMPSON IN SUPPORT OF SURFACE WATER COALITION'S JOINT MEMORANDUM IN OPPOSITION TO THE STATE OF IDAHO'S MOTION FOR PARTIAL SUMMARY JUDGMENT**

STATE OF IDAHO)
) ss.
County of Twin Falls)

TRAVIS L. THOMPSON, being first duly sworn upon oath, deposes and hereby states as follows:

I am an attorney representing A&B, BID, Milner, NSCC, and TFCC in the above-captioned matter. I am over the age of 18 and state the following based upon my own personal knowledge.

Attached hereto as individual exhibits identified below are true and correct copies of the following:

1. Map Showing Upper Snake River Basin Reservoirs.
2. January 1996 Bureau of Reclamation Report on The Upper Snake River
3. Act of September 30, 1950 (Reauthorization of Palisades Project); 64 Stat. 1083.
4. USBR "Tea Cup" Diagram Examples from November 2011 to March 2012
5. Water Right License No. 15134 issued by IDWR
6. Statement by Lynn Crandall (from Water District 1 archives)
7. Statement by R.P. Parry dated August 9, 1949 (from Water District 1 archives)
8. May 14, 1947 Letter to U.S. Bureau of Reclamation from Lynn Crandall (from Water District 1 archives)
9. May 29, 1947 Letter to U.S. Bureau of Reclamation from Lynn Crandall (from Water District 1 archives)
10. December 18, 1947 Letter to U.S. Bureau of Reclamation from Lynn Crandall (from Water District 1 archives)
11. March 5, 1948 Letter to Lynn Crandall from U.S. Bureau of Reclamation / May 12, 1948 Letter to U.S. Bureau of Reclamation from Burley Irrigation District (from Water District 1 archives)
12. Memorandum Re: Jackson / American Falls Exchange, believed to be drafted by Lynn Crandall, watermaster (from Water District 1 archives)
13. January 4, 1951 Letter to U.S. Bureau of Reclamation from American Falls Reservoir District #2; January 5, 1951 Letter to Bird from Watermaster (from Water District 1 archives)

14. August 8, 1952 Letter to Bird from U.S. Bureau of Reclamation (from Water District 1 archives)
15. December 7, 1948 Letter to Snake River Committee of Nine from Bureau of Reclamation (from Water District 1 archives)
16. June 17, 1952 Memorandum to Commissioner, Bureau of Reclamation from U.S. Department of the Interior, Bureau of Reclamation (from Water District 1 archives)
17. Unsigned October 8, 1953 Letter to North Side Canal Company (believed to be drafted by Lynn Crandall, watermaster at the time) (from Water District 1 archives)
18. January 14, 1955 Letter to North Side Canal Company from Clifford Fix (from Water District 1 archives)
19. November 21, 1957 Letter to Minidoka Irrigation District from Lynn Crandall (from Water District 1 archives)
20. February 2, 1960 Minidoka Irrigation District Contract with Reclamation (No. 14-06-100-1833)
21. Complaint (*Burley Irr. Dist. et al. v. Eagle*, Twin Falls County District Court, Fifth Jud. Dist.)
22. Stipulation (*Burley Irr. Dist. et al. v. Eagle*, Twin Falls County District Court, Fifth Jud. Dist.)
23. Findings of Fact and Conclusion of Law dated July 10, 1968 (*Burley Irr. Dist. et al. v. Eagle*, Twin Falls County District Court, Fifth Jud. Dist.)
24. July 25, 1966 Letter to John Rosholt from U.S. Department of the Interior
25. November 28, 1966 Letter to John Rosholt from U.S. Department of the Interior
26. December 14, 1966 Letter to John Rosholt from the U.S. Department of the Interior

27. September 6, 1967 Letter to John Rosholt from the U.S. Department of the Interior
28. July 9, 1968 Letter to the U.S. Department of the Interior from John Rosholt
29. Table Showing Storage Water Right Priority Dates in Upper Snake River Basin
30. River Operations on Snake River, Idaho by Lynn Crandall (from Water District 1 archives)
31. Excerpts from *Irrigated Eden* by Mark Fiege
32. May 15, 1934 Letter to Lynn Crandall from U.S. Bureau of Reclamation (from Water District 1 archives)
33. May 16, 1934 Letter to U.S. Bureau of Reclamation from Lynn Crandall (from Water District 1 archives)
34. June 25, 1935 Letter to North Side Canal Company from Lynn Crandall (from Water District 1 archives)
35. July 12, 1961 Letter to Bureau of Reclamation from Henry Eagle (from Water District 1 archives)
36. Excerpts from 1967 Water District 1 Annual Report
37. Excerpts from 1978 Water District 1 Annual Report
38. Amended Notice of Claim Water Right No. 01-2064
39. Amended Notice of Claim Water Right No. 01-2068
40. State of Idaho Objections filed in subcases 01-2064 and -1-2068.
41. Draft Transcript of the Deposition Tony Olenichak Deposition taken on March 21, 2012 (Tr. Vol. II).
42. Partial Decrees for Water Right Nos. 37-856, 37-11989, and 37-22116.
43. Partial Decree for Water Right No. 22-11987.

44. Partial Decree for Water Right No. 29-13471.

45. May 19, 1941 Letter to Lynn Crandall from U.S. Department of the Interior, Bureau of Reclamation (from Water District 1 archives)

46. December 15, 1955 Stipulation between NSCC, TFCC and U.S. Bureau of Reclmation.

47. May 20, 1953 Letter to U.S. Bureau of Reclamation from Lynn Crandall (from Water District 1 archives)

48. January 19, 1960 Letter to U.S. Bureau of Reclamation from Lynn Crandall (from Water District 1 archives)

49. July 27, 1959 Letter to North Side Canal Company from Henry Eagle (from Water District 1 archives)

50. July 20, 1959 Letter to U.S. Bureau of Reclamation from Henry Eagle (from Water District 1 archives)

51. August 26, 1959 Letter to American Falls Reservoir District #2 from Henry Eagle (from Water District 1 archives)

52. May 10, 1962 Letter to U.S. Bureau of Reclamation from Henry Eagle (from Water District 1 archives)

53. November 23, 1966 Letter to Falls Irrigation District from Henry Eagle (from Water District 1 archives)

54. June 4, 1968 Letter to North Side Canal Company from Henry Eagle (from Water District 1 archives)

55. December 14, 1956 Letter to California Attorney General's office from Lynn Crandall (from Water District 1 archives)

56. December 26, 1956 Letter to California Attorney General's office from Lynn Crandall (from Water District 1 archives)

57. USBR "Tea Cup" Diagram Examples from May and June 2006.

58. March 31, 1965 Letter to Henry Eagle and David Crandall from Roger Ling; March 10, 1965 Letter to Glenn Simmons and Henry Eagle from Minidoka Irrigation District; and March 9, 1967 Letter to Henry Eagle from Minidoka Irrigation District.

Further you affiant sayeth naught.

DATED this 16th day of April, 2012.

Travis L. Thompson

SUBSCRIBED AND SWORN to before me this 16 day of April, 2012.

JESSICA NIELSEN NOTARY PUBLIC STATE OF IDAHO

Notary Public for State of Idaho
Residing at Twin Falls, Idaho.
Commission Expires: 4/3/18

CERTIFICATE OF SERVICE

I hereby certify that on the 16th day of April, 2012, I served a true and correct copy of the foregoing **AFFIDAVIT OF TRAVIS L. THOMPSON** on the person(s) listed below, by U.S. Mail, and electronic mail if available:

Idaho Department of Water Resources
P.O. Box 83720
Boise, ID 83720-0098

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Regional Director, PN Region
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Jerry R. Rigby
P.O. Box 250
Rexburg, ID 83440-0250

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Denver, CO 80202

Randall C. Budge
Candice M. McHugh
P.O. Box 1391
Pocatello, ID 83201

U.S. Department of Justice
Division of Env. & Natural Resources
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James C. Tucker
Idaho Power Company
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A. Dean Tranmer
P.O. Box 4169
Pocatello, Idaho 83201

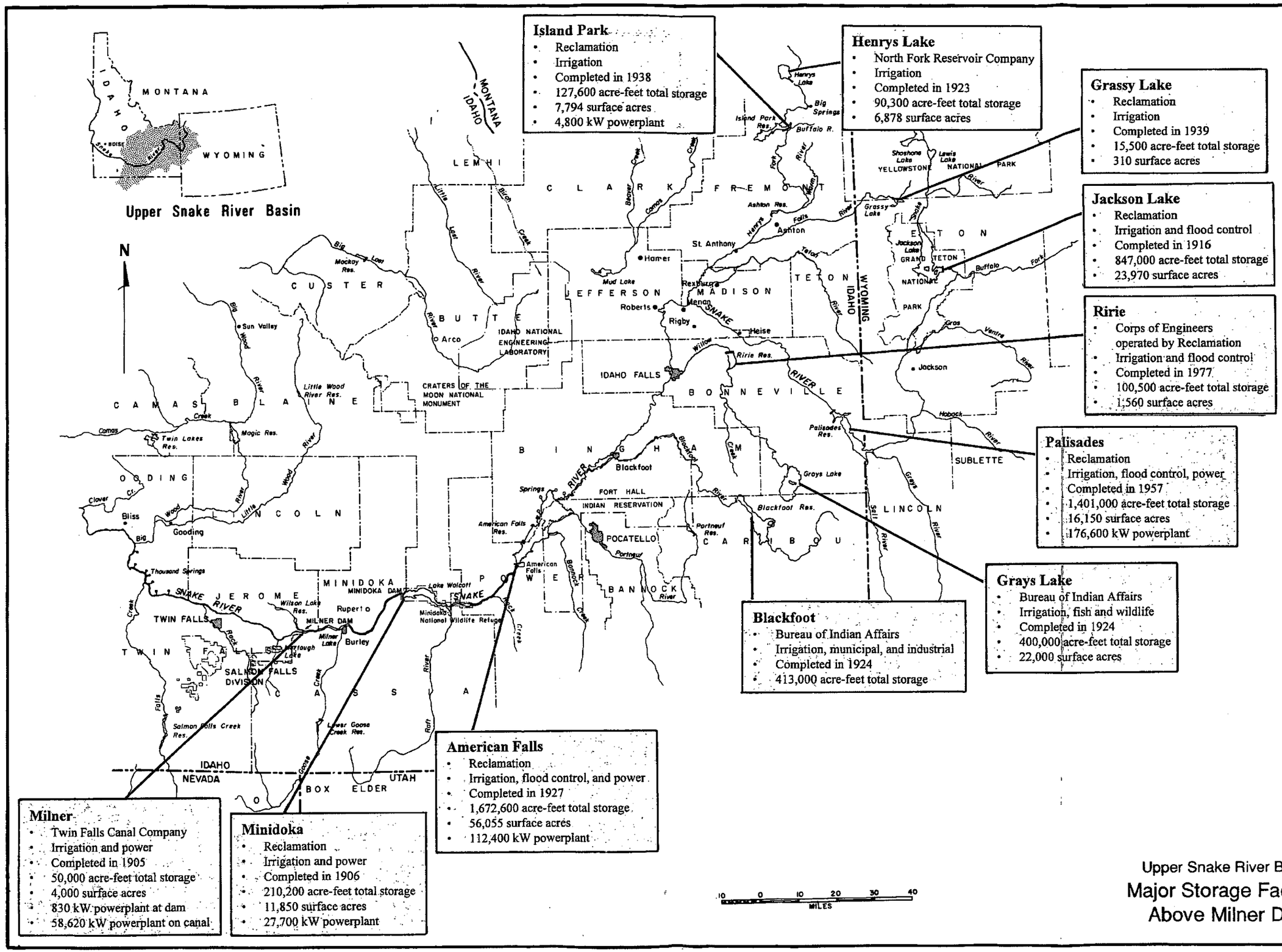
Travis L. Thompson

ATTACHMENT A

01-2064
01-2064A
01-2064B
01-2064C
01-2064D
01-2064E
01-2064F
01-2064L
01-10042
01-10042A
01-10042B
01-10053A
01-10190

01-2068
01-2068D
01-2068E
01-2068F
01-2068M
01-2068Y
01-10043
01-10043A
01-10043E
01-10191
01-10389

Exhibit
1



Island Park
- Reclamation
- Irrigation
- Completed in 1938
- 127,600 acre-feet total storage
- 7,794 surface acres
- 4,800 kW powerplant

Henrys Lake
- North Fork Reservoir Company
- Irrigation
- Completed in 1923
- 90,300 acre-feet total storage
- 6,878 surface acres

Grassy Lake
- Reclamation
- Irrigation
- Completed in 1939
- 15,500 acre-feet total storage
- 310 surface acres

Jackson Lake
- Reclamation
- Irrigation and flood control
- Completed in 1916
- 847,000 acre-feet total storage
- 23,970 surface acres

Ririe
- Corps of Engineers operated by Reclamation
- Irrigation and flood control
- Completed in 1977
- 100,500 acre-feet total storage
- 1,560 surface acres

Palisades
- Reclamation
- Irrigation, flood control, power
- Completed in 1957
- 1,401,000 acre-feet total storage
- 16,150 surface acres
- 176,600 kW powerplant

Grays Lake
- Bureau of Indian Affairs
- Irrigation, fish and wildlife
- Completed in 1924
- 400,000 acre-feet total storage
- 22,000 surface acres

Blackfoot
- Bureau of Indian Affairs
- Irrigation, municipal, and industrial
- Completed in 1924
- 413,000 acre-feet total storage

American Falls
- Reclamation
- Irrigation, flood control, and power
- Completed in 1927
- 1,672,600 acre-feet total storage
- 56,055 surface acres
- 112,400 kW powerplant

Milner
- Twin Falls Canal Company
- Irrigation and power
- Completed in 1905
- 50,000 acre-feet total storage
- 4,000 surface acres
- 830 kW powerplant at dam
- 58,620 kW powerplant on canal

Minidoka
- Reclamation
- Irrigation and power
- Completed in 1906
- 210,200 acre-feet total storage
- 11,850 surface acres
- 27,700 kW powerplant

Upper Snake River Basin

Major Storage Facilities Above Milner Dam

Exhibit
2

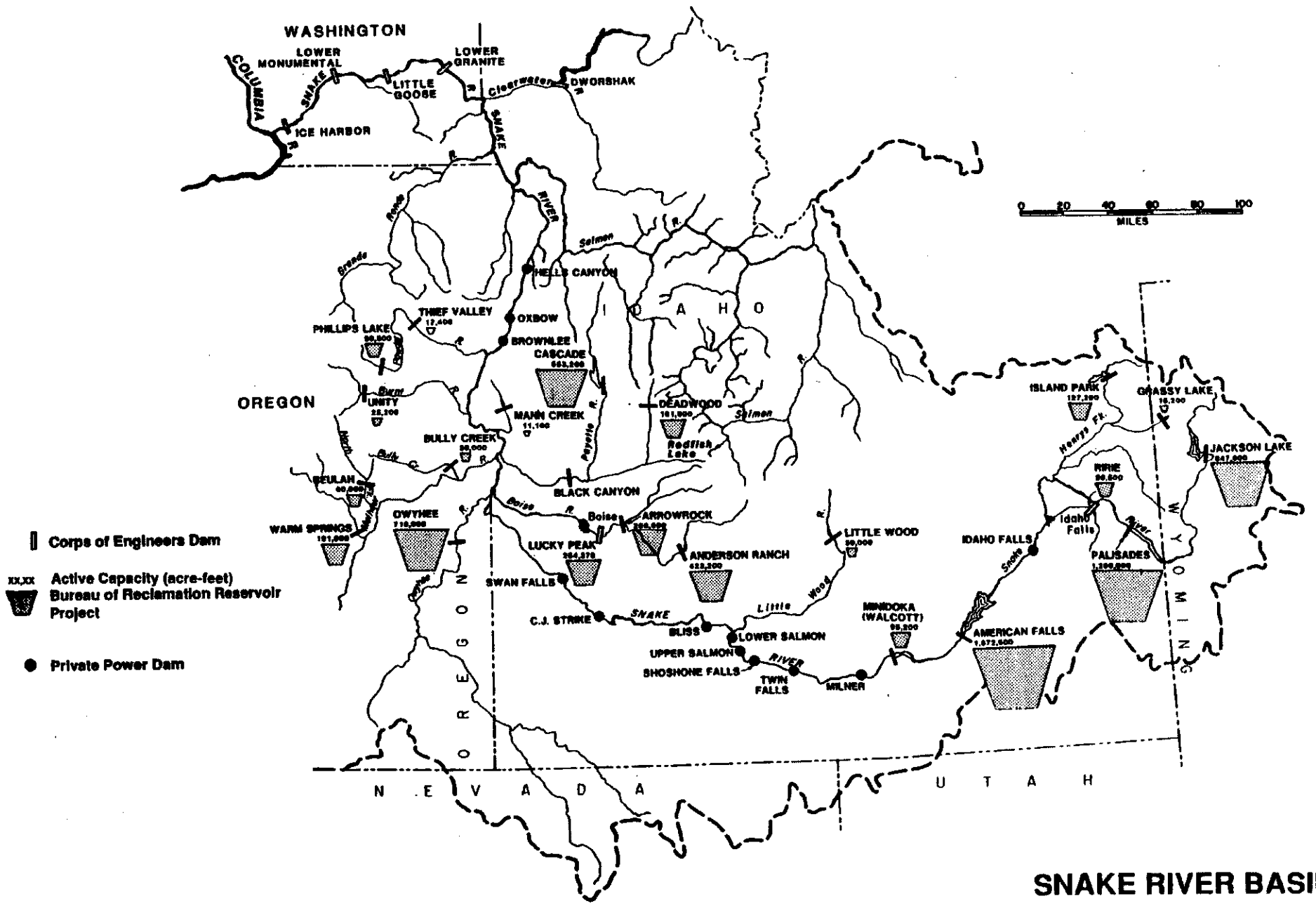
The Upper Snake River Basin

A Description of Bureau of

Reclamation System Operations

Above Milner Dam

Bureau of Reclamation
Boise Idaho
January 1996
(revised December 1997)



SNAKE RIVER BASIN

Acronyms and Abbreviations

BPA	Bonneville Power Administration
cfs	Cubic feet per second
Corps	U.S. Army Corps of Engineers
ESA	Endangered Species Act
FCRPS	Federal Columbia River Power System
FERC	Federal Energy Regulatory Commission
IDFG	Idaho Department of Fish and Game
IDWR	Idaho Department of Water Resources
IPC	Idaho Power Company
IWRB	Idaho Water Resources Board
kW	Kilowatt
NMFS	National Marine Fisheries Service
Reclamation	Bureau of Reclamation
RMP	Resource Management Plan
SOP	Standing Operating Procedures
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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I. Introduction

This report is intended as an overview of the operation of the Snake River/Federal storage system above Milner Dam. Increasing demands and controversy over the use of Snake River resources require an understanding of the history of water development, river hydrology, characteristics of the dams and reservoirs, and the legal and institutional requirements for operation of the current system. Water operations in the past focused on out-of-stream diversions to irrigate land and flood control. In recent years, additional demands on the water resource have focused primarily on instream uses including recreation and recovery of endangered species. Since 1991, the Bureau of Reclamation (Reclamation) has been asked to provide water to augment flows in the lower Snake River for enhancement of endangered salmon. Part of this water is being provided from the upper part of the Snake River basin. Reclamation also has been asked to modify operations to accommodate other species listed under the Endangered Species Act (ESA). Groups representing resident fishery, white water rafting, and water quality interests are asking for system operation changes to better accommodate their concerns.

This document focuses on the Snake River in the reach upstream from Milner Dam which is located near Burley, Idaho. This region is designated as Water District 01 by the State of Idaho and closely corresponds to the reach of the Snake River where a majority of the diversions from the main stem are for irrigation of lands and where most of the main stem reservoir storage is located. Irrigated lands further downstream in the Snake River basin, except those watered by diversions from the Milner pool, are watered from tributaries and storage development on those tributaries, e.g., the Boise, Little Wood, Owyhee, and Payette Rivers in Idaho and several streams in eastern Oregon. This document does not consider system operation of the Snake River downstream from Milner Dam.

Consumptive use of the Snake River is primarily for agriculture. However, it is important to recognize that less than one-half of the irrigated land in the upper Snake River basin[1] was developed under Federal authorities. The majority of the irrigation development in the upper Snake River basin is private development which relies on natural flow rights and ground water pumping. Federal irrigation development, in contrast, applies to those lands that were mostly privately developed but rely on storage rights for either a supplemental water supply or a full water supply. Several points, which are further developed throughout this document, should be kept in mind in considering Reclamation operation of the upper Snake River system:

- Irrigation water rights are appurtenant to the land, and the Federal Government does not hold most of these. Reclamation does hold storage rights at Reclamation dams.

- Water rights are administered by the State; Reclamation law, beginning with the 1902 Reclamation Act, requires Reclamation to comply with state law with regard to control, appropriation, use, and distribution of waters.

- Use of federally developed storage is closely controlled by three factors:
  - Federal authority for operation of the Federal facilities as enacted by the Congress
  - State water rights
  - Contracts for storage.

[1]Upper Snake River basin and upper Snake River are used throughout this report to indicate the Snake River and basin located upstream from Milner Dam. See chapter VII (Glossary) for additional definitions.

- Of almost 2.5 million acres irrigated upstream from Milner Dam, less than 1.1 million acres receive water from Reclamation storage, and only 210,000 acres receive a full water supply from Reclamation storage.

This paper is organized to provide more detailed information in succeeding chapters. Chapter II provides a description of the area, and chapter III provides a short history of water resource development upstream from Milner Dam. Major Federal and private facilities and water rights are discussed in chapter IV. Chapter V adds a general discussion of river system operations and includes a series of graphs of reservoir levels and river flows to illustrate the effects of water supply. River operations by function are expanded in chapter VI. Chapter VII identifies several issues related to operation of the Snake River/reservoir system. A list of acronyms and abbreviations appears at the front of this document and a glossary of hydrologic and other terms follows chapter VII as an aid to the reader.

II. Description of Area

Geography

The Snake River originates in Yellowstone National Park at an elevation in excess of 9,500 feet, flows south through western Wyoming, turns west and curves north in Idaho, and north of Idaho Falls curves south to make an arc through southern Idaho (see Snake River Basin and Major Storage Facilities above Milner Dam maps). At the Oregon border, the Snake River turns north, forming much of the border between Idaho and Oregon and a short portion of the border between Idaho and Washington. From Lewiston, the river makes an arc to join the Columbia River near the tri-cities of Richland, Pasco, and Kennewick, Washington. The Snake is the largest tributary of the Columbia River.

In Wyoming, the major tributaries to the main stem Snake River (sometimes referred to as the South Fork) are the Buffalo Fork, Gros Ventre, Hoback, Greys, and Salt Rivers. North of Idaho Falls, the main stem is joined by the Henrys Fork (often referred to as the North Fork) which flows from the north. The Henrys Fork originates in the northeast corner of Idaho at Henrys Lake, and flows south through Island Park Reservoir and to the confluence of the Warm River. After this confluence, the flow of the Henrys Fork is generally southwest to the confluence with the main stem. The major tributaries of the Henrys Fork are the Warm, Falls, and Teton Rivers.

Downstream to Milner Dam, most of the surface inflow is from streams that flow northward to join the main stem. These streams include the Blackfoot, Portneuf, and Raft Rivers and Willow Creek.

In addition to streams, springs provide a significant contribution to the Snake River. Many of these springs flow directly into the Snake River and are hidden. The largest contribution to the river is the highly visible Thousand Springs located downstream from Milner Dam.

Water Supply and Historical Change of Flows

Figure 1 shows the estimated annual water supply for the upper Snake River basin for the period from 1928 to 1989; the average supply during this period was about 10 million acre-feet. The estimated natural flow at Milner is the amount of water that would pass Milner Dam if there were no storage reservoirs and no irrigation or other diversion of the basin water supply. These estimates of natural flow were derived using the State of Idaho Monthly Planning Model and require adjusting observed runoff for the effects of

of upstream storage, diversions, and return flows. Estimates of natural flow for the years following 1989 are not available at this time. The most difficult part of making this estimate is the determination of return flow and reuse which are affected by a complex relationship between surface flows and ground-water flows. The Snake Plain Aquifer intersects the river and provides significant water. Timing of this ground-water influence is difficult to assess, and data on ground-water movement does not provide exact results.

Natural flow in figure 1 is contrasted with the observed flow past Milner. This contrast shows the effect of operating the river/storage system with storage of water and out-of-stream diversions.

Figure 1.—Annual Discharge of the Snake River at Milner, Idaho.

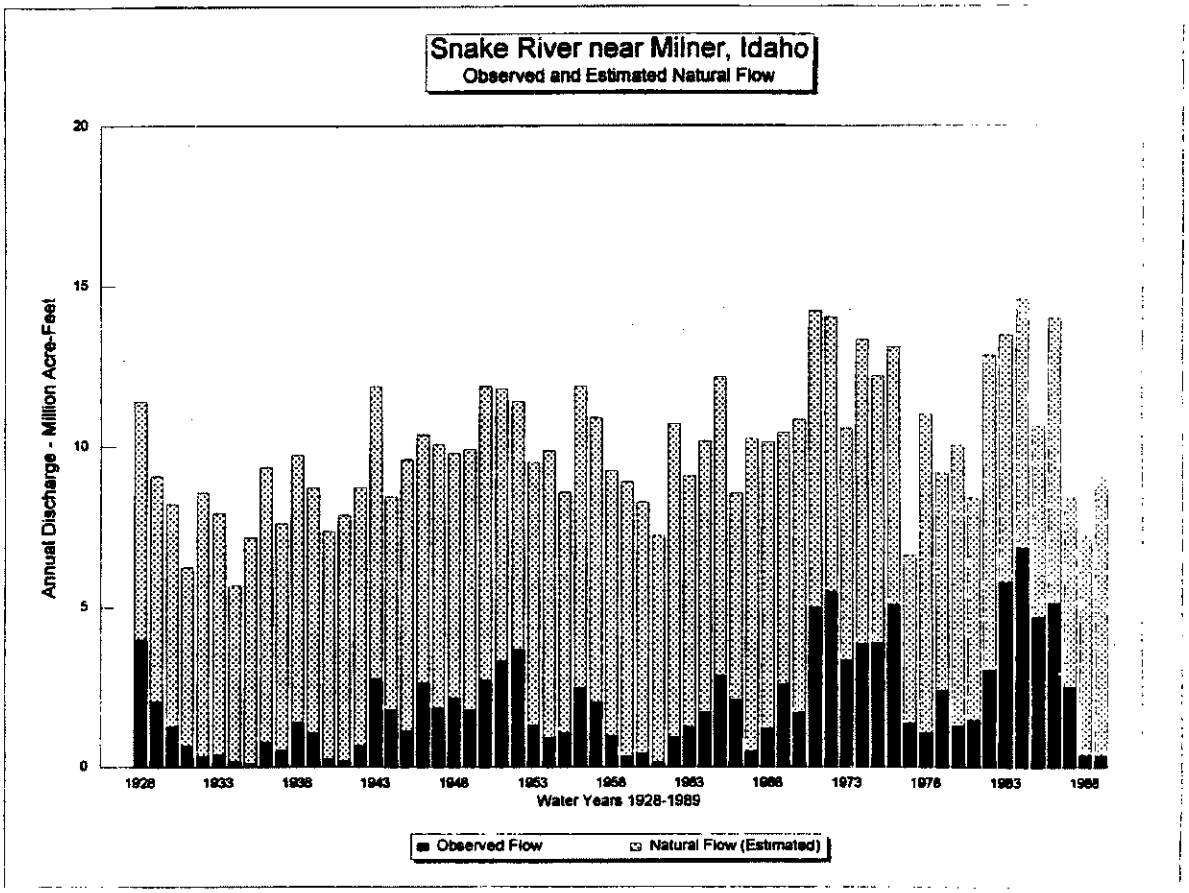
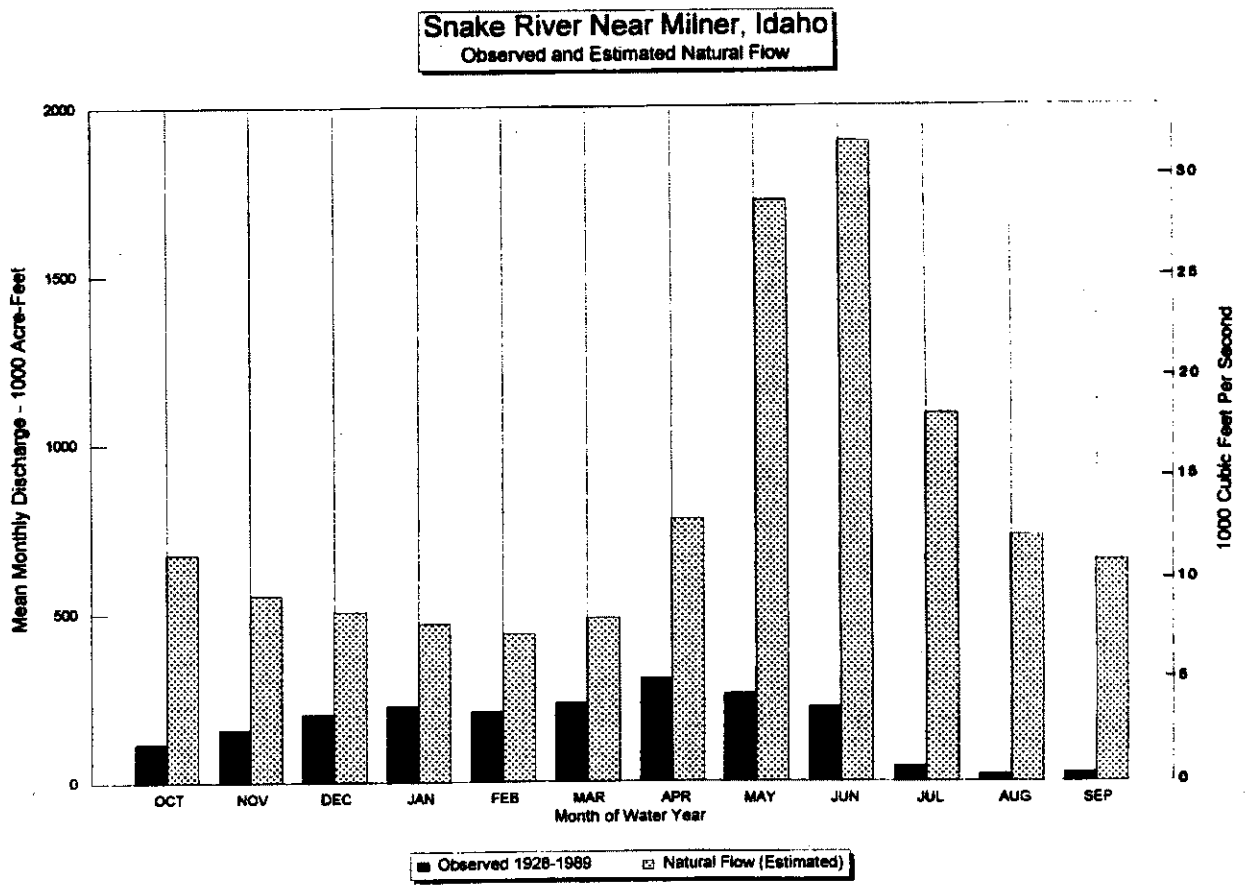


Figure 2 shows the average monthly flow past Milner for natural flow (no water development and no diversions) for the period 1928-1989. Natural flow past Milner would peak in June at a level of nearly four times the natural flow in February. With the current irrigation and reservoir development, flows peak in April and decline to minimums in August and September. Average monthly flows past Milner with system development are lower in all months than the average monthly flow for the lowest flow month without development (natural river flow).

Figure 2.—Average Monthly Discharge of the Snake River at Milner, Idaho



During early development of irrigation, but before major storage was developed, the natural flows during the winter changed very little, whereas, summer flows were substantially diminished by diversions for irrigation. With the current level of storage development, winter flow as well as summer flow are substantially altered.

It is important to note that the Minidoka Project was initiated because irrigated agriculture was already highly developed and experienced shortages in summer months. Project storage was designed and developed to capture excess winter and spring season flows for use in the summer, because the river was being severely depleted. Summer flows at Blackfoot were sometimes reduced to zero. Also, the aquifer was in an early stage of charging, and springflows and other subsurface return flows were smaller than they are today.

Although this report focuses only on the Snake River upstream from Milner Dam, upstream diversions and water use affect the downstream reach of the river. Some of those effects are complex. For instance, a minimum flow of 200 cubic feet per second (cfs) past Milner Dam is quickly augmented by irrigation return flows and to a much larger extent by the discharge of the Snake Plain Aquifer at Thousand Springs. Average discharge at Thousand Springs was around 4,000 cfs in the early 1900's and increased to almost 7,000 cfs in the 1950's. It has since decreased to about 5,000 cfs.

III. History of Water Resource Development

In the late 19th century, Utah farmers were attracted to the Snake River Valley upstream from American Falls, Idaho because of the relative abundance of water. The area where the two forks of the Snake River join (north of Idaho Falls) was especially attractive because of the fertile plain and many natural water channels. This interest led to extensive construction of canal systems around American Falls prior to 1900. Due to arid conditions in the west, the riparian doctrine of water rights that developed in the more humid east was discarded throughout the west as inappropriate, and the prior appropriation doctrine of water rights was developed. Under the prior appropriation doctrine, a person could use water from a stream without ownership of abutting land provided that the use did not interfere with an earlier use. Priority of appropriation became the recognized principle, with the courts ultimately determining the priority sequence and the amount of water of each appropriation. A law regulating the appropriation of water and affirming the prior appropriation doctrine was passed in Idaho in 1881. The Idaho State Constitution affirmed the principle that the stream belonged to the State, and a procedure was established through which future appropriation of water was to be made by application to the State Engineer (currently the Director of the Idaho Department of Water Resources). For administrative purposes, the State of Idaho has divided the Snake River into three sections. Water District 01 extends from Milner Dam to Palisades Reservoir including all of the Snake River drainage in Idaho above Milner Dam.

In Idaho, public land was acquired largely under the Homestead Act (1862), the Desert Land Act (1877), and the Carey Act (1884). The Carey Act was used quite extensively in the development of lands for irrigated agriculture production in the upper Snake River system. Under the Carey Act, each state, where irrigation was feasible, was to select up to 1 million acres of arid Federal lands to secure their reclamation by inducing private capital to construct the works necessary for irrigation. The Secretary of the Interior was authorized to ". . . donate, grant, and patent to the State free of cost for survey or price . . ." desert land for reclamation, cultivation, and settlement. The State Land Board was to approve the plans for development, set a price to be charged by the developing company, and provide supervision for the projects. The promoting company was to acquire a lien upon the lands of the settlers as security for payment of the obligation due for the water rights.

The first project constructed under the Carey Act was the Aberdeen-Springfield Canal completed in 1895 to divert 1,230 cfs from the Snake River at a point 3 miles downstream from the Firth bridge. Further to the west, the Twin Falls Land and Water Company was formed to provide for the development of Milner Dam and for the construction of the Twin Falls Canal to convey water to lands south of the Snake River. Upon completion in 1905, the Twin Falls tract included 202,000 acres.

Although the Desert Land Act and the Carey Act were somewhat effective in promoting irrigation development by private enterprise, development was limited by the financial resources of the individual promoters and the state. As the less complex irrigation projects were completed, the Federal Government was pressured to participate in development of irrigation by providing financing and water through storage development. Early settlers often overestimated the available water supply, not realizing that natural flows in August and September were insufficient to dependably irrigate crops.

At about the same time, the U.S. Geological Survey (USGS) had been formed and was actively classifying public lands and examining the geologic structure, mineral resources, and products of the national domain. The USGS reviewed opportunities for storage of water and

irrigation of lands. Included in this evaluation were lands for a proposed Minidoka Project, lying to the north and south of the Snake River and extending up to 35 miles west from Minidoka Rapids (situated 6 miles south of the town of Minidoka) and water storage facilities in the upper basin. In 1902, the Reclamation Act was passed and work on the proposed Minidoka project was assigned to the newly created Reclamation Service. At the time that the Reclamation Service became involved in the investigation of irrigation potentials, Snake River flows were being used to irrigate some 275,000 acres upstream of Minidoka Rapids. Construction of Minidoka Dam and carriage facilities began in 1904, and a rockfilled crib dam was constructed at Jackson Lake in 1907. By 1912, 110,000 acres of the Minidoka Project could be irrigated.

As irrigation development proceeded, it became clear that the water supply was not as abundant as had once been thought. The irrigation season of 1905 was the first time that the Snake River canals experienced a serious water shortage. During the summer, the Snake River was dry for a distance of 10 miles in the vicinity of Blackfoot. Irrigation diversion came under the jurisdiction of the court which mandated the closing and opening of the headgates to only partially fulfill water claims so that a total loss of crops in the Blackfoot area was averted.

Completion of the Twin Falls North Side Project under the Carey Act to irrigate up to 180,000 acres on the north side of the Snake River was delayed until storage could be obtained from an enlarged Jackson Lake. In 1919, Jackson Lake (by then reconstructed to a capacity of 847,000 acre-feet) failed to fill, and a serious water shortage occurred. In 1924, another water shortage occurred, and crops on the North Side Twin Falls tract were in jeopardy.

The dry years and the resulting loss of agricultural production and financial instability provided the impetus for construction of additional Federal storage capacity. Additional storage capacity became available with the completion of American Falls Dam in 1927. While both Jackson Lake Dam and American Falls Dam were constructed by Reclamation, up front funding was secured from the participants to supplement Federal appropriations so that construction could proceed.

Federal irrigation development continued with the Gooding Division of the Minidoka Project in 1927, the Upper Snake River Division in 1935, the North Side Pumping Division in 1950, and other irrigation projects in the upper Snake region.

Reclamation involvement in irrigation development of the region is the response of the Congress to requests for Federal participation. Federal involvement began primarily with the USGS, which began classification of public lands at the request of Congress. The 1902 Reclamation Act provided the broad authority under which the Reclamation Service (later the Bureau of Reclamation) operates to identify and pursue irrigation potentials. The Reclamation Project Act of 1939 provided additional broad authorities particularly in the area of expending funds and recovering construction charges on Federal reclamation projects. The Federal Water Project Recreation Act of 1965 (Public Law 89-72) further broadens authorities by essentially authorizing recreation and fish and wildlife enhancement as a function at all existing reservoirs. More recently, Title XXVIII of Public Law 102-575 provides some additional broad authorities. Other public laws, especially the various flood control acts, provide further authorities for consideration and authorization of other functions. Specific authorizations of projects, divisions, and units or specific facilities are contained in a variety of individual project or facility authorizing acts and in some appropriation acts.

A USGS study in 1990 indicates that there are about 2,470,000 acres of irrigated land upstream of Milner Dam. This includes about 60,000 acres of the Fort Hall Indian Project which is irrigated

with natural flows, ground water, and storage in Blackfoot Reservoir and Grays Lake.
About 1,070,000 acres are part of Reclamation's Minidoka and Michaud Flats Projects with about 210,000 acres receiving a full water supply and about 860,000 acres receiving a supplemental water supply from Reclamation storage. The remaining 1,340,000 acres are outside Federal projects and much of this acreage is irrigated from ground water; none receive storage water developed by Reclamation.

Annual withdrawal of water is about 14,365,000 acre-feet, of which 6,581,000 acre-feet are from ground water and 7,784,000 acre-feet are from surface water. The annual consumptive use of water (net use of water) totals about 4,661,000 acre-feet.

IV. Overview

Federal Projects

There are five major Federal projects associated with development of irrigation and water and land resources in the upper Snake. The Federal projects include the following:

Fort Hall Indian Project, constructed and operated by the Bureau of Indian Affairs

Minidoka Project, constructed and operated by Reclamation

Michaud Flats Project, constructed and operated by Reclamation

Palisades Project, constructed and operated by Reclamation

Ririe Project[1], constructed by the U.S. Army Corps of Engineers (Corps) and operated by Reclamation

Minidoka Project lands extend discontinuously along the Snake River from the town of Ashton on the Henrys Fork to the town of Bliss in south-central Idaho, about 300 miles downstream. Project lands downstream from Milner Dam are served by diversions from the Milner Pool.

Project facilities furnish a full or supplemental water supply to more than 1 million acres of land from five reservoirs that have a combined active storage capacity of about 2.8 million acre-feet (Note: this does not include the storage of the Palisades and Ririe Projects). Major project works consist of Minidoka Dam and Powerplant, Jackson Lake Dam, American Falls Dam, Island Park Dam, and Grassy Lake Dam. In addition, there are thousands of miles of canals, laterals, and drains and many water supply wells.

The Fort Hall Indian Project is an irrigation project constructed primarily on the Fort Hall Indian Reservation. The water supply is provided from Blackfoot Reservoir, which has an active capacity of about 350,000 acre-feet; Grays Lake, which has an active capacity of about 40,000 acre-feet; and the Snake River. Operation of Blackfoot Reservoir and Grays Lake are not integrated into the operation of other Federal reservoirs in the upper basin.

The Michaud Flats Project is an irrigation project developed by Reclamation for irrigation of about 11,000 acres of land adjacent to the town of American Falls. There was no storage facility constructed specifically for the project which gets its water supply from storage space in American Falls and Palisades Reservoirs and from ground water.

[1]Ririe Dam and Reservoir are considered to be Reclamation facilities for the purposes of this document.

The Palisades Project consists of Palisades Dam and Reservoir which were constructed to provide additional storage of 1,200,000 acre-feet in the upper basin. (Palisades Project is often combined in common speech with Minidoka Project, e.g., "the Minidoka-Palisades Project" because the two are so closely related. Often, a speaker includes the operation of the Palisades Project when the stated subject is the Minidoka Project.)

The Ririe Project consists of Ririe Dam and Reservoir and was constructed for flood control and irrigation. The reservoir has an active storage capacity of more than 80,000 acre-feet.

Reclamation Project Authorizations

Most of the Reclamation reservoirs in the upper Snake River basin were authorized as part of the Minidoka Project under the 1902 Reclamation Act with subsequent authorization of specific facilities by the Secretary of the Interior or the President. From 1902 to 1910, the Secretary of the Interior had authority to approve construction after a finding of feasibility. The Act of June 25, 1910 modified the procedure to require the President to approve the authorization. The 1939 Reclamation Act returned authorization authority to the Secretary of the Interior but a finding of feasibility had to be submitted to the President and the Congress. Authorizing legislation sometimes clearly states the authorized purpose of the project or facility but often indicates only that the project is to be constructed in accordance with a cited report.

The authorized purpose is an important consideration because it determines the limits within which a Federal facility can be operated. Flood control, as a project function, was authorized after most facilities were constructed. Recreation, including fish and wildlife enhancement, is an authorized function at projects and reservoirs generally through legislation that was passed after the facilities were constructed. However, the general authorizations for recreation apply to management of water and land surfaces and the development of facilities for recreation or safety purposes; they do not authorize reallocation of water supply for other purposes.

The Minidoka Project was authorized by the Secretary of the Interior on April 23, 1904, under the 1902 Reclamation Act. Investigation and construction funds for the Gooding Division (Gravity Extension Unit) were provided by the Act of January 12, 1927, and the Secretary's finding of feasibility dated July 2, 1928 was approved by the President on July 3, 1928. The Upper Snake River Division was authorized by a finding of feasibility of the Secretary and approved by the President on September 20, 1935. The North Side Pumping Division was authorized for construction by the Act of September 30, 1950. Replacement of American Falls Dam was authorized by the Act of December 28, 1973 (Public Law 93-206).

The Palisades Project was initially authorized by the Secretary of the Interior on December 9, 1941 under the Reclamation Project Act of 1939. It was reauthorized by the Act of September 30, 1950 (Public Law 81-864).

The Michaud Flat Project was authorized by the Act of August 31, 1954 (Public Law 83-741) and the Ririe Dam and Reservoir Project was authorized by the Act of October 23, 1962 (Public Law 87-874).

Table 1 shows the original authorization associated with each reservoir.

Table 1.—Authorization of Reclamation Storage Facilities		
Facility and Construction[1]	**Authorization**	**Original Authorized Purpose[2]**
Minidoka Dam 1904-1906	Secretary of the Interior on April 23, 1904 (under the 1902 Reclamation Act)	Irrigation and power
Jackson Lake Dam, 1907, 1910-11, 1916	Secretary of the Interior on April 23, 1904 (under the 1902 Reclamation Act)	Irrigation
American Falls Dam 1925-27, 1976-78	(under 1902 Reclamation Act[3]). Replacement by Act of December 28, 1973	Irrigation and power
Island Park Dam 1935-38	President on September 20, 1935 (under 1902 Reclamation Act)	Irrigation
Grassy Lake Dam 1932-39	President on September 20, 1935 (under 1902 Reclamation Act)	Irrigation
Palisades Dam 1951-57	Secretary of the Interior on December 9, 1941. Reauthorized by Act of September 30, 1950	Irrigation, power, flood control, and fish and wildlife
Ririe Dam[4] 1970-77	Act of October 23, 1962	Flood control, irrigation, and recreation.

[1]Multiple construction periods indicate reconstruction or additional construction to reach the current storage capacity.
[2]The Act of September 30, 1950, by reference, appears to authorize the upper Snake River Reservoir system to be operated for flood control. In addition, several flood control acts have essentially authorized flood control at all Reclamation reservoirs. Public Law 89-72 along with Public Law 102-575 have essentially authorized recreation (including fish and wildlife enhancement) at all Reclamation projects. However, this authorization is primarily for construction of facilities and management of lands and does not authorize a change in the use of storage space in a reservoir.
[3]Legislation in 1924 addresses purchase of Indian lands and expenditure of monies for construction of the reservoir; however, a specific document authorizing construction has not been identified.
[4]Constructed by the Corps, but operated by Reclamation.

History and Operation of Reclamation Dams

The major Reclamation dams are discussed below in the approximate order in which they were constructed. Table 2 summarizes the capacities of Reclamation reservoirs located upstream of Milner Dam. (Additional information on reservoir space is included in Appendix A.)

Table 2.—Capacities of Federal Reservoirs					
Reservoir	Elevation at Full Pool (feet above sea level)	Capacity (acre-feet)			
		Active[1]	Inactive[2]	Dead[3]	Total
Minidoka	4,245	95,200	115,000	--	210,200
Jackson Lake	6,769	847,000	--	--	847,000
American Falls	4,354.5	1,672,590	--	--	1,672,590
Grassy Lake	7,120	15,200	--	270	15,470
Island Park	6,302	127,265	381	--	127,646
Palisades	5,620	1,200,000	157,000	44,000	1,401,000
Ririe	5,119	80,500	6,000	4,000	[4]90,500
Total	Not Applicable	4,037,755	278,400	48,270	4,364,406

[1]Water that can be released for specific purposes.
[2]Water that can be released from the reservoir but is normally retained for a specific purpose, e.g., Island Park and Ririe--sediment control; Palisades and Minidoka--power or operational head (see also Appendix A).
[3]Water that cannot be released by gravity flow because it is below the elevation of the outlet.
[4]Does not include 10,000 acre-feet of exclusive flood control space.

Minidoka Dam

Construction of Minidoka Dam began in 1904 and was completed in 1906; Minidoka Powerplant was completed in 1909. In 1909, the overflow spillway section was raised 5 feet with the addition of 334 stop-log piers and bays. Development of Minidoka Project lands began with diversion of water from Minidoka Dam to the Minidoka Irrigation District and the Burley Irrigation District. Lands around Lake Walcott (the impoundment formed by Minidoka Land) are withdrawn by Reclamation and managed by the U.S. Fish and Wildlife Service (USFWS) as part of the Minidoka National Wildlife Refuge which was established in 1909.

Several activities have recently taken place at Minidoka Dam. The spillway radial gates were replaced in 1989-90. The original gates were installed in 1913 and were in need of complete replacement. Rehabilitation and construction activities at the powerplant have been initiated and are expected to be completed in 1997. The "old" Minidoka Powerplant is being replaced with a new, two unit powerplant built near the left abutment of the embankment dam. Units 1 through 5 will be retired and preserved as museum pieces in the old powerplant. Existing Unit 6 will be completely replaced and Unit 7 will have modern controls installed. The new powerplant will house Units 8 and 9. With this construction, generation nameplate capacity will be increased from 13,4 kilowatts (kW) to about 28 kW.

Minidoka Dam is primarily a diversion dam and a power generating facility. Lake Walcott is the easiest reservoir to fill because it is relatively small and winter flows in the Snake River at Minidoka are always sufficient to fill it. An early priority storage right means that the storage right must be physically filled somewhere in the system before junior storage rights can be filled (see additional discussion under "Water Rights").

Normal spring/summer operation is to raise the elevation to 4245 feet and to maintain that level to provide adequate flow to the main canals of the Burley and the Minidoka Irrigation Districts. Flows from American Falls Reservoir are diverted to the canals and/or passed through Minidoka Dam downstream to Milner Dam. In late summer,

deliveries are made from storage if needed. In the fall, when irrigation deliveries will not be affected, the reservoir is drawn down and maintained at elevation 4240 feet or lower. This protects the concrete overflow spillway stop-logs, piers, and bays from ice damage. Winter inflow includes any releases from American Falls plus reach gains that normally total 250 to 350 cfs.

Jackson Lake Dam

The original Jackson Lake Dam (rockfilled crib) was completed at the outlet of a large existing lake in 1907 but partially failed in 1911; the size of the original lake is unknown but may be as much as 2 million acre-feet . A concrete gravity structure with earth embankment wings was built at the site in 1911 and further raised in 1916. Safety concerns were identified at the dam in the mid-1970's, and from 1977 to 1989 the level of Jackson Lake was maintained at a lower than normal level because of concerns for possible dam failure during an earthquake. In 1989, reconstruction was completed under the authority of the Reclamation Safety of Dams Acts making the full capacity again available. Lands around the lake are withdrawn by Reclamation. Since the lands are inside the boundary of Grand Teton National Park, they are managed by the National Park Service. (See also "Snake River Compact.")

Jackson Lake is operated in conjunction with Palisades Reservoir for flood control. In the late summer or early fall, flood control space is evacuated, lowering the lake to 647,000 acre-feet of storage; normal summer operation sometimes empties the flood control space. Winter inflow, minus outflow, is stored until the 647,000 acre-feet is reached and then passed to maintain that level; however, additional flood control releases may be made in the late winter or early spring. Winter flow releases are generally above 200 cfs. In the spring and summer, inflow is stored until full pool is reached or released as needed to meet irrigation demands.

American Falls Dam

American Falls Dam was completed in 1927 and rebuilt in 1977. Idaho Power Company (IPC) owns and operates a powerplant under a Federal Energy Regulatory Commission (FERC) license at the dam. Lands around American Falls Reservoir were withdrawn and acquired and are managed by Reclamation; lands located on the Fort Hall Indian Reservation are managed by the Shoshone-Bannock Tribes.

A winter minimum release of at least 300 cfs is maintained from November until spring; in recent years the release from December to February has averaged 4,050 cfs. The magnitude of the winter flow depends principally on the amount of carryover storage in American Falls Reservoir and the system upstream. If American Falls is nearly drained at the end of the irrigation season, a flow of about 350 cfs is commonly released to maintain water quality downstream. If carryover storage is good, estimates are made of the amount of unstorable flow expected prior to the irrigation season. This unstorable flow is then released as uniformly as feasible to provide higher flows throughout the winter.

The primary winter operation goal is to fill American Falls by April 1 or the onset of the irrigation season. IPC often moves some of its American Falls storage water (total of 44,276 acre-feet) in December and this may increase the flow for a short time. If inflows to American Falls are much higher than normal or if the carryover storage is substantial, winter releases may range from 1,000 to 5,000 cfs. Some flood control operations may be made at American Falls but are incidental to irrigation operations. Summer releases from American Falls are dictated by downstream irrigation demands and downstream water rental pool leases below Milner Dam.

Island Park Dam

Island Park Dam was completed in 1938, primarily for irrigation of land in the St. Anthony to Rexburg area. Safety of Dams work was completed in the early 1980's. In 1991, the Fall River Rural Electric Cooperative (FRREC) received a FERC license to construct and operate a small powerplant at the dam; generation began in 1994. FRREC also received approval in 1995 to modify the spillway to enhance hydropower generation. This modification will increase the active storage capacity to 135,000 acre-feet and improve water temperature conditions downstream in the Henrys Fork that will benefit its world famous rainbow trout fishery. A combination of withdrawn and acquired lands around Island Park Reservoir are managed by the U.S. Forest Service (USFS).

Winter releases are established in late October and November of each year and are dependent on carryover storage and fall inflows Although there is no requirement for a minimum release, Reclamation has worked with spaceholders and others to try to maintain a release of 300 cfs between irrigation seasons. Recent winter releases have ranged from 100 to 300 cfs. With good carryover and normal to above normal runoff, a release of about 500 cfs is maintained. Close communication is maintained with the Henrys Fork Foundation (a private conservation group) and the Idaho Department of Fish and Game (IDFG) on all release operations, and consideration is given to fish and swan habitat.

Island Park is operated to provide additional flow in the winter months using water that was adversely stored (storage accumulated adverse to a senior storage priority) in the fall after the irrigation season. In the spring and early summer, water is stored with the goal of filling the reservoir in April. Some incidental flood control operation may occur if the forecast dictates. In the past, Island Park Reservoir was managed to maintain a surcharge of one additional foot above the dam's spillway lip to meet contractual irrigation storage obligations. With the spillway modification and resultant increase in active capacity, this water will no longer be in surcharge.

Grassy Lake Dam

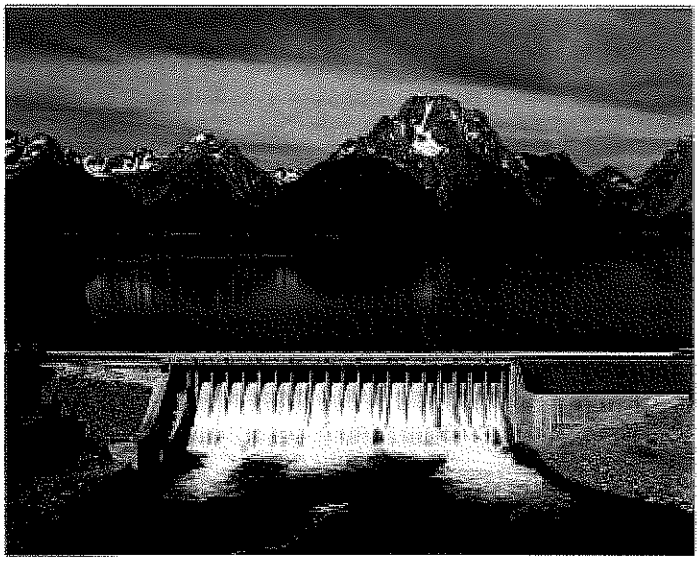
Grassy Lake Dam was completed in 1939. Grassy Lake is a small reservoir located in Wyoming just outside the southwest corner of Yellowstone Park. Lands around Grassy Lake are withdrawn by Reclamation and managed by the USFS.

Water is diverted from Cascade Creek to Grassy Lake in the fall, winter, and early spring. No water is diverted during periods of high inflow, full reservoir conditions, or during the summer months. Grassy Lake does not normally release water in the winter. Diversions into the lake begin in late winter and early spring with the goal of filling Grassy Lake in early summer. Releases are made on demand, normally in July and August. Additional releases are made if necessary to reach the winter operation level. Grassy Lake is difficult to fill the following spring if drawn down to 7,000 acre-feet or lower.

Palisades Dam

Palisades Dam was completed in 1957. The powerplant was uprated in 1994 and all four units were rewound increasing the nameplate rating from the original 118,750 kW to 176,600 kW. As part of the mitigation for the powerplant uprate, a fish screen was constructed on an irrigation diversion on Palisades Creek, a small tributary which joins the Snake River approximately 3 miles downstream from the dam. The acquired and withdrawn lands around Palisades Reservoir are managed by the USFS.

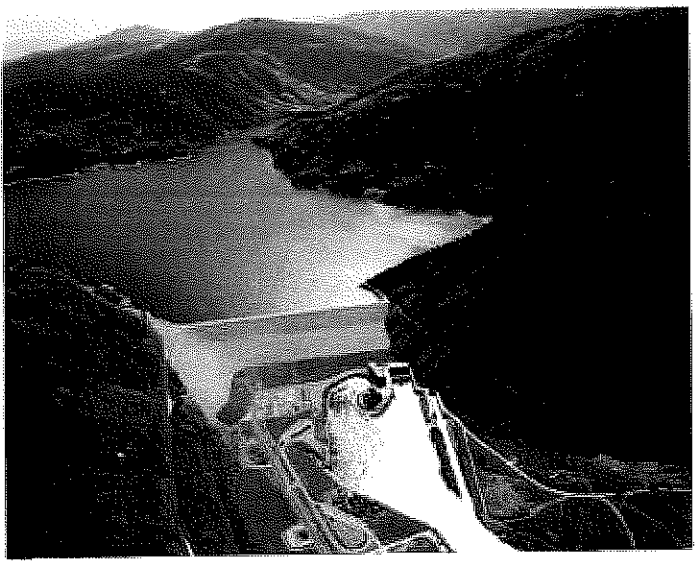
At Palisades, winter minimum releases are established in early November on the basis of fall carryover storage and fall inflow and are maintained throughout the winter. A minimum flow of 550-750 cfs is usually maintained depending on the severity of drought conditions. The usual minimum flow is 1,100-1,200 cfs. If



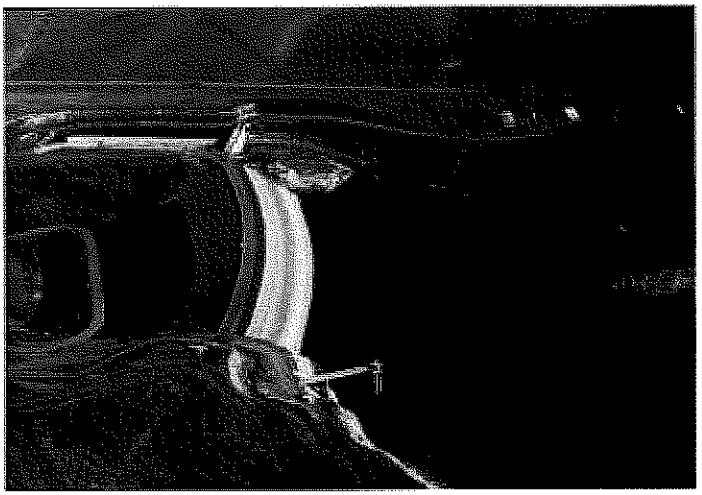
Jackson Lake Dam

Grassy Lake Dam

Island Park Dam

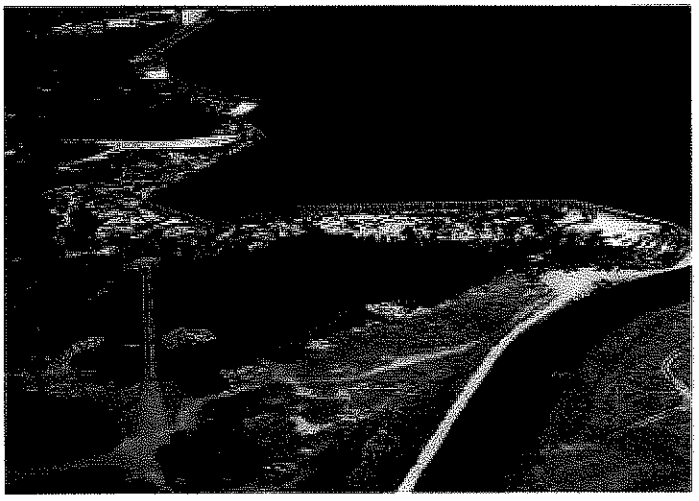


Palisades Dam



Ririe Dam

American Falls Dam



Minidoka Dam

carryover storage is good, higher releases may be needed around the end of the calendar year to create or maintain flood control space.

During the spring runoff, Palisades is operated in combination with Jackson Lake under flood control rules which may require increased releases depending on the forecast. The goal is to fill Palisades when flood potential subsides; after the peak spring runoff. Releases are made throughout the summer and fall to meet downstream irrigation demands. To the extent possible, releases are directed through the powerplant but storage is not specifically released for power production.

Ririe Dam

Ririe Dam and flood control channel were completed by the Corps in 1977 and were turned over to Reclamation for operation. The reservoir is operated primarily for flood control. Uncontracted storage in Ririe Dam is part of the 1990 Fort Hall Indian Water Rights Agreement (see chapter VII) which is in the process of being approved. Lands around Ririe Reservoir are managed by the IDFG with recreation facilities managed by Bonneville County.

Water is stored at Ririe throughout the winter, spring, and early summer. There is no winter minimum flow because of possible ice formation in the flood channel. After spring, the reservoir is maintained as high and as stable as possible for recreation with a release of at least 30 cfs to provide water for natural flow right demands. After Labor Day the reservoir is drawn down to the flood control pool for the winter, releasing as much as 45,000 acre-feet by November 1.

Other Major Dams and Reservoirs

There are four other major dams and reservoirs in the upper Snake River basin. Two are operated by the Bureau of Indian Affairs and two are owned and operated by non-Federal entities.

Milner Dam

Milner Dam is owned and operated by the Twin Falls Canal Company and was constructed for irrigation in 1905. Because of safety concerns, the dam was rebuilt in 1991-1992. Although the reservoir has about 50,000 acre-feet of storage, the primary purpose of the dam is to raise the pool to a level adequate to divert water to the several irrigation canals and pumping plants and for operation of the powerplants. Associated with the dam are two powerplants owned and operated by IPC and operated under FERC licenses, under which IPC is required to pass 200 cfs whenever water is available. The smaller powerplant discharges directly to the stream downstream from the dam. Water for the larger powerplant is diverted from the Twin Falls Canal to penstocks for the powerplant located 1 mile downstream from the dam. Discharge is to the Snake River.

Blackfoot Reservoir and Grays Lake

Blackfoot Reservoir and Grays Lake are owned and operated by the Bureau of Indian Affairs as part of the Fort Hall Indian Project. Blackfoot Reservoir, completed about 1913 and raised to its current capacity by an auxiliary dam, has a total capacity of about 413,000 acre-feet and an active capacity of about 350,000 acre-feet. It is the main source of water for irrigation and municipal and industrial water supply on the Fort Hall Indian Reservation. Grays Lake, constructed in 1924, has a total capacity of about 400,000 acre-feet and a surface area of about 22,000 acres, but provides only 40,000 acre-feet of active storage. A canal diverts water from Grays Lake to Blackfoot Reservoir. Because of the small active storage capacity and large wetland area, Grays Lake is operated primarily for wildlife benefits.

Henrys Lake

Henrys Lake Dam is owned and operated by the North Fork Reservoir Company. The dam was completed at the outlet of a natural lake of unknown capacity in 1923 and has an active storage capacity of about 90,000 acre-feet. Storage in the lake is used to irrigate private lands.

Reclamation Spaceholder Contracts

Reclamation Projects are authorized with the intent of recovering the capital and operating costs from the direct beneficiaries. Over time and with experience in developing large projects, the Congress has changed the procedures and rules to achieve this goal. Currently, the capital and operating costs of a project are allocated among the benefiting functions, e.g., irrigation, flood control, power, fish and wildlife, etc. In some cases, the benefiting entities are widespread and cannot easily be identified or there is a national interest in the benefit, e.g., flood control, anadromous fish enhancement, and migratory bird enhancement. These costs are made nonreimbursable meaning that the people of the United States pay these costs through general taxes. Where costs are assigned to functions that benefit specific entities, the costs are made reimbursable, and repayment contracts to recover the reimbursable costs are signed with the benefiting entities. Capital costs assigned to the irrigation function are to be fully repaid without interest over a specific time period (as low as 10 years in the early 1900's to about 50 years at present depending on the type of contract). Reclamation irrigation repayment contracts are generally spaceholder contracts or water service contracts. Annual operating costs (operation, maintenance, replacement, and power costs) are included in the repayment contracts.

Project capital costs are seldom reallocated, a process that requires the Congress to reauthorize the project. However, annual operating costs are adjusted from time to time not only to reflect changing economic conditions but changes in benefits. Changes in the contracts must be approved by all of the signing entities.

All of the repayment contracts for Reclamation storage in the upper Snake River basin are spaceholder contracts that include an annual payment for the reimbursable cost of construction and for operation and maintenance. A spaceholder contract means that Reclamation sold each contractor (spaceholder) a share of the reservoir space, not a specific amount of water to be delivered each year. Carryover rights were also established, meaning that spaceholders could retain unused stored water from one year to the next. Under this system a water user's supply of storage water is a function of the space contracted, carry-over storage from previous years, and accrual to storage in the current year. However, the total amount of water due a spaceholder cannot exceed the volume of the contract space. Spaceholder contracts are held in perpetuity but can be sold to another entity with approval of Reclamation under Idaho State water law.

The Fremont-Madison Irrigation District is the only contracting entity for Island Park Reservoir and Grassy Lake. The District is served primarily by the Henrys Fork and Teton River. Some 64 other contracting entities hold space in one or more of the following reservoirs: Jackson Lake, American Falls Reservoir, and Palisades Reservoir. A total of 31 contractors hold space in only one reservoir, 12 contractors hold space in two reservoirs, and 21 contractors hold space in three reservoirs. A list of spaceholders in these three reservoirs and the capacities and contracted space for all of the Federal reservoirs is included as appendix A.

These spaceholder contracts are in marked contrast to conventional repayment and water service contracts often used at other Reclamation Projects. With water service contracts, Reclamation essentially delivers a specific amount of water or an entitlement and all water that

remains in a reservoir after delivery of the specified entitlements is under Reclamation's control. With spaceholder contracts, Reclamation's control is limited to water in the uncontracted space and the inactive space. If all the active reservoir space has been marketed or contracted, all of the water in the active space of the reservoir is under control of spaceholders. That is the case for the Federal reservoirs upstream from Milner Dam. All of the active space has been marketed except for the following: 500 acre-feet in Palisades Reservoir and 10,000 acre-feet of exclusive flood control in Ririe. Reclamation has recently purchased about 22,400 acre-feet of storage space for salmon flow augmentation. Technically, this latter space can be included in uncontracted total, but the space is assigned to a specific use.

Spaceholder contracts make possible another concept—water banking. Under these contracts, the spaceholders can accumulate water in their contracted space and they may rent that water. To avoid problems with possible forfeiture of use (under State law a water right holder retains the right only if the water is used for a beneficial purpose), the State authorized creation of a water bank and defined the water bank as a beneficial use under State law.

In poor water years, when not all of the spaceholder storage is filled, each spaceholder gets his/her carryover from previous years and an amount of the accrued water supply proportionate to the contracted storage space. During normal and above normal years, the spaceholder storage space usually fills and the supply may exceed the amount used by the spaceholder who may carry over the excess or market it to a rental pool.

Spaceholder contracts are an important part of reservoir operations as the contract language, in part, defines the operating limits. For example, the contracts often stipulate that Reclamation will maximize the storage of water for irrigation use.

Reclamation Reservoir Cost Allocations

Construction Costs

As indicated earlier, the facilities of the Project were essentially for single purpose irrigation facilities; power at Minidoka Dam and American Falls Dam was intended primarily for operation of the dams and pumping water for irrigation. As a result almost all of the cost of these dams and reservoirs were to be repaid by irrigation interests. The capital cost of the Palisades Project was allocated to flood control (47 percent), irrigation (20 percent), power (32 percent), recreation (0.2 percent) and fish and wildlife (0.8 percent). The capital cost of Ririe Dam was allocated to flood control (74.30 percent), irrigation (14.33 percent), and recreation and sport fishery (11.37 percent). Costs assigned to flood control are considered nonreimbursable. All of the capital costs assigned to fish, wildlife, and recreation for these facilities are nonreimbursable. The only reimbursable costs of these facilities are the costs allocated to irrigation and power.

The repayment obligation for construction of the Reclamation facilities (dams, canals, etc.) of the Minidoka and Palisades Projects have for the most part been paid except for the obligation incurred for recent safety of dams work at Jackson Lake Dam. The Fremont-Madison Irrigation District has repaid the construction obligation for Island Park Reservoir and Grassy Lake. At present, most of the original contracting entities for the Minidoka and Palisades Projects have little or no repayment obligation remaining. As a result, annual payments to Reclamation are primarily for operation and maintenance.

Annual Operating Costs

Annual operating costs include operation, maintenance, replacement, and power costs needed to operate and maintain the facility over an extended period. Most of the reservoirs were single purpose at the time of construction and annual costs were to be repaid by irrigation interests. Later, other purposes, including flood control, recreation, and fish and wildlife were recognized and in some cases authorized. At present, all of the reservoirs provide multipurpose benefits. This change is recognized by allocating annual operating costs among several functions.

Allocation of annual operating costs for the older reservoirs uses the Lineweaver allocation method which recognizes that all reservoirs provide substantial benefits to recreation and fish and wildlife (e.g., flatwater boating, water skiing, reservoir fishery, wetlands, etc.). The annual operating costs of Palisades and Ririe Dams and Reservoirs are allocated to project functions following standard Reclamation procedures. Table 3 summarizes annual operating cost allocations. None of the annual costs allocated by the Lineweaver method to recreation and to fish and wildlife are reimbursable.

Table 3.—Allocation of Annual Operating Costs for Reclamation Reservoirs (percent of total cost)

Reservoir	Flood Control	Recreation	Fish and Wildlife	Irrigation	Power
American Falls	33.5	4.0	4.0	58.5	0.0
Grassy Lake	0.0	4.0	4.0	92.0	0.0
Island Park	13.0	4.0	4.0	79.0	0.0
Jackson Lake	29.5	4.0	4.0	62.5	0.0
Minidoka Dam	0.0	4.0	4.0	42.0	50.0
Palisades Dam	27.57	4.0	4.0	27.57	36.86
Ririe Dam	77.2	1.7	0.0	21.1	0.0

Water Rights

Hydraulic mining in the west was an early activity that required diversion of a large amount of water for transport to another place of use. As a result, the prior appropriation doctrine of water rights was developed in the west. Because of the arid conditions, this doctrine was also adapted for irrigation, and the riparian doctrine of water rights that developed in the more wet climate of the east was discarded throughout much of the west as inappropriate.

Under the prior appropriation doctrine, a person could use water from a stream without ownership of abutting land provided that the use did not interfere with an earlier use. Priority of appropriation became the recognized principle, with the courts ultimately determining the priority sequence and the amount of water of each appropriation. A law regulating the appropriation of water and affirming the prior appropriation doctrine was passed in 1881 while Idaho was a Territory. The Idaho State Constitution affirmed that streams belong to the State. Legislation has

established a procedure through which appropriation of water is made by application to the State Engineer (currently the Director of the Idaho Department of Water Resources).

Water rights are administered by the State and are issued by date of appropriation for specific quantities, diversion points and places of use, and purposes. The 1902 Reclamation Act and subsequent Federal legislation affirm that the states are responsible for administering appropriative water rights within their borders. The earliest water rights for irrigation in the Boise and Payette River basins predate any storage development and are for diversion of flow at a specific rate (often called natural flow rights). Under the prior appropriation doctrine, natural flow rights are satisfied in order of priority based on date. When the water supply is limited, a water right holder with an earlier natural flow right is likely to receive a greater supply than a water right holder with a later date.

Development of storage facilities led to water rights for storage of a quantity of water (storage rights). Storage rights, along with natural flow rights, are satisfied in order of priority based on the date of the appropriation, i.e., the earliest rights must be met first. If earlier rights cannot be met, then water cannot be stored. All of the storage in a reservoir may have one priority date, but if a reservoir was increased in size at a later date, there may be a second priority date associated with the increase. As an example, Jackson Lake has storage priorities with three dates, each associated with an increase in the storage capacity of Jackson Lake. In addition, there are some cases where natural flow rights were exchanged for storage rights that may have a priority that predate the construction of the reservoir.

In the case of storage, the relative priority among spaceholders is established in the repayment contracts. In general, spaceholders have equal access to storage accruals, however, unequal access and priorities may be established in the contracts (see "District 01 Water Rental Pool" in chapter VI).

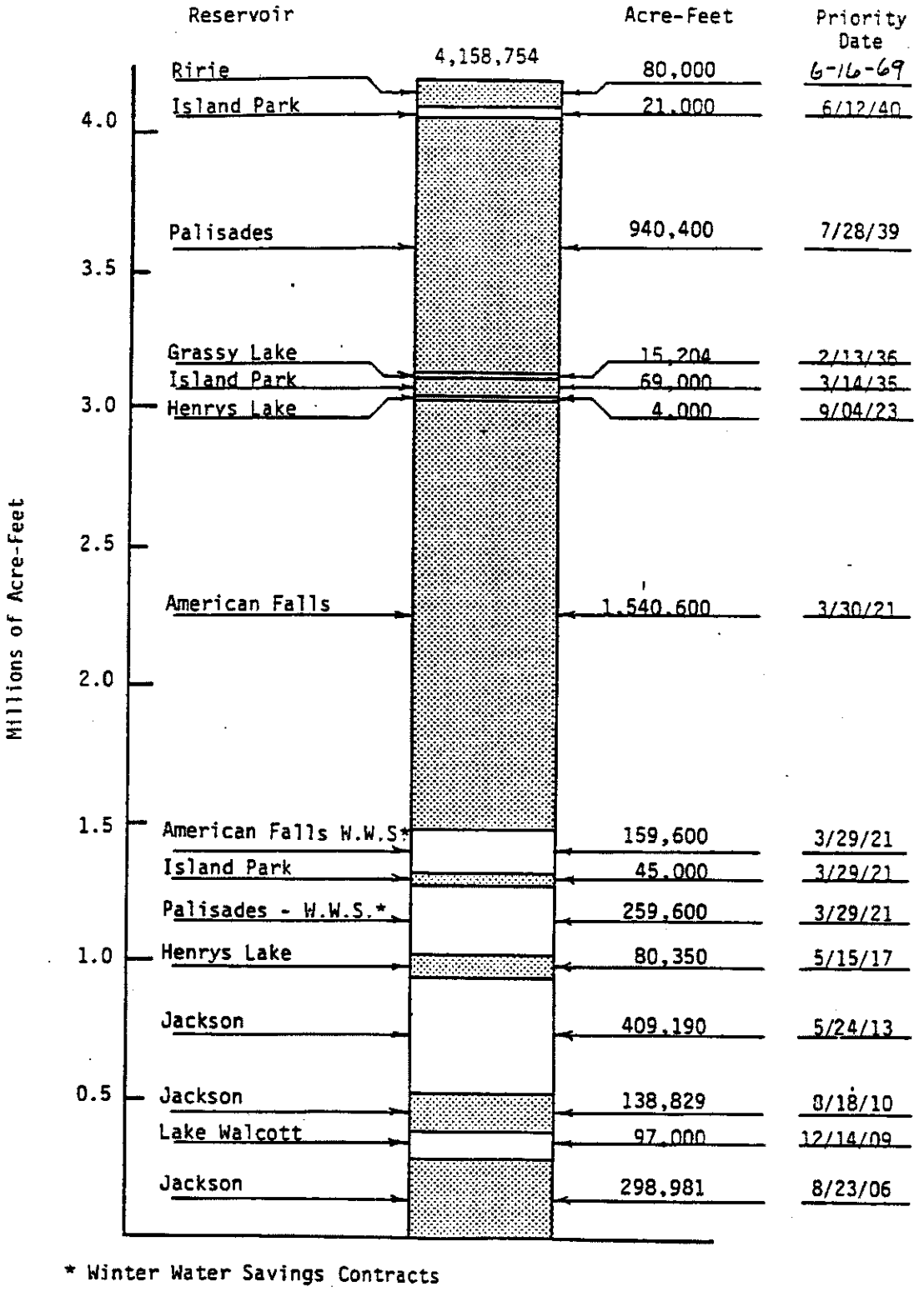
The right to use water for irrigation is an appurtenance to the lands served, whereas water rights for other purposes such as power and municipal and industrial (M&I) water supply are generally not. Water rights for irrigation are often managed collectively by some entity such as an irrigation district.

The total of the natural flow rights above Milner Dam is considerably greater than the estimated natural flow (no storage and no diversions) at Milner Dam. This is one reason that storage development in the upper Snake River basin became necessary to adequately support irrigation that was developed primarily on the basis of natural flows. Resolution of this problem is of concern to the State and to water users and is part of the impetus for the Snake River basin water rights adjudication (se chapter VII).

In the water rights process in Idaho, a permit is issued as a temporary right during development and a license is issued later. When a court takes action to settle water rights, the resulting decision on water rights converts the earlier permits and licenses to decreed water rights.

Reclamation holds title to the storage rights for all Reclamation storage facilities in the Snake River basin above Milner Dam. These rights were acquired in accordance with the laws of Idaho and Wyoming. A compact between the State of Wyoming and the State of Idaho allows water stored in Jackson Lake and Grassy Lake to be used as though the reservoirs were located in Idaho. The earliest storage rights are at Jackson Lake and the latest are at Ririe Reservoir. Some 98 water right claims have been filed by the Minidoka Project in the ongoing Snake River Basin Adjudication. Most of these claims are consistent with presently held water rights. These water rights are for uses or purposes including

Figure 3.—Upper Snake River Reservoir Storage Rights



* Winter Water Savings Contracts

recreation, and fish and wildlife and for direct diversion for irrigation and power. In addition, as part of the legislation and planning for the Palisades Project and to make that project feasible, a concept known as "winter water savings" was introduced. In brief, water users ceased diverting water in the winter (thus the name) in exchange for an earlier storage priority in a reservoir. There are "winter water savings " storage priorities in American Falls and Palisades Reservoirs. Figure 3 illustrates the storage rights by priority date for Reclamation storage rights and the storage rights in Henrys Lake.

Changes in water rights, such as diversion point or use, require an application to and approval by the Idaho Department of Water Resources (IDWR). If the change exceeds 50 cfs or 5,000 acre-feet, the change must also be approved by the Idaho State Legislature.

Snake River Compact

The Snake River Compact between Wyoming and Idaho was signed October 10, 1949, and approved by Congress on March 21, 1950. It allocates the waters of the Snake River to each state (96 percent to Idaho, and 4 percent to Wyoming) for storage or direct diversion exclusive of Wyoming water rights established prior to July 1, 1949. The 4 percent has been quantified to be about 200,000 acre-feet per year based on average annual runoff at the Wyoming/Idaho State line.

The Compact allows for future direct diversion or storage development in Wyoming. Idaho is to be compensated with storage by Wyoming if certain "trigger" criteria are exceeded. The Compact allows one-half of the 200,000 acre-feet to be used without restriction. However, use in Wyoming of the remaining 100,000 acre-feet requires replacement storage in the amount of one-third of such use for the benefit of existing Idaho water users. Therefore, 33,000 acre-feet of space in Palisades Reservoir has historically been identified for that purpose. This space, called Wyoming Compact Space, has now been contracted to Wyoming by Reclamation. It is to be used to meet Wyoming's obligations under the Compact. By exchange, Wyoming may use the space to maintain higher lake levels in Jackson Lake or increases releases from Jackson Lake to supplement low fall and winter streamflows.

V. General System Operation

This chapter provides an overview of operation of the upper Snake River/reservoir system. More detailed description by function is provided in chapter VI.

Climatic conditions of the area produce low precipitation in the summer and early fall, and higher precipitation during the late fall, winter, and spring. Much of the winter precipitation accumulates as snowpack. This produces natural riverflows that can peak at very high levels as snow melts in the spring and early summer, decline throughout the summer to a minimum, and remain low during the fall and winter.

Storage reservoirs are constructed and operated to change the flow regime for some purpose. Based on project authorities, the reservoir system of the upper Snake River is operated for two primary purposes—irrigation water supply and flood control. Hydroelectric power generation, recreation, and fish and wildlife functions (such as maintaining trumpeter swan habitat) are secondary or incidental to the primary operating considerations, i.e., generally, water is not specifically released from storage except for irrigation and flood control purposes.

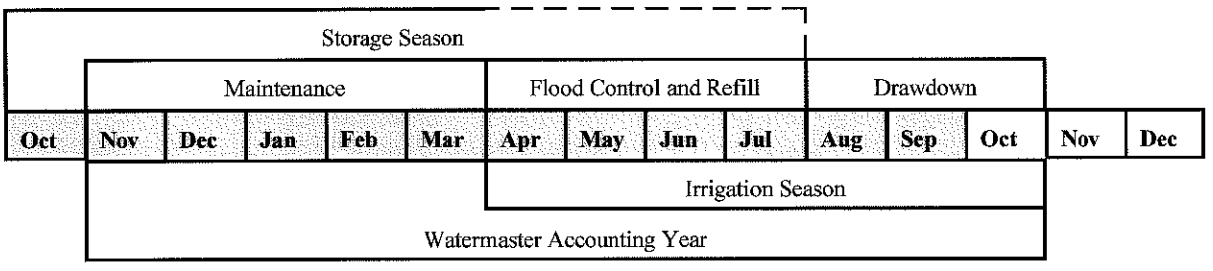
The upper Snake River reservoirs are operated as a unified storage system where water is stored and released in a manner to maximize the capability of the storage reservoirs. This means that water is physically stored in those reservoir that are most difficult to fill and is released from the reservoirs that are most likely to refill in the following year. There are two major operating principles: (1) in general, water is stored as far upstream as possible regardless of storage right priorities and (2) water is released first from the reservoirs that are easiest to refill. A water rights accounting is maintained to assure that, regardless of where water is stored or from where releases are made, the storage and use of water is properly accounted to the appropriate rights and spaceholders. This allows the system to be operated more efficiently than strictly following individual storage right priorities and functions, provides a much greater chance that reservoirs will fill, and allows releases that would otherwise violate water rights.

Water operations are not defined on a calendar year and there are several "seasons" or "years" of reference. For most purposes, a water year is used and is defined as running beginning on October 1 and ending the following September 30, e.g., the 1994 water year began on October 1, 1993 and ended on September 30 of 1994.

Spaceholder contracts for upper Snake River basin specify that the storage season begins on October 1 and extends until there is no more water to be stored and that the irrigation season begins on April 1 and extends to October 31. In keeping with the end of the contract irrigation season, the water accounting system used by the Watermaster runs from November 1 to October 31.

There are three general operating seasons based on climatological pattern and irrigation demand: (1) Maintenance from November through March, (2) Flood Control and Refill from April through July, and (3) Drawdown from August through October. This general pattern coincides with the Watermaster's accounting period. Drawdown for flood control, storage release for irrigation demand, and reservoir refill may occur in the same time frame for different reservoirs because of elevation difference and the demand for irrigation at lower elevations. Also, it is important to recognize that the beginning and ending of the three operating seasons can vary widely with climate and the water supply. The various operating seasons and the accounting period are shown in figure 4.

Figure 4.—Operating Periods and Seasons
(Water year shown by shaded blocks)



Maintenance Period

The primary function of reservoir operation during the Maintenance period of November through March is to carryover and store water to the extent allowed by flood control requirements. By the beginning of November, the reservoirs have been drawn down as the result of meeting summer irrigation needs and/or to meet a maximum elevation that provides the required flood control space. Inflow is stored, if there is more space than needed for flood control, or released as needed to maintain the general winter flood control space. Accrual of water is normally very slow as streamflows are low because of the cold temperatures at the elevation of the reservoirs. Water is released from some reservoirs to meet minimum streamflows for protection or enhancement of fish and other wildlife. After January 1, anticipated spring flooding becomes a factor. Depending on the size of the snowpack the flood control space will be decreased, maintained, or increased.

Flood Control and Refill Period

Spring snowmelt and irrigation demand at lower elevations may begin in April. During the Flood Control and Refill period of April through July, reservoir storage is continuously adjusted on the basis of runoff forecast to provide space for flood control as needed and to assure refill of the reservoirs. Irrigation demands during the early part of this season are usually met from streamflows but may require some release of storage from lower reservoirs. As snowmelt increases, irrigation demands may be met entirely from natural flows, and unstorable flows in excess of irrigation demand may pass Milner Dam. During the latter part of this period, irrigation demands may again be met by a combination of natural streamflow and release of storage. In recent years, some water has also been released downstream to meet requirements for augmentation flows in the lower Snake for ESA-listed salmon (see chapter VI for more detail).

Drawdown Period

During the Drawdown period of August through October, storage is released to meet irrigation demands or to reach a reservoir elevation that provides the required flood control space in November. Irrigation demands must be met in varying degrees from storage releases, and there is constant adjustment of reservoir releases to maintain water as high in the system as possible and to use water from reservoirs with the greatest refill capability. In very poor water years the Drawdown period may begin as early as April.

An important consideration in all of the phases of operation of the reservoirs is travel time. The travel time for water released from Jackson Lake to reach Minidoka Dam is about seven days. As a result, system operators must constantly anticipate irrigation demands and often release water up to 2 days before anticipated use. Ending the irrigation season with water stored as high in the system as possible increases the ability to maintain streamflows throughout the winter. During the flood control season, releases for flood control must also anticipate possible local weather events downstream.

Standing Operating Procedures

Standing Operating Procedures (SOP's) are documents that contain instructions and all of the necessary information for a damtender to correctly operate the dam and reservoir. Reclamation prepares an SOP for each Reclamation dam and reservoir primarily for the use of the damtender and the immediate supervisor. The SOP usually includes (1) an emergency preparedness plan that provides instructions to follow in the event of various emergencies, (2) a directory of personnel including those of emergency services and cooperators for communications purposes, (3) general information on the facility, (4) technical data on structural, mechanical and electrical details, and (5) information on reservoir operations including filling and release of water, inflow forecasting, and specific operating criteria.

These documents are controlled and numbered, which allows additions, corrections, and updates to be tracked carefully. Deviation from the SOP is a serious matter which requires concurrence of upper management.

General Operating Activities

Table 4 shows general operating activities for Reclamation reservoirs located upstream from Milner Dam. Jackson Lake, Palisades Reservoir, American Falls Reservoir and Lake Walcott (Minidoka Dam) are operated in a closely integrated manner.

Ririe Reservoir is operated for flood control and recreation as there are no contracts for storage at present. However, the uncontracted storage is part of the Fort Hall Indian Water Rights Agreement (see chapter VII). The operations of Island Park Reservoir, Grassy Lake, and Henrys Lake are somewhat coordinated among the three and with downstream reservoirs, but not to the degree of coordination among the main stem reservoirs.

Table 4.—Summary of Reservoir Operating Activities

Activity	American Falls Reservoir	Grassy Lake	Island Park Reservoir	Jackson Lake
Refill target	April 1	None	April 1	Mid-May to July 1
Flood control operation	Informal	None	Informal rule curve	Yes. Rule curve with Palisades Reservoir
Minimum flood control space[1]	None	None	None	200,000 acre-feet October 1 to May 1
Average winter release (Dec-Feb 1966-1995)	4,050 cfs	0 cfs	350 cfs	415 cfs
Minimum winter release (unofficial)	300 cfs	None	100 cfs	Smaller of inflow or 280 cfs
Minimum or conservation pool	0 acre-feet	270 acre-feet	380 acre-feet	Large natural lake[2]

[1]Until spring forecasts are available
[2]Larger than the active storage capacity

Table 4.—Summary of Reservoir Operating Activities (Continued)			
Activity	**Minidoka (Lake Walcott)**	**Palisades Reservoir**	**Ririe Reservoir**
Refill target	April 1	Mid-June to early July	None
Flood control operation	None	Yes. Rule curve with Jackson Lake	Yes. Rule curve
Minimum flood control space[1]	None	None	50,000 acre-feet
Average winter release (Dec-Feb 1966-1995)	4,350 cfs	2,260 cfs	0 cfs since 1987
Minimum winter release	300 cfs plus reach gain	550 cfs	0 cfs
Minimum or conservation pool	115,000 acre-feet	201,000 acre-feet	10,000 acre-feet

Typical Reservoir Contents and Riverflows

At any given time, the contents of the upper Snake River reservoirs and the flows in various reaches of the river will vary depending on a large number of factors. These factors, include the amount of precipitation in the previous year as well as in the past few weeks or days, the contents of the reservoirs at the end of the storage season, the temperature, the amount of irrigation demand, etc. The content of reservoirs and the amount of streamflow at any instant provide limited information on the system operation as reservoir contents and riverflows could markedly differ in a few weeks or even a few days. In addition, riverflows may change greatly in a few hours and reservoir contents and riverflows can very greatly with the water supply. However, charts of riverflows and reservoir contents can provide a general overview of the range of operations.

The contents of five reservoirs and the outflow at six dams were selected for a good, average, and poor water supply year. The 1992 water year was selected as a recent, very poor water supply year. However there is no year since 1989 that would show a typical average water supply and a good water supply, and Jackson Lake content was restricted from 1977 to 1989. As a result, the 1970 water year was selected for an average supply, and the 1971 water year was selected to illustrate a good water supply. Figure 5 illustrates typical reservoir content and outflows for good, average, and poor water years.

The reader is cautioned that several significant developments have occurred since the early 1970's. American Falls Dam was under reconstruction from 1976 to 1978 and Ririe Dam was not completed until 1977. In addition, significant conservation measures in irrigation have been implemented since the early 1970's. None of these changes are reflected in the average water year (1970) and good water year (1971) data. The most significant change—conservation effects during a poor water supply—are reflected in the poor water year (1992) data.

The reader is also cautioned that riverflow may be composed of many elements. During the irrigation season, these are primarily (1) natural flows to meet demands for natural flow rights, and (2) storage releases to meet spaceholder demands for a full or supplemental water supply. Early in the spring, riverflow may also include releases from storage for flood control operation. In the summer and fall, part of the flow may be releases from storage to reach the minimum flood control level for fall and winter operation.

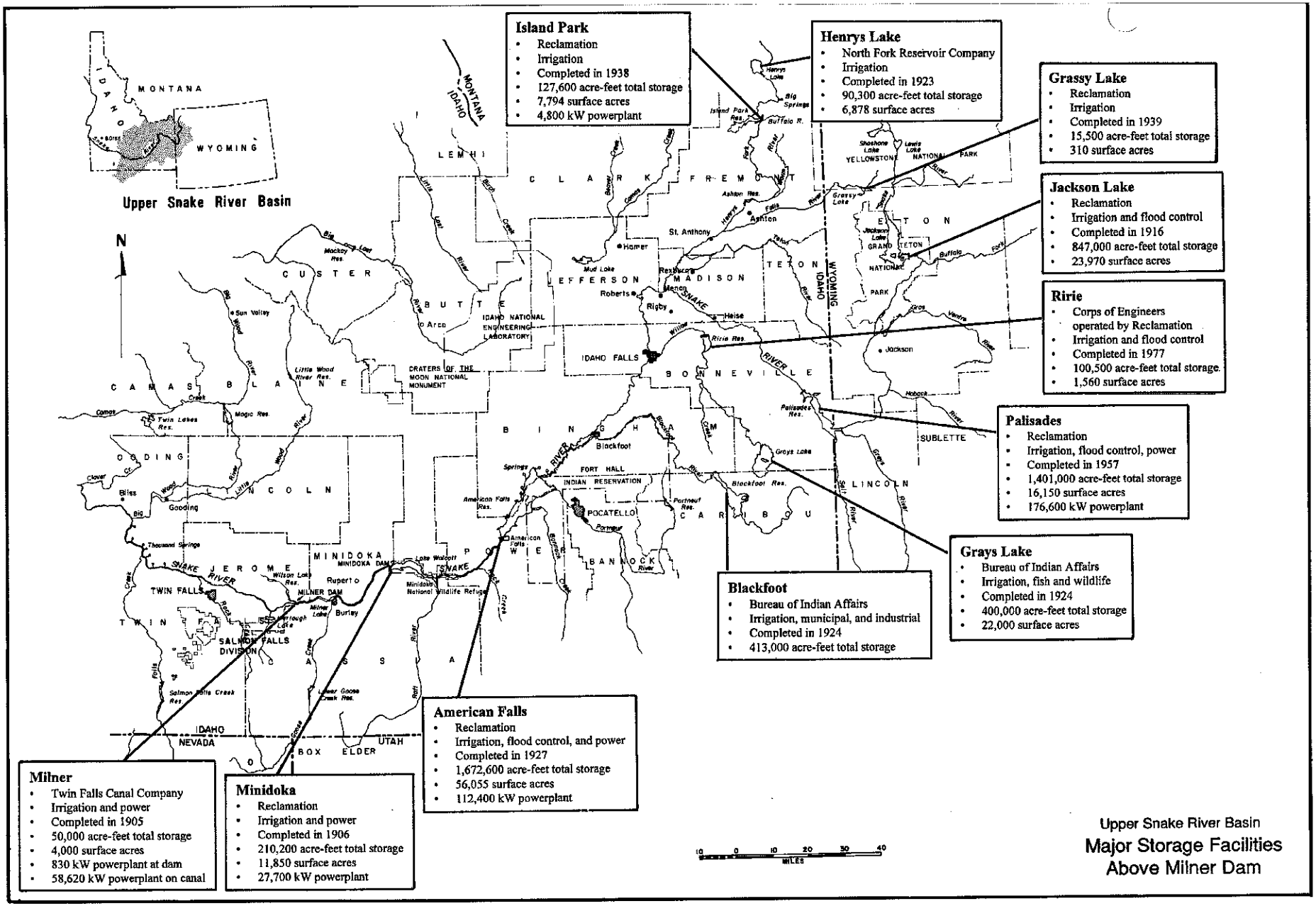
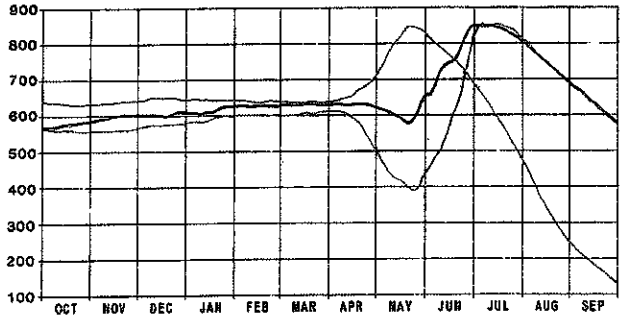
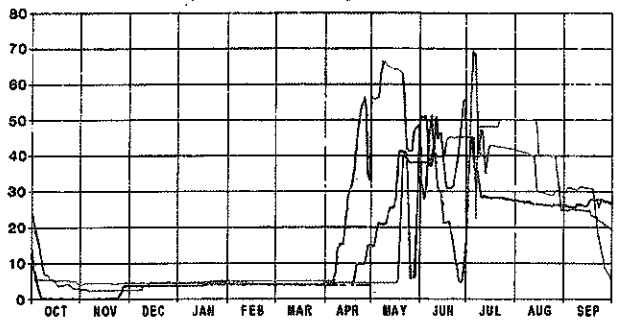

Upper Snake River Basin
MONTANA
WYOMING
IDAHO
N
Island Park
• Reclamation
• Irrigation
• Completed in 1938
• 127,600 acre-feet total storage
• 7,794 surface acres
• 4,800 kW powerplant
Henrys Lake
• North Fork Reservoir Company
• Irrigation
• Completed in 1923
• 90,300 acre-feet total storage
• 6,878 surface acres
Grassy Lake
• Reclamation
• Irrigation
• Completed in 1939
• 15,500 acre-feet total storage
• 310 surface acres
Jackson Lake
• Reclamation
• Irrigation and flood control
• Completed in 1916
• 847,000 acre-feet total storage
• 23,970 surface acres
Ririe
• Corps of Engineers operated by Reclamation
• Irrigation and flood control
• Completed in 1977
• 100,500 acre-feet total storage
• 1,560 surface acres
Palisades
• Reclamation
• Irrigation, flood control, power
• Completed in 1957
• 1,401,000 acre-feet total storage
• 16,150 surface acres
• 176,600 kW powerplant
Grays Lake
• Bureau of Indian Affairs
• Irrigation, fish and wildlife
• Completed in 1924
• 400,000 acre-feet total storage
• 22,000 surface acres
Blackfoot
• Bureau of Indian Affairs
• Irrigation, municipal, and industrial
• Completed in 1924
• 413,000 acre-feet total storage
American Falls
• Reclamation
• Irrigation, flood control, and power
• Completed in 1927
• 1,672,600 acre-feet total storage
• 56,055 surface acres
• 112,400 kW powerplant
Milner
• Twin Falls Canal Company
• Irrigation and power
• Completed in 1905
• 50,000 acre-feet total storage
• 4,000 surface acres
• 830 kW powerplant at dam
• 58,620 kW powerplant on canal
Minidoka
• Reclamation
• Irrigation and power
• Completed in 1906
• 210,200 acre-feet total storage
• 11,850 surface acres
• 27,700 kW powerplant
MILES
Upper Snake River Basin
Major Storage Facilities
Above Milner Dam

Figure 5.—Typical Content and Outflow of Upper Snake River Reservoirs

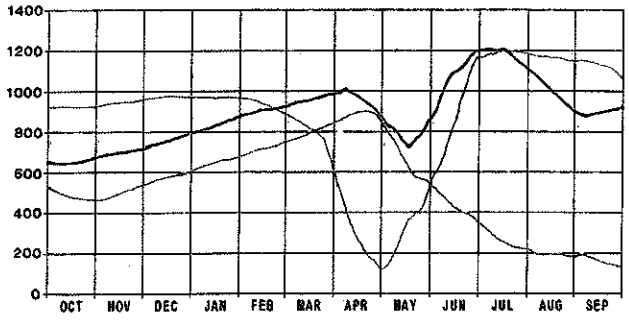
Contents of Jackson Lake
(1,000 acre-feet)



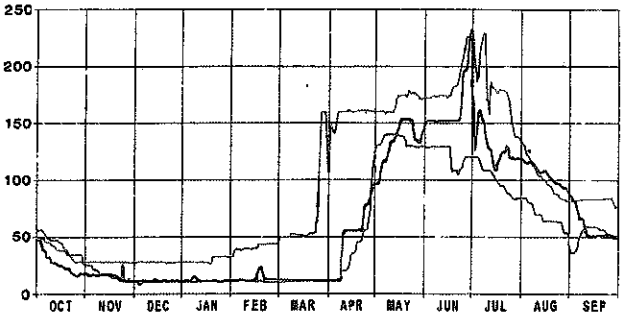
Outflow of Jackson Lake Dam
(100 cubic feet per second)



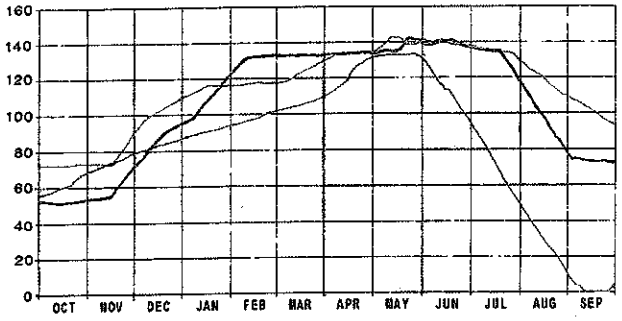
Contents of Palisades Reservoir
(1,000 acre-feet)



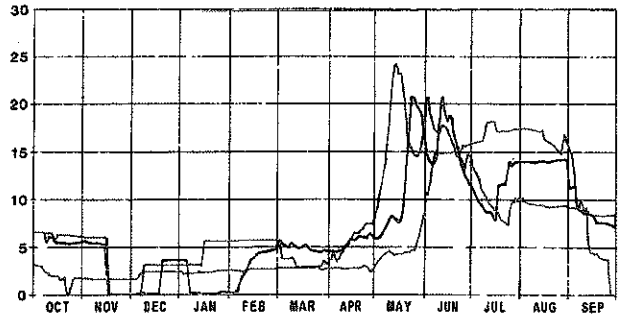
Outflow of Palisades Dam
(100 cubic feet per second)



Contents of Island Park Reservoir
(1,000 acre-feet)



Outflow of Island Park Dam
(100 cubic feet per second)



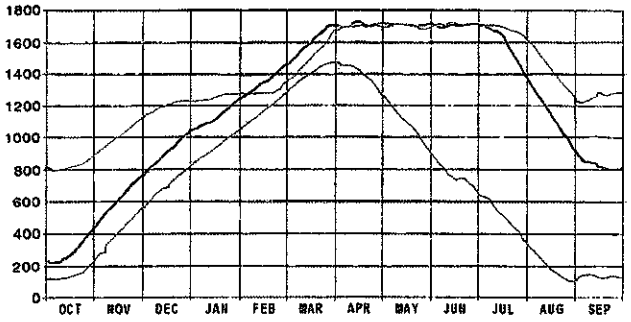
1971 (Good water supply)

1970 (Average water supply)

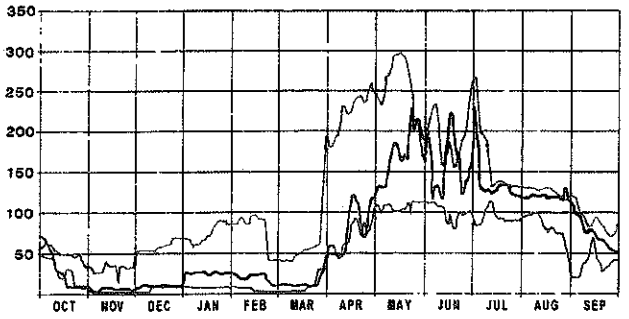
1992 (Low water supply)

Figure 5.—Typical Content and Outflow of Upper Snake River Reservoirs (continued)

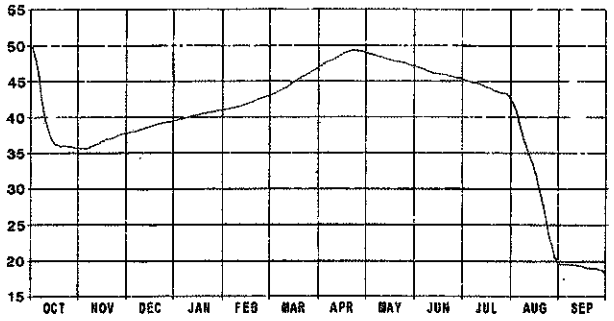
Contents of American Falls Reservoir
(1,000 acre-feet)



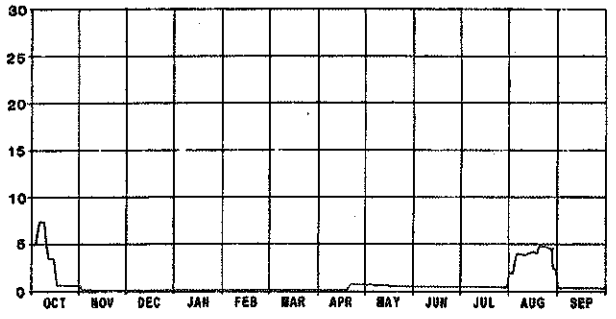
Outflow of American Falls Dam
(100 cubic feet per second)



Contents of Ririe Reservoir
(1,000 acre-feet)

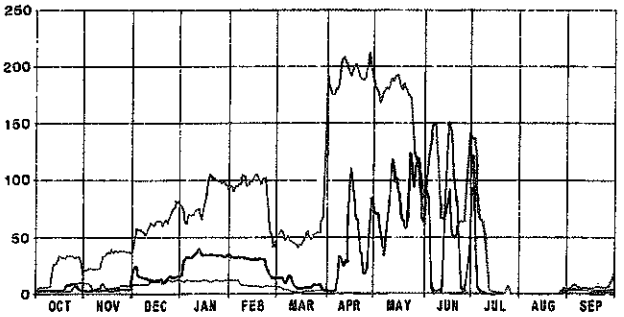


Outflow of Ririe Dam
(100 cubic feet per second)



(Note: No data available before 1978; Ririe Dam and Reservoir were completed in 1977)

Outflow of Milner Dam
(100 cubic feet per second)



1971 (Good water supply)
1970 (Average water supply)
1992 (Low water supply)

VI. Detailed Operation By Function

Early Reclamation storage facilities were developed for a single purpose—irrigation—or for dual purposes—irrigation and power. As additional storage was added, flood control became a potential operating function and was authorized. The passage of laws that required consideration of other functions at existing facilities and new facilities also helped change the character of Reclamation project development in the upper Snake River basin. Passage of a variety of Federal and State laws that require greater consideration of environmental and other factors combined with a general change toward more consideration for fish and wildlife protection has helped mold the operation of the present system.

The upper Snake system has evolved into a true multipurpose operating system; however, irrigation and flood control remain the dominant operating functions. Water rights administered by the State, project authorizations defined by the Congress, and storage contracts with the water users define the operating boundaries. It is important to recognize that although storage space and the use of water are dedicated to specific purposes, the way the water is moved among reservoirs can accommodate other purposes. To the extent possible, reservoir releases are passed through hydroelectric powerplants for the generation of electricity. Within Federal and State statutes and contract law and with the consent of water users, reservoir and river operations are implemented to protect fish and wildlife populations and to provide recreation benefits.

There is a marked contrast in the operation of the Snake River at Milner Dam. Except for salmon flow augmentation water, Reclamation does not release storable water that can be controlled above Milner Dam. In addition, Reclamation has no storage on the main stem downstream from Milner Dam. Below Milner, IPC uses riverflows to generate electricity at numerous powerplants. Another contrast is that there is careful accounting of irrigation water upstream from Milner, and almost no accounting of irrigation water downstsream.

Flood Control

Two types of flooding can occur above Milner Dam—spring snowmelt and winter rain on snow. At higher elevations, such as above Palisades, the major threat of flooding is from the spring snowmelt. At lower elevations, such as the Willow Creek basin upstream from Idaho Falls, there is a major threat from floods caused by winter rain on snow.

Jackson Lake, Palisades Reservoir, and Ririe Reservoir provide the major flood control above Milner Dam. Jackson Lake and Palisades Reservoir are operated as a system to limit the maximum flow at the Heise stream gauge (about 48 miles below Palisades Dam) to 20,000 cfs. Ririe Reservoir is operated to limit Willow Creek flows to a maximum of 1,200 cfs. Island Park Reservoir is operated informally for flood control. Other reservoirs above Milner are operated for irrigation and incidentally provide space for flood control. In addition, there are channel restrictions of 20,000 cfs at Burley, Idaho. (A list of stream gauges is included as appendix B.)

Rain on Snow

A rain-on-snow on frozen ground event occurs when a saturated basin is subjected to cold, snowfall, and warm rain, in that order. An extremely damaging flood occurred in February 1962 in the Willow Creek basin above Idaho Falls. Ririe Dam was built to prevent a recurrence of this type of flood, as well as to control spring snowmelt floods.

It is generally not possible to anticipate a rain-on-snow event far enough in advance to provide an appropriate amount of flood control space. Therefore, reservoir pools are lowered to a

predetermined elevation in the fall and maintained throughout the winter months to provide adequate storage space for possible rain-on-snow events. The reservoir space provided by this action is often referred to as the winter minimum flood control space and is based on studies of historical runoff.

Spring Snowmelt

After January, space is maintained in the reservoirs (i.e., the water surface is held at a lower elevation) according to the amount of inflow anticipated. This requires forecasts of runoff at Heise and Ririe Dam. As forecasts of spring runoff become available, the reservoir pool is adjusted to provide the appropriate amount of flood control space based on criteria for that reservoir—the larger the runoff forecast, the more space required.

The present statistical technique used for forecasting runoff above Milner Dam is a step-wise multiple regression analysis. Forecasts are based on a comparison of the current basin conditions (including observed precipitation and runoff and snowpack moisture) with historical conditions and the resulting runoff. Forecasts are made which assume subsequent precipitation amounts below normal, at normal, and above normal. Reclamation and the Corps independently make runoff forecasts and coordinate to produce one operating forecast. (A sample of a Reclamation forecast for Heise is included as appendix C)

Reservoir operators try to balance flood control and refill needs, since providing too much flood control space jeopardizes reservoir refill, and providing too high a refill probability jeopardizes flood control. Ordinarily, it is possible to maintain a high probability of controlling flooding while also maintaining a high probability of reservoir refill. A large forecast error, however, can occasionally result in flows in excess of the goals or a reservoir failing to refill. Large errors are generally caused only when a low-probability condition occurs that, with hindsight, would have required operating entirely for either flood control or refill. Examples of low probability conditions include exceptionally large or small amounts of precipitation over a long period, exceptionally large amounts of precipitation over a short period, lengthy periods when temperatures are above or below normal, and rapid or extreme shifts in temperature. Forecasts are made as needed, but at least once a month, beginning on January 1 and extending to the end of the spring runoff.

Flood control rule curves are used to determine the amount of storage space required to adequately control runoff. Formal flood control rule curves have been developed for Palisades Reservoir (combined operation with Jackson Lake) and Ririe Reservoir, while informal flood control rule curves have been developed for Island Park Reservoir. A formal flood control curve is jointly developed by the Corps and Reclamation according to Congressional directives, and the Corps has ultimate authority to implement a formal flood curve operation. An informal flood control curve is developed by Reclamation to serve as a guideline in providing flood control benefits below a Reclamation reservoir. Generally, an informal curve will provide a higher chance of reservoir refill than a formal curve.

These rule curves are included as appendix D, and indicate how much space must be maintained by date based on the forecast of runoff. The formal rule curves must be followed and operations agreed to by the Corps which has authority under the Flood Control Act of 1949 to direct some Reclamation reservoir operation to reduce flooding. In actual operation, there is a high level of cooperation and mutual concern for both flood control and reservoir refill.

Irrigation

Most of the Reclamation storage above Milner Dam is used as a supplemental water supply for irrigation; only 210,000 acres depends on Reclamation for a full water supply. As a result,

most irrigators are using a combination of water supplies that includes storage, natural flows, and ground water. To provide a sufficient amount of water in the river for out-of-stream diversion without spilling at Milner Dam requires a high degree of coordination among irrigators, storage operators, and the State Watermaster.

Irrigation and flood control operations overlap during much of the reservoir filling season. Spaceholder contracts specify that the storage season begins on October 1 and ends when no more water is available for storage. That point is reached when the riverflow equals or falls below the total amount of natural flow demand for irrigation water. The end of the storage season depends on irrigation demand and the amount and rapidity of snowmelt, varies from April 6 to July 24, and occurs most often in June.

Henrys Lake and the two northern Reclamation reservoirs—Island Park and Grassy Lake—serve only the Fremont-Madison Irrigation District. Jackson Lake, American Falls, and Palisades serve the southern part of the basin. Minidoka has some storage that is used for diversion and powerhead and to enhance storage in American Falls, Island Park, and Palisades Reservoirs. At present, Ririe has no storage contracts for irrigation and is used exclusively for flood control and recreation (but see chapter VII, "The 1990 Fort Hall Indian Water Rights Agreement").

Throughout the irrigation season, water is released from the reservoirs as needed to meet irrigation demands. Reservoir releases in the segment of the Snake River from Palisades Dam downstream to the Blackfoot gauge are determined by diversion demands of some 50 canals, the need to maintain a sufficient flow in the river at Blackfoot, and the desire to move stored water from Palisades Reservoir to American Falls Reservoir so that an adequate amount of water will be available to complete the irrigation season. Frequent consultations with the Watermaster (see "Watermaster" in this section) are necessary to determine the flow requirements and the amount of stored water that needs to be released.

Irrigation demands in the reach from American Falls Dam to Milner Dam are met by releasing water from American Falls Dam through the IPC powerplant. Through most of the irrigation season, the water surface at Lake Walcott is maintained at or near maximum elevation to ensure water deliveries to the Minidoka Irrigation District and the Burley Irrigation District and to provide maximum hydraulic head for hydropower generation at Minidoka Powerplant.

Irrigation demand is determined by weather, crop consumptive use requirements, and cropping patterns. In daily operations, individual irrigators request water from local "ditch riders" who report needs to irrigation district managers. The irrigation districts accumulate the totals and request water from the District 01 Watermaster or Reclamation's Burley office. The Watermaster then requests that water be released from the reservoirs to satisfy the accumulated requests. Operating personnel in Reclamation's Burley office determine how much water to release from each reservoir and the timing of the releases and provide specific instructions to each damtender.

Reclamation coordinates and works with water users throughout the basin including the Committee of Nine and some 64 irrigation districts and canal companies that contract for storage space in the Reclamation facilities. Reclamation personnel in the Burley office work with the Watermaster of Water District 01 in Idaho Falls to meet daily demands for irrigation and instream flows. The Watermaster of Water District 01 is responsible for the natural flow determination and accounting, and Reclamation is responsible for the storage water accounting and allocation. The Watermaster and Reclamation's Burley office operating personnel work very closely to account for all water use and to meet the demands.

Committee of Nine

The Committee of Nine was created in 1919 by the Governor of Idaho to address and help solve water problems in the Snake River basin above Milner. That year, a serious water shortage developed. Upstream diverters of natural flow contested with downstream owners of storage over the flows in the river. As a result, the Committee of Nine was tasked to devise a plan for distribution of water in the Snake River.

The Committee is comprised of representatives elected by canal companies and irrigation districts in that area. Reclamation's Snake River Area Manager and the District 01 Watermaster are advisors to the Committee. Officially recognized by the State of Idaho, the Committee is also recognized in all Minidoka and Palisades Project reservoir spaceholder contracts as an advisory body. The Committee of Nine provides a forum for discussion, consultation, and advice on reservoir and river operation and administration. Reclamation considers the advice of the Committee in making reservoir operation decisions. In addition, the Committee is a decisionmaking body in its function as the local committee for the District 01 Water Rental Pool (also know as the upper Snake River Rental Pool).

District 01 Water Rental Pool

Spaceholder contracts and Idaho State law allow operation of rental pools. These pools allow spaceholders to offer water for rent to other entities that are in short supply.

Water rental pools (as they are now called) operate under State of Idaho law and at the direction and under the rules of the Idaho Water Resources Board (IWRB). Prior to 1991, the rental pools were often called water banks, but that term is now used as the official umbrella name for all water rental pools in the State. The water rental pool concept has been unofficially in existence since 1937 in the upper Snake. In 1979, the State Legislature authorized the establishment of water banks and rental pools statewide as a means to share water. Reclamation's Snake River Area Manager is a member of the Committee of Nine water rental pool subcommittee. Local water rental pool rules and leasing prices are determined by the local water rental pool organization and then subsequently approved or denied by the IWRB. In Water District 01, the Committee of Nine is the local water user committee and proposes rules for approval by the IWRB. The Watermaster administers the rental pool under guidance of the committee. Reclamation as the storage facility owner and contractor is also involved and must approve the rules and rates for Federal storage as well.

Spaceholders who offer water for rent before July 1 receive a proportionate share of proceeds from any such water that sells. Spaceholders who offer water for rent after July 1 receive proceeds from any sales on a "first come" basis after all water offered before July 1 is sold.

District 01 Water Rental Pool procedures stipulate a priority basis for acquiring water from the rental pool. The first priority is for irrigators with storage space in Reclamation reservoirs and the second priority is for irrigators who use the water in the Reclamation project area. The third priority is for other beneficial uses.

In order to protect spaceholders who do not sell storage water, a "last-to-fill" rule was adopted. This rule says that any water sold for use below Milner Dam will be the last to fill the next year. This was imposed to prevent spaceholders who have good overall water supplies from profiting at the expense of overall refill the following year (each spaceholder accrues water proportionately to his owned space). If water is sold through the rental pool, the reservoir space drafted must be refilled the next year. Without the "last-to-fill" rule, all spaceholders would have to contribute to the refill of the rented water.

The price for rented water is set by the Committee of Nine. In 1997, irrigation water for use above Milner Dam sold for $2.95 an acre-foot which included $0.75 for District 01 administration and $0.20 for the IWRB surcharge. Non-irrigation water for use below Milner Dam includes the same administration and surcharge fees and sold for a base price of $7.00 an acre-foot plus per acre-foot charges of $0.75 for District 01 administration, $0.70 for the Water Resources Council, and $2.05 to be held to secure water for Reclamation through 1999 for a total of $10.50 per acre-foot. If this last-to-fill water is filled in the following year the contingency fee will be refunded to the buyer.

Table 5 summarizes District 01 Water Rental Pool contributions and sales for the period 1979-1997. In most years, there was much more water consigned than sold. Prior to 1991, most of the non-irrigation purchases were made by IPC for power generation. Since 1991, Reclamation has purchased most of the non-irrigation water for salmon flow.

Table 5.—District 01 Water Rental Pool Activity, 1979-1997 (acre-feet)

Year	Consigned	Total Purchases[1]	Irrigation Purchases	Not Sold
1979	88,870	73,960	23,960	14,910
1980	72,190	14,575	14,575	57,615
1981	170,107	149,039	24,039	21,068
1982	290,426	203,515	3,515	86,911
1983	540,606	353,084	3,084	187,522
1984	809,400	277,433	2,433	531,967
1985	497,302	362,169	12,169	135,133
1986	895,642	159,735	9,735	735,907
1987	365,006	192,506	42,506	172,500
1988	235,325	159,215	109,215	76,110
1989	416,994	115,736	15,736	301,258
1990	306,463	124,525	68,000	181,938
1991	205,113	184,677	85,677	20,436
1992	9,954	9,954	9,954	0
1993	408,240	287,974	38,974	120,266
1994	432,171	432,171	75,889	0
1995	605,658	303,944	37,828	301,714
1996	637,134	303,369	20,055	333,765
1997	0[2]	0[2]	0[2]	0[2]

[1]Prior to 1991, purchases other than for irrigation were for power, beginning in 1991, Reclamation purchased this water for lower Snake River flow augmentation to enhance salmon migration.
[2]Not available

Watermaster

The State of Idaho issues and administers water rights in the State. The Watermaster of District 01 is elected each year by the water users, is a State Government employee and the State representative for administering water rights throughout the year, and is currently also the Manager of the Eastern Office of the IDWR. He supervises an office of about 15 part-time and full-time employees in Idaho Falls. The Watermaster tracks and reports water use, and notifies water right holders when they do not have a right to use water, e.g., the water supply is insufficient to provide water for their water right. This is a difficult task requiring monitoring of a great deal of water data and extensive computations especially since many water right holders have both natural flow and storage rights. During the course of a year, the natural river runoff declines to the point that flow becomes insufficient to supply all natural flow rights. Holders of later date priority then must switch to storage rights and the Watermaster must also track the storage used. The Watermaster also provides day-to-day operation of the rental pool on behalf of the Committee of Nine.

Water Accounting

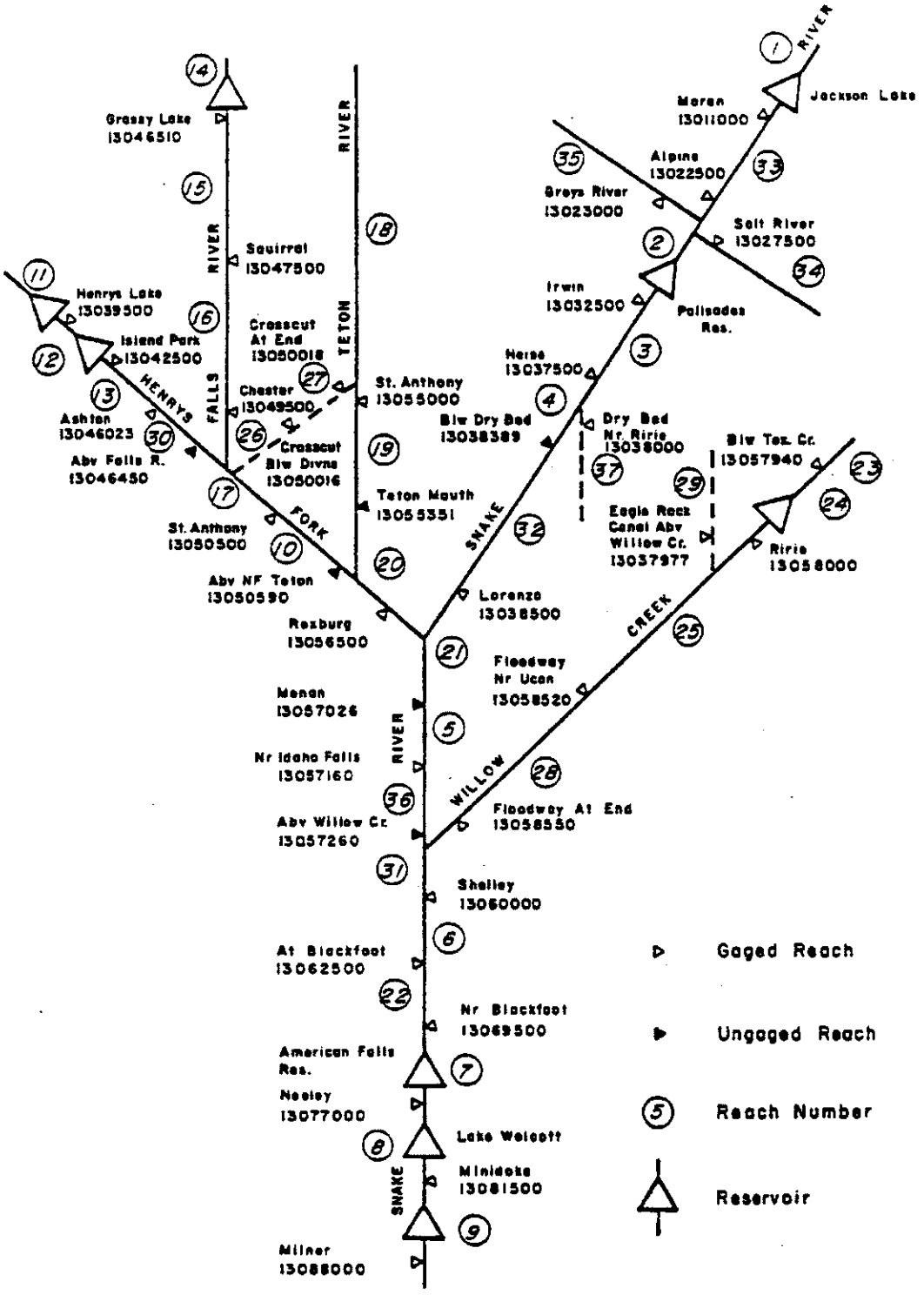
Water data collection and accounting is administered by Water District 01 pursuant to an agreement with the IDWR and in cooperation with Reclamation. The majority of the data is collected by automated data collection platforms that are part of a satellite based telemetry system, referred to as HYDROMET, operated by Reclamation for the collection of hydrologic and meteorologic data on a real-time basis. All important river gauges and the majority of the canal diversions are monitored by the HYDROMET system. Data from canal diversions which are not on this system are obtained by telephone from the canal managers and water district river riders.

The major role of Water District 01 activities under the direction of the Watermaster is to account for the diversions of natural flows, ensure that water right holders are complying with their rights, both in quantity and priority, and determine the amount of stored water used by each spaceholder. On a daily basis, the Watermaster computes the amount of natural flows available in the system and the total diversions by calculating reach gains or losses in 37 reaches of the Snake River and tributaries upstream of Milner Dam (figure 6). These reaches are segments of river lying between two stream gauging stations. Gains are due to inflow from tributaries, springs, and irrigation return flows. Losses are caused by surface flow entering the ground water, evaporation and transpiration of riparian vegetation, and out-of-stream diversions. From this, and the diversion data, the Watermaster determines which water rights are being filled on each day and accounts, on a daily basis, for the amount of stored water that is being used by each of the diverters and from which reservoir account it is being taken. This provides the basis for determining each spaceholder's water storage account of stored water accumulated, used, and carried over. To the extent possible, the debiting for stored water use takes into consideration (1) the need to lower Jackson Lake by October 1 to provide 200,000 acre-feet of flood control space and (2) the location of the diversion demands and the refill potential of American Falls Reservoir, Palisades Reservoir, and Jackson Lake. The accounting year for Water District 01 is November 1 through October 31. A final accounting is made after the end of the accounting period and documented in the Watermaster's annual report.

Power

There are Federal powerplants and non-Federal powerplants located at Federal Dams and there are non-Federal powerplants at several non-Federal dams. Power generation is secondary or

Figure 6.—Upper Snake System for Water Right Accounting



incidental to flood control and irrigation water supply at Federal dams and no water is released from Reclamation facilities specifically for power generation except for water held under spaceholder contracts (IPC is the only electric utility that has a spaceholder contract and that contract amount is 44,275 acre-feet in American Falls Reservoir).

Federal Powerplants

Power generation was included as an authorized function at Minidoka and Palisades Dams. Currently there are Federal power generation facilities at Minidoka Dam and Palisades Dam. Some of the power generated at the Reclamation facilities is used directly for facility operation and irrigation pumping and the remainder is marketed in the Federal Southern Idaho Power System administered by the Bonneville Power Administration (BPA). Minidoka Powerplant, the oldest powerplant in the region is currently being rehabilitated and expanded to a capacity of 27,000 kW. Palisades Powerplant has recently undergone major rehabilitation with an increase in capacity to 176,600 kW.

Idaho Power Company

In the Snake River basin above Milner Dam, IPC owns and operates powerplants at American Falls Dam and Milner Dam; a third IPC powerplant uses water from the Milner pool and is located on the Twin Falls Canal just downstream from Milner Dam.

IPC powerplants at Milner are operated as run-of-the river plants, i.e., available reservoir inflow is passed through the powerplants up to the capacity of the powerplants and riverflows are not controlled for power generation. The only control that IPC can use to regulate river flows is to release water from the 44,275 acre-feet of its contract space in American Falls Reservoir. IPC would normally release this water only when it could be released through the American Falls Powerplant (i.e., Reclamation releases are less than the powerplant capacity) and this water would also produce power at the Milner powerplants.

The American Falls Powerplant, owned and operated by IPC, recently underwent a rewind/uprate to a capacity of 112,400 kW. At American Falls, Reclamation directs the IPC powerplant operator to release the water necessary for flood control or irrigation operations. If the required release is in excess of powerplant capacity (about 13,500 cfs), Reclamation uses the low level outlet gates to supplement powerplant flow. At Milner Dam, IPC releases water to the extent possible through the small powerplant which discharges water to the stream immediately downstream from the dam. About 200 cfs are released directly to the river for minimum streamflow maintenance. When the flow entering Milner pool exceeds irrigation diversion requirements and exceeds the capacity of the small powerplant, flow is directed to the larger powerplant. The larger powerplant takes flows from Twin Falls Canal and discharges flows to the river about 1 mile downstream from the dam.

IPC has provided help in shaping salmon augmentation flows at its downstream dams (see ESA section).

Other Powerplants

In addition to the Federal powerplants and the IPC powerplants, there are other powerplants owned by public agencies and private utilities. All are run-of-the-river powerplants, i.e., flow of the river up to the capacity of the powerplant is passed through the generating units.

In 1991, approval was granted by the FERC for the Fall River Rural Electric Cooperative (FRREC) to construct powerplant with a capacity of 4,800 kW at Island Park Dam. Power generation began in June of 1994. The powerplant operates between a minimum of 190 cfs and a maximum of 960 cfs and utilizes

only water that is released to meet irrigation demands or during flood control operations. During late 1995, FRREC also secured approval to modify the spillway with an adjustable lip to allow water that was previously spilled during irrigation surcharge to be passed through the powerplant to provide additional power generation. The FRREC also has a license for a powerplant with a capacity of 1,900 kW located on the Teton River near Felt. This powerplant was leased to Bonneville Pacific Corporation which filed for bankruptcy in the early 1990's.

Marysville Hydro Associates owns and operates a powerplant with a capacity of 9,100 kW located on the Falls River near Marysville. Utah Power and Light Company owns and operates two powerplants on the Henrys Fork. Its powerplant near Ashton has a capacity of about 5,000 kW and its powerplant near St. Anthony has a capacity of 500 kW. The city of Idaho Falls has three powerplants with a total capacity of about 24,000 kW located upstream from American Falls Reservoir. Lower Valley Power and Light Incorporated owns and operates a 1,500-kW powerplant on Strawberry Creek, a tributary of the Salt River which flows into Palisades Reservoir.

Powerplant Summary

There are two federally owned and operated powerplants and 12 non-federally owned and operated powerplants located upstream from Milner Dam. The total nameplate capacity of these facilities is about 423,000 kW. The nameplate rating of the two Reclamation powerplants is nearly half of the total. IPC is the major non-Federal power producer and owns and operates one powerplant located at a Reclamation dam in addition to two powerplants associated with Milner Dam. FRREC is the only other electric utility that owns and operates a powerplant at a Reclamation dam. Powerplants at Federal Dams and at Milner Dam are summarized in table 6.

Table 6.—Powerplants Located at Milner and Reclamation Dams in the Upper Snake River Basin

Site	Nameplate Rating	Owner/Operator
American Falls Dam	112,400 kW	Idaho Power Company
Island Park Dam	4,800 kW	Fall River Rural Electric Cooperative
Milner Dam	At dam: 830 kW On canal: 58,620 kW	Idaho Power Company
Minidoka Dam	[1]27,700 kW	Bureau of Reclamation
Palisades Dam	176,600 kW	Bureau of Reclamation

[1]When new powerplant is completed in 1997.

Appendix A

Spaceholder Contracts

Current Spaceholder Contracts[1] (November 1995) (acre-feet)				
Spaceholder	**American Falls**	**Jackson Lake**	**Palisades**	**Total**
Lower Valley Organizations with American Falls Space				
A&B Irrigation District	46,826		90,800	137,626
American Falls Reservoir District[2]	445,577	13,042		458,619
American Falls Reservoir District No. 2	393,550			393,550
Burley Irrigation District	155,395		39,200	194,595
Hillsdale Irrigation District	40,482			40,482
Idaho Power Company (nonirrigation)	44,275			44,275
Milner Irrigation District	44,951		44,500	89,451
Minidoka Irrigation District	82,216	186,030	35,000	303,246
North Side Canal Company, Ltd.[3]	116,471	312,007	116,600	545,078
Upper Valley Organizations				
Aberdeen-Springfield Canal Company[3]	29,771	57,661	143,278	230,710
Andrus, Ray	187	110		297
Artesian Irrigation, Inc.	2,794			2,794
Blackfoot Irrigating Company	12,558	7,370	4,050	23,978
Burgess Canal & Irrigating Company	9,343	10,603	31,400	51,346
Butte & Market Lake Canal Company	4,591	2,695	44,000	51,286
Clement Brothers, a partnership	70	196		266
Corbett Slough Ditch Company	3,342	1,961	6,300	11,603
Dilts Irrigation Company, Ltd.	871	511	1,200	2,582
Enterprise Canal Company, Ltd.	8,779	11,252	19,600	39,631
Enterprise Irrigation District	10,024	5,883		15,907
Falls Irrigation District	22,925		40,900	63,825
Harrison Canal & Irrigation District	11,832	11,943	23,500	47,275
Idaho Irrigation District	22,541	13,230	58,800	94,571
Lenroot Canal Company	3,805	5,234	7,850	16,889
Michaud Div, Fort Hall Indian Reservation	46,931		83,900	130,831
New Sweden Irrigation District	27,290	22,516	37,000	86,806
Osgood Canal Company, Ltd.	3,930	7,771		11,701
Peoples Canal & Irrigation Company	21,070	20,365	35,000	76,435
Poplar Irrigation District	662	1,589	1,550	3,801
Progressive Irrigation District	12,284	7,209	28,500	47,993

Current Spaceholder Contracts[1] (November 1995) (acre-feet)				
Spaceholder	**American Falls**	**Jackson Lake**	**Palisades**	**Total**
Reid Canal Company	2,507	1,472	3,150	7,129
Rudy Canal Company, Ltd.	2,606	3,530	15,700	21,836
Snake River Valley Irrigation District	25,942	30,225	35,300	91,467
Trego Ditch Company	1,293	758	3,200	5,251
Woodville Canal Company	5,949	3,491	6,000	15,440
Organizations Without American Falls Space				
Butler Island Canal Company, Ltd.			250	250
City of Pocatello			50,000	50,000
Clark & Edwards Canal or Irrigation Company			800	800
Craig-Mattson Canal Company			1,440	1,400
Danskin Ditch Company			2,350	2,350
F.M.C. Corporation			5,000	5,000
Farmers Friend Canal Company, Ltd.		2,000	9,400	11,400
Island Irrigation Company			4,700	4,700
J.R. Simplot Company			2,500	2,500
Labelle Irrigation Company			800	800
Liberty Park Irrigation Company			2,350	2,350
Long Island Irrigation Company			5,000	5,000
Lower Slough Canal Company, Ltd.		1,040	1,600	2,640
Mitigation, Inc.[4]			18,980	18,980
New Lava Side Ditch Company			11,750	11,750
North Rigby Irrigation & Canal Company			1,200	1,200
Owners Mutual Irrigation District		200		200
Palisades Water Users, Inc.			53,630	53,630
Parks & Lewisville Canal Irrigation Company			5,500	5,500
Parsons Ditch Company, Ltd.			994	994
Rigby Canal & Irrigation Company			6,300	6,300
Riverside Ditch Company			1,500	1,500
Sunnydell Irrigation District		4,000	6,300	10,300
Texas Slough Irrigation Canal Company			2,350	2,350

Current Spaceholder Contracts[1] (November 1995) (acre-feet)				
Spaceholder	**American Falls**	**Jackson Lake**	**Palisades**	**Total**
Twin Falls Canal Company[3]		97,183		97,183
Watson Slough Irrigation Company, Ltd & Watson Slough Ditch Company, Ltd			2,056	2,056
Wearyrick Ditch Company			600	600
West Labelle Irrigation Company			1,000	1,000
West Side Mutual Canal Company			2,350	2,350
Wyoming, State of			33,000	33,000
Contract Space Totals	1,663,640	843,077	1,189,978	3,696,695
Uncontracted Space Totals[5]	8,951	3,923	10,022	22,896
TOTAL ACTIVE CAPACITY[1]	1,672,590	847,000	1,200,000	3,719,590

[1] Lake Walcott, Minidoka Dam impoundment, Island Park Reservoir, Grassy Lake, and Ririe Reservoir are not accounted in this table. Minidoka Dam is operated primarily for irrigation diversions and power. Winter power releases may be curtailed by Reclamation and stored in its active storage capacity of 95,200 acre-feet to make additional water available for storage purposes in American Falls, Island Park, and Palisades Reservoirs in any year when these reservoirs fail to fill. The first 45,000 acre-feet of such curtailed saved water is credited to Island Park Reservoir, contingent upon spaceholders paying for power replacement. Fremont-Madison Irrigation District holds all 142,400 acre-feet of the active storage capacity of Island Park Reservoir (127,200 acre-feet) and Grassy Lake (15,200 acre-feet) which are not accounted in this table and make up the Upper Snake River Storage Division of the Minidoka Project.
Mitigation, Inc. holds 80,500 acre-feet in Ririe Reservoir in the 1994 contract (see footnote 4)
[2] American Falls Reservoir District holds: 22,492 acre-feet in American Falls Reservoir and 13,042 acre-feet in Jackson Lake for Aberdeen-Springfield Canal Company; 274,338 acre-feet in American Falls for North Side Canal Company; and 148,747 acre-feet in American Falls for Twin Falls Canal Company.
[3] Also has space through American Falls Reservoir District.
[4]Held in a 1994 contract which becomes operative upon the announcement by the Secretary of the Interior that the 1990 Fort Hall Indian Water Rights Agreement is in effect. Mitigation, Inc. also holds 80,500 acre-feet in Ririe Reservoir in the 1994 contract.
[5]Totals for American Falls and Total Space do not add due to rounding.

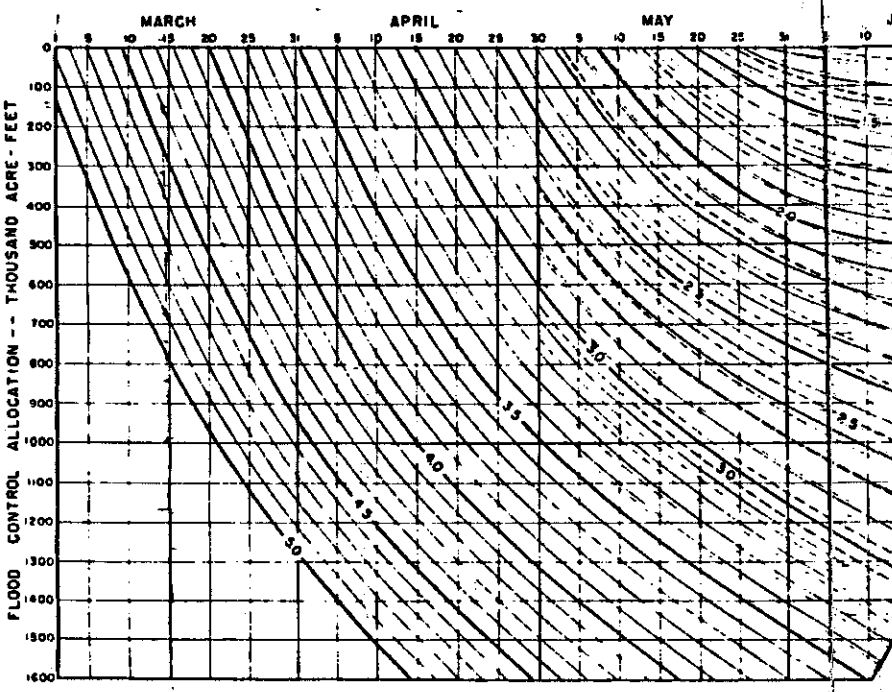
Reservoir Space in Bureau of Reclamation Reservoirs Above Milner Dam (acre-feet)

Reservoir	Total Capacity	Active Capacity				Inactive	Flood Surcharge[1]	Dead
		Total	Contracted[2]	Formally Assigned To Other Uses	Formally Assigned to Flow Augmentation			
STATE OF WYOMING								
Grassy Lake	15,500	15,200	15,200				740	300
Jackson Lake	847,000	847,000	843,077		[3]3,923		94,740	([4])
STATE OF IDAHO								
American Falls	1,672,590	1,672,590	1,663,640		[5]8,951			
Island Park	127,600	127,200	127,200			[6]400	42,000	
Minidoka (Walcott)	210,200	95,200	95,200			[7]115,000	10,000	
Palisades	1,401,000	1,200,000	1,189,978		[8]10,022	[9]157,000	16,000	44,000
Ririe	100,500	90,500	80,500	[10]10,000		[11]6,000		4,000
TOTALS	4,374,390	4,047,690	4,014,795	10,000	22,896	278,400	163,480	48,300

1. Above the spillway and not storable.
2. Except for Minidoka, all contracts are spaceholder (share of reservoir capacity) repayment contracts. Minidoka storage is included in the original Minidoka Project and addressed in conventional repayment contracts.
3. Purchased by Reclamation for salmon augmentation flow.
4. Dead storage is a natural lake, the volume of which has not been determined but is estimated at about 2 million acre-feet.
5. Purchased by Reclamation for salmon augmentation flow. American Falls numbers do not add due to rounding.
6. Reserved for sediment control.
7. Provides head for north side and south side Minidoka canals and Minidoka Power Plant.
8. All but 500 acre-feet repurchased by Reclamation for salmon flow augmentation.
9. Reserved for power head.
10. Exclusive flood control.
11. Reserved for sediment control.

Appendix D

Flood Control Rule Curves



NOTES

1. The minimum flood control storage reservation required on any day of the flood season is as indicated by the diagram. Parameter values are forecasted natural flood run-off of Snake River at Heise in millions of acre-feet for the remainder of the season from any given date to 31 July. A minimum of 200,000 acre-feet of storage space in Jackson Lake will be held vacant until 1 May every year unless the forecast indicates that storage should begin earlier to insure filling that space.

2. Storage space in Palisades Reservoir and Jackson Lake combined shall be kept available for flood control purposes in accordance with this diagram. However, not less than 75 per cent of total storage space will be made available in Palisades Reservoir. Solid lines to be used during evacuation and until natural inflow to Palisades first exceeds 20,000 c.f.s. Dashed lines to be used after natural inflow exceeds 20,000 c.f.s.

3. Releases from Palisades Reservoir shall be restricted to 20,000 c.f.s. or less as measured at the Heise gaging station except: (A) when the forecasted run-off indicates that storage capacity in excess of 1,400 000 acre-feet in Palisades and Jackson Lake combined is required to control flows at Heise to 20,000 c.f.s., releases in excess of 20,000 c.f.s. will be made but not to exceed 30 000 c.f.s. except as noted under item 7 or as may be agreed upon by the Bureau of Reclamation and the District Engineer, U S Army Engineer District, during extremely large floods and; (B) when the forecasted run-off for the period 1 June through 31 July exceeds 2,500 000 acre-feet, and when after 1 June the available space is not within 10,000 acre-feet of the space required by this diagram, the release may be increased above 20 000 c.f.s. up to a limit of 30,000 c.f.s. to the extent of 1,000 c.f.s. for each 5,000 acre-feet of deficient storage. The change in discharge will be made in such manner as to minimize the adverse downstream effects.

4. Nothing in these regulations shall be construed to require dangerously rapid changes in magnitudes of releases, or that releases be made at rates or in a manner that would be incompatible with requirements for protecting the dam and reservoir from major damage.

5. The Bureau of Reclamation shall procure current basic hydrologic data necessary for forecasting inflows to Palisades and Jackson Lake Reservoirs in conformance with procedures mutually agreed to, make current determinations of required flood control storage reservations from the diagram and make current calculations of permissible releases from the reservoirs as are required to accomplish the flood control objectives.

6. The Bureau of Reclamation shall keep the District Engineer, U S. Army Engineer District, in charge of the locality currently advised of reservoir release, reservoir storage and such other operating data as the District Engineer may request.

7. The above flood control regulations are subject to temporary modification by the District Engineer, if found necessary in time of emergency.

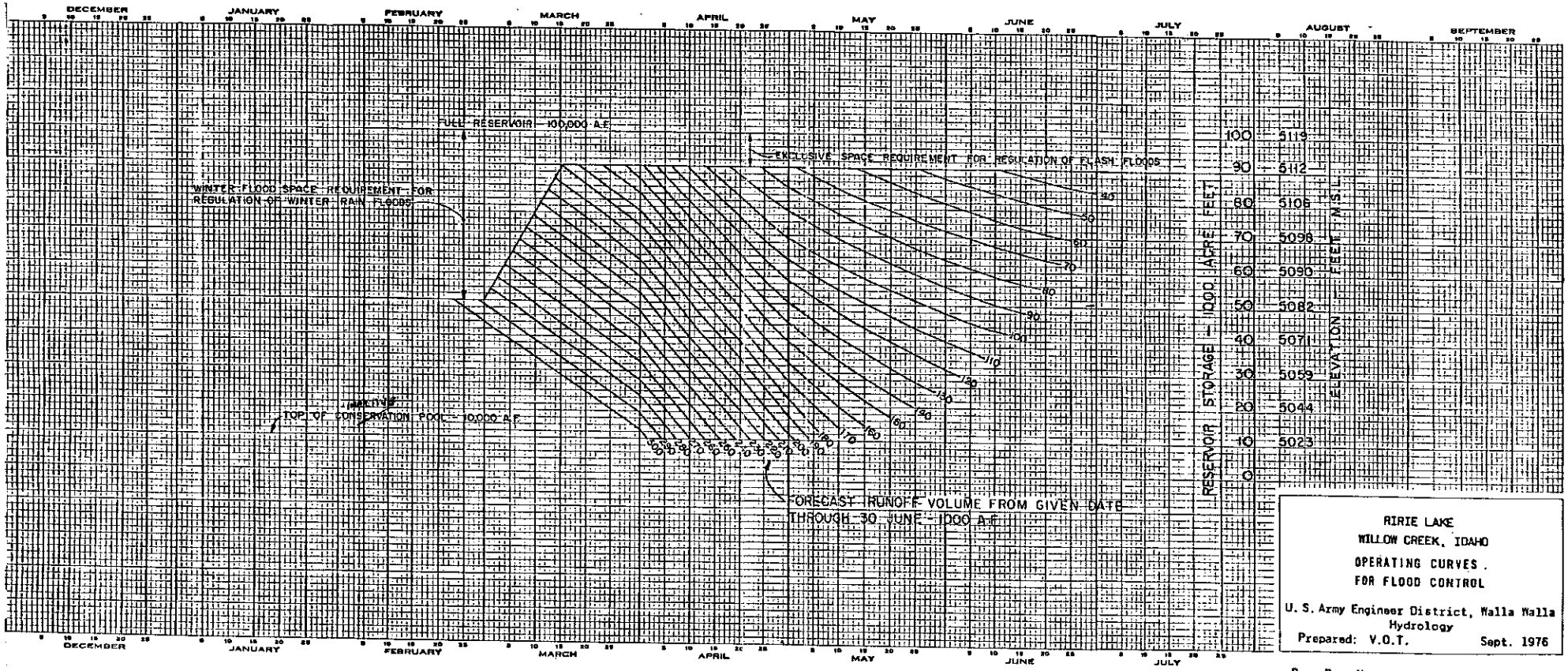
8. Copies of this diagram may be obtained from the offices of the District Engineer, U.S. Army Engineer District, Walla Walla, Washington, and the Regional Director, Bureau of Reclamation, Boise, Idaho.

PALISADES DAM AND RESERVOIR
Snake River, Idaho
FLOOD CONTROL STORAGE RESERVATION DIAGRAM
Prepared Pursuant to Flood control Regulations for Palisades Dam and Reservoir 33 CFR 208 1

APPROVED W A Dexheimer
Commissioner of Reclamation

APPROVED E C Itschner
Major General, Chief of Engineers

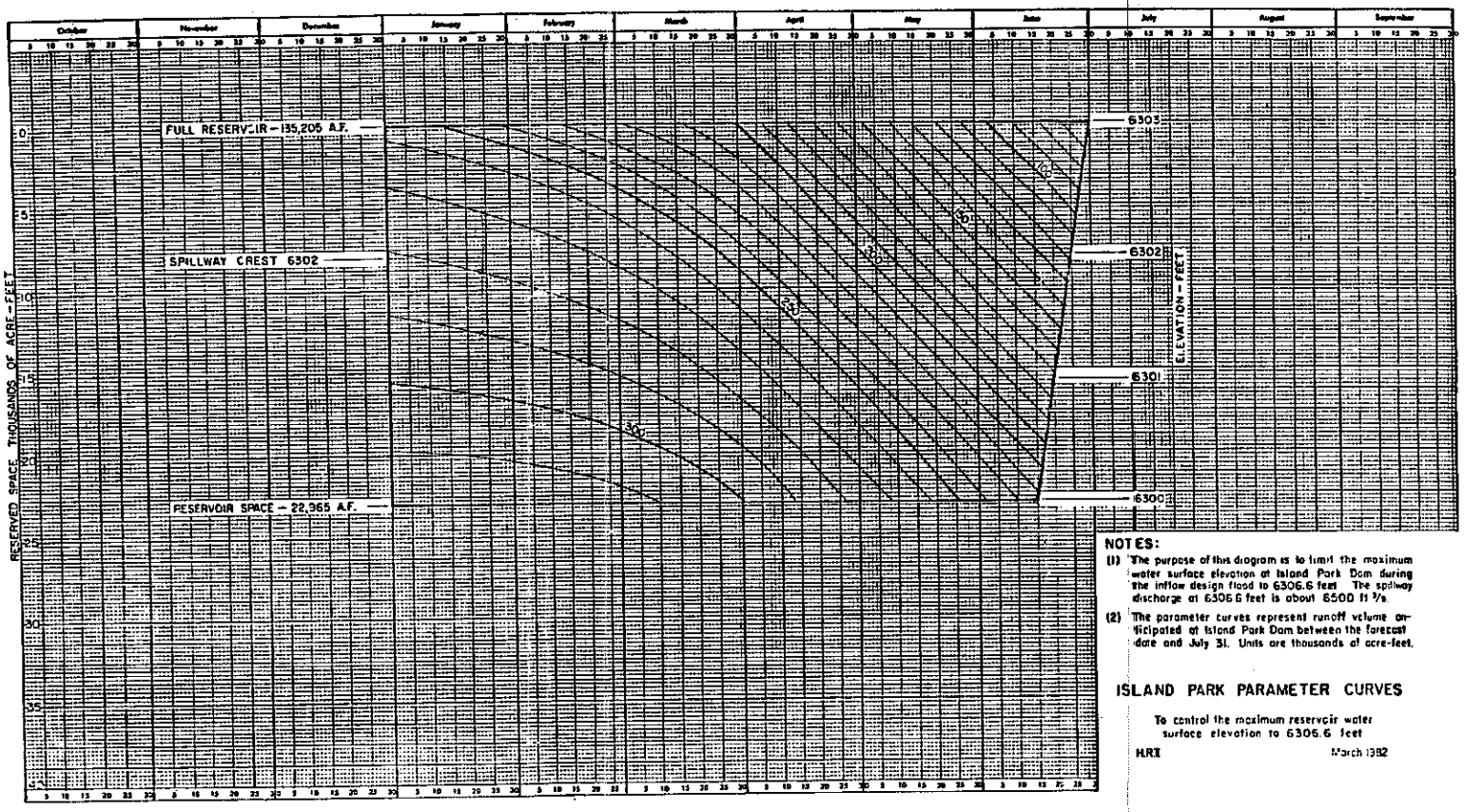
Effective Date May 12, 1958 File No SN-902-1/1



RIRIE LAKE
WILLOW CREEK, IDAHO
OPERATING CURVES .
FOR FLOOD CONTROL

U. S. Army Engineer District, Walla Walla
Hydrology
Prepared: V.O.T. Sept. 1976

Res. Reg. Man. CHART 5



NOTES:

(1) The purpose of this diagram is to limit the maximum water surface elevation at Island Park Dam during the inflow design flood to 6306.6 feet. The spillway discharge at 6306.6 feet is about 6500 ft ³/s.

(2) The parameter curves represent runoff volume anticipated at Island Park Dam between the forecast date and July 31. Units are thousands of acre-feet.

ISLAND PARK PARAMETER CURVES

To control the maximum reservoir water surface elevation to 6306.6 feet

HRT March 1982

Exhibit
3

PALISADES DAM AND RESERVOIR PROJECT; NORTH SIDE PUMPING DIVISION, MINIDOKA PROJECT; CONTRACTS FOR RESERVED CAPACITY, AMERICAN FALLS RESERVOIR

An act to authorize the Palisades Dam and Reservoir project, to authorize the North Side Pumping Division and related works, to provide for the disposition of reserved space in American Falls Reservoir, and for other purposes. (Act of September 30, 1950, ch. 1114, 64 Stat. 1083)

[**Sec. 1. Reauthorization of Palisades Dam.**]—The Palisades Dam and Reservoir project, Idaho, heretofore authorized under the provisions of the Federal reclamation laws by the presentation to the President and the Congress of the report of December 9, 1941 (House Document Numbered 457, Seventy-seventh Congress, first session) by the Secretary of the Interior (herein called the Secretary), is hereby reauthorized under the Federal reclamation laws for construction and operation and maintenance substantially in accordance with that report as supplemented and modified by the Commissioner's supplemental report and the recommendations incorporated by reference therein, as approved and adopted by the Secretary on July 1, 1949, and as including, upon approval by the President of a suitable plan therefor, facilities for the improvement of fish and wildlife along the headwaters of the Snake River, such facilities to be administered by the Fish and Wildlife Service: *Provided,* That, notwithstanding recommendations to the contrary contained in said report (a) the Secretary shall reserve not to exceed fifty-five thousand acre-feet of active capacity in Palisades Reservoir for a period ending December 31, 1952, for replacement of Grays Lake storage, but no facilities in connection with the proposed wildlife management area at Grays Lake shall be built and no allocation of construction costs of the Palisades Dam and Reservoir by reason of providing replacement storage to that area shall be made until the development and operation and maintenance of the wildlife management area has been authorized by Act of Congress, and (b) the nonreimbursable allocation on account of recreation shall be limited to the costs of specific recreation facilities in an amount not to exceed $148,000. (64 Stat. 1083)

Explanatory Note

Cross Reference, Purchase of Improvements. The Act of July 27, 1954, 68 Stat. A129, authorized the Secretary of the Interior to purchase certain improvements located on public lands within the boundaries of the Palisades project. The Act appears herein in chronological order.

Note of Opinion

1. Grays Lake refuge

The proviso in section 1 prohibiting the development, operation, and maintenance of a wildlife management area as part of the project until authorized by Congress, applies to a proposal that was subsequently abandoned, and does not restrict the general authority of the Secretary of the Interior under the Migratory Bird Conservation Act to establish and develop refuges for migratory birds anywhere in the United States. Solicitor Barry Opinion, 70 I.D. 527 (1963), 71 I.D. 311 (1964), in re proposed refuge for migratory birds at Grays Lake Idaho.

Sec. 2. [Authorization of North Side Pumping Division of Minidoka project.]—There are hereby authorized for construction and operation and maintenance under the Federal reclamation laws: (a) the North Side Pumping Division of the Minidoka project, this to be substantially in accordance with the Commissioner's report and the recommendations incorporated by reference therein, as approved and adopted by the Secretary on July 1, 1949: *Provided,* That, notwithstanding recommendations to the contrary contained in said report, (1) lease or sale of that portion of the power service system extending from the substations to the pumping plants may be made to any entity on terms and conditions that will permit the United States to continue to provide power and energy to the pumping facilities of the division, and, in the event of lease or sale to a body not entitled to preference in the purchase of power under the Federal reclamation laws, will preserve a reasonable opportunity for subsequent lease or sale to a body that is entitled to such privilege, (2) no allocation of construction costs of the division shall be made on a nonreimbursable basis by reason of wildlife benefits, and (3) there shall be, in lieu of a forty-year period, a basic repayment period of fifty years for repayment, in the manner provided in the recommendations, of the irrigation costs assigned for repayment by the water users; and (b) for the furnishing of electric power for irrigation pumping to that division and for other purposes, power generating and related facilities at American Falls Dam. These generating and related facilities, to the extent the Secretary finds to be proper for pay-out and rate-making purposes, may be accounted for together with other power facilities operated by the Secretary that are interconnected with the American Falls Dam power facilities, excluding any power facilities the net profits of which are governed by subsection I of section 4 of the Act of December 5, 1924 (43 Stat. 703). The authorization set forth in the preceding sections 1 and 2 shall not extend to the construction of transmission lines, substations, or distribution lines unless such facilities are for the purposes of interconnecting the power plants herein authorized, or for the delivery of power and energy for use in connection with the construction, operation, and maintenance of the projects herein authorized. (64 Stat. 1083)

EXPLANATORY NOTE

Reference in the Text. Subsection I of section 4 of the Act of December 5, 1924 (43 Stat. 703), referred to in the text, is that subsection of the Fact Finders' Act dealing with the use of profits from projects whose care, operation and maintenance have been taken over by the water users. The Act appears herein in chronological order.

NOTE OF OPINION

1. Power plant

Although a power plant of 30,000 kw capacity, as deemed to be authorized by section 2(b) of the Act of September 30, 1950, for construction at American Falls Dam, cannot be constructed within the $6,600,000 authorization for appropriations contained in section 5 of the act, there is no legal objection to installation of 20,000 kw of capacity, which can be accomplished within the limitation, particularly where the partial project has engineering and financial feasibility and can be constructed in such manner as to permit later installation of the third 10,000 kw unit without material alteration or interference. Memorandum of Chief Counsel Fisher, October 28, 1952.

Sec. 3. [**American Falls Reservoir.**]—The Secretary is hereby authorized to contract, under the Federal reclamation laws, with water users and water users' organizations as to the use for their benefit of the heretofore reserved storage capacity in American Falls Reservoir. Not to exceed three hundred and fifteen thousand acre-feet of that capacity shall be made available to those who have heretofore had the use of reserved capacity under lease arrangements between the United States and the American Falls Reservoir district of Idaho, the distribution of this capacity among contractors to be determined by the Secretary after consultation with the interested water users' organizations or their representatives. Of the balance of the reserved capacity, forty-seven thousand five hundred and ninty-three acre-feet are hereby set aside for use under contract for the benefit of the lands comprising unit A of the North Side Pumping Division of the Minidoka project, and seventy-one thousand acre-feet are hereby set aside for use under contract for the benefit of those lands in the Michaud area which may hereafter be found to be feasible of development under irrigation. Contracts for the repayment of construction charges in connection with reserved capacity shall be made without regard to the second proviso of the tenth paragraph (Minidoka project, Idaho) under the heading "Bureau of Reclamation" of the Act of June 5, 1924 (43 Stat. 390, 417). Such contracts shall require the repayment of all costs determined by the Secretary to be allocable to the reserved capacity, less, in the case of the three hundred and fifteen thousand acre-feet of capacity above described, three hundred and eighty-six four-hundred-and-thirty-fourths of the revenues realized, after deduction of what the Secretary determines to be an appropriate share for operation, maintenance, and replacements, from the leasing of that capacity for irrigation purposes up to the time water first becomes available in Palisades Reservoir and, in the case of the capacity set aside for the North Side Pumping Division, all other revenues realized from or connected with the reserved capacity and which the Secretary determines to be available as a credit against the cost allocable to that division. (64 Stat. 1084)

EXPLANATORY NOTE

Reference in the Text. The second proviso of the tenth paragraph (Minidoka project, Idaho) under the heading "Bureau of Reclamation" of the Act of June 5, 1924 (43 Stat. 390, 417), referred to in the text, provides that no contractor shall secure a right to use of water from the American Falls reservoir except under a contract containing the provision that the contractor shall, as a part of the construction cost, pay interest at the rate of 6 per centum per annum upon the contractor's proportionate share, as found by the Secretary of the Interior, of the moneys advanced by the United States on account of the construction of the reservoir prior to the date of the contract. The Act is the Interior Department Appropriation Act for 1925. Extracts from the Act, including the item referred to, appear herein in chronological order.

Sec. 4. [**Annual saving of winter water.**]—(a) The continuation of construction of Palisades Dam beyond December 31, 1951, or such later controlling date fixed by the Secretary as herein provided, is hereby made contingent on there being a finding by the Secretary by the controlling date that contracts have been entered with various water users' organizations of the Upper Snake River Valley in Idaho that, in his opinion, will provide for an average annual savings of one hundred and thirty-five thousand acre-feet of winter water. If in the Secretary's

judgment the failure of the requisite organizations so to contract by the controlling date at any time is for reasons beyond the control of those organizations, he may set a new controlling date but not beyond December 31, 1952.

(b) Repayment contracts made in connection with the use of capacity in either American Falls or Palisades Reservoir may include, among other things, such provisions as the Secretary determines to be proper to give effect to recommendations referred to in section 1 of this Act, and particularly those concerning the continued effectiveness of the arrangements as to the minimum average annual water savings. (64 Stat. 1084)

EXPLANATORY NOTE

Supplementary Provision: Authority to Amend Contracts. Section 4 of the Act of September 7, 1964, found herein in chronological order, authorizes the Secretary of the Interior to amend contracts made under this Act and the Act of August 31, 1954, also found herein in chronological order. The 1964 Act provides that to the extent the annual obligations of the water users are reduced, the cost thereof shall be included in the cost to be absorbed by the power operations of the Federal power system in Idaho.

Sec. 5. [Appropriations authorized.]—There is hereby authorized to be appropriated, out of any funds in the Treasury not otherwise appropriated, the sums of not to exceed $76,601,000 for the Palisades Dam and Reservoir project, Idaho, $11,395,000 for the Minidoka project North Side Pumping Division, Idaho, and $6,600,000 for the American Falls power plant. (64 Stat. 1085)

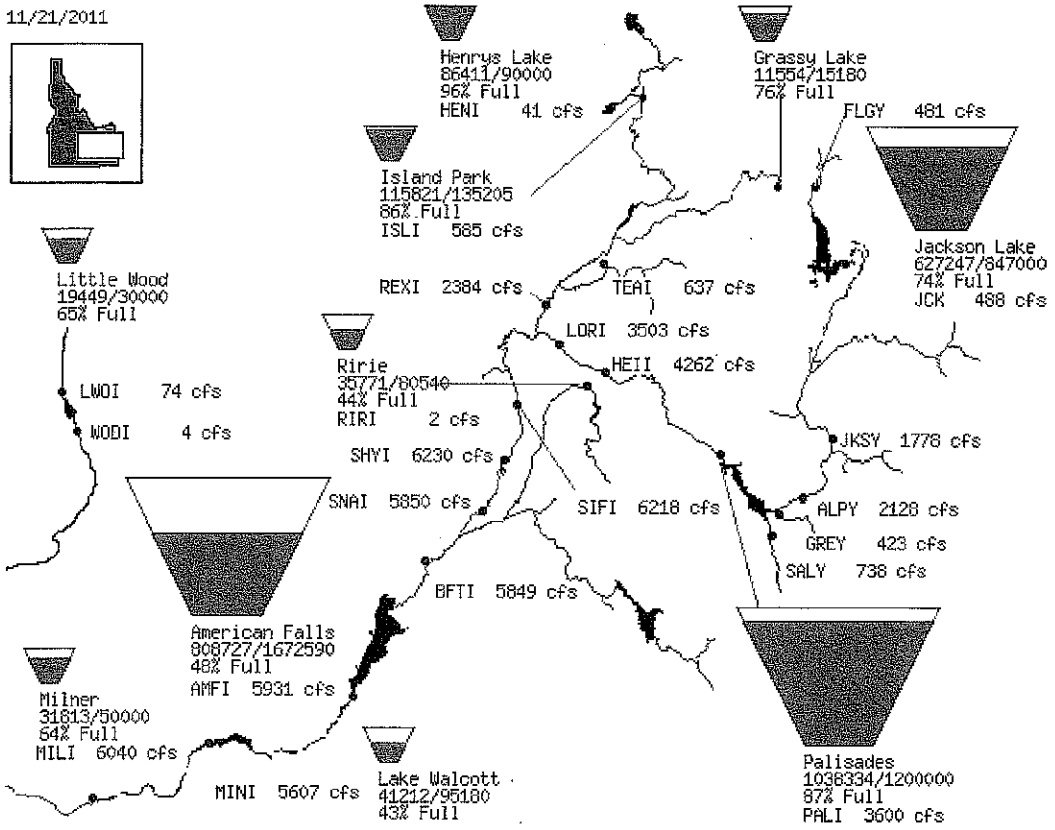
EXPLANATORY NOTES

Not Codified. This Act is not codified in the U.S. Code.

Legislative History. S. 2195, Public Law 864 in the 81st Congress. S. Rept. No. 1116. H.R. Rept. No. 1297 (on H.R. 5506). H.R. Rept. No. 3121 (conference report).

Exhibit
4

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Upper Snake River Basin



PROVISIONAL DATA - SUBJECT TO CHANGE!

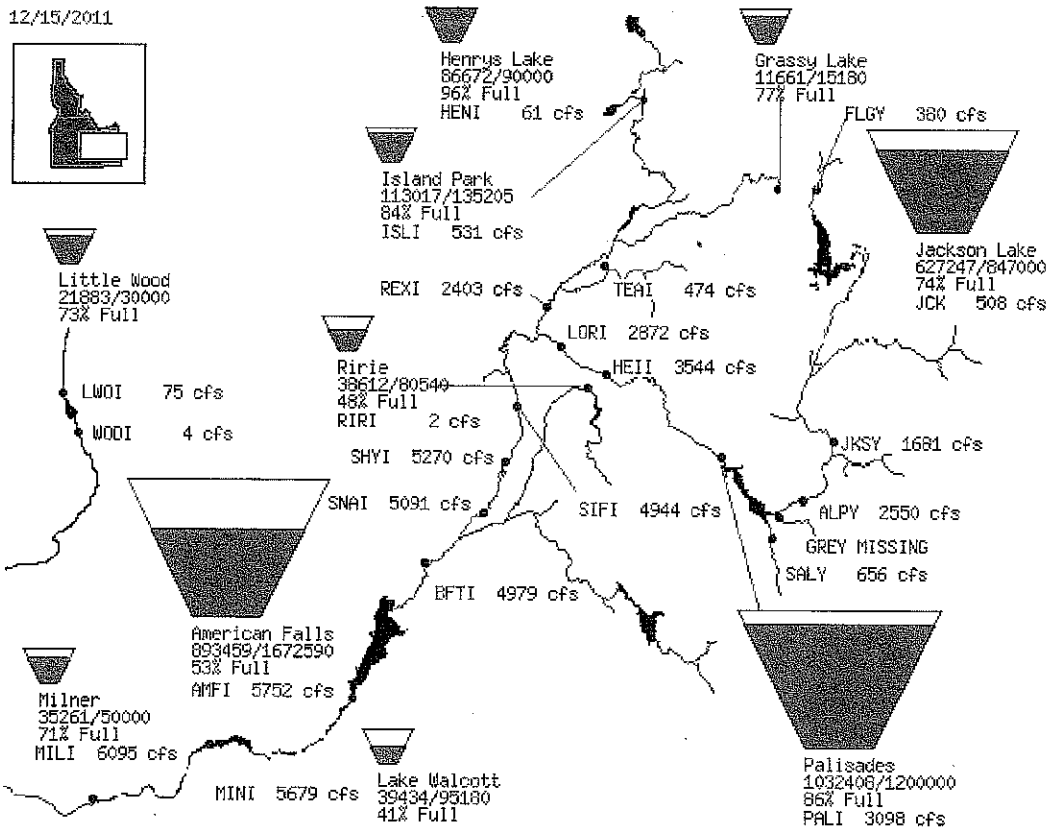
Average daily streamflows indicated in cubic feet per second.
Reservoir levels current as of midnight on date indicated.
Click on gaging stations (red dots) for streamflow hydrographs.

```
Upper Snake River system (Jackson Lake,Palisades,
Grassy Lake,Island Park,Ririe,American Falls,LakeWalcott)
is at  66 % of capacity.
Total space available:       1367026 AF
Total storage capacity:      4045695 AF
```

Graph of Total System Storage

Key to Station Codes
Minidoka Project Information
Ririe Project Information
Palisades Project Information

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Upper Snake River Basin



PROVISIONAL DATA - SUBJECT TO CHANGE!

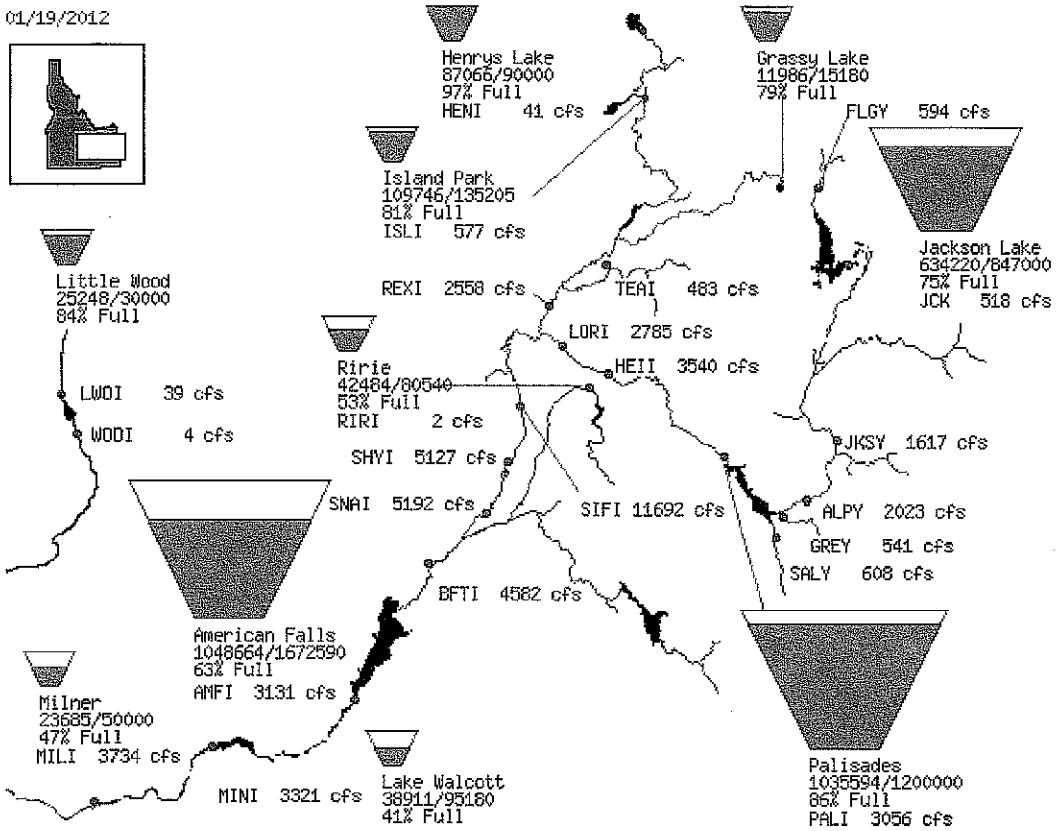
Average daily streamflows indicated in cubic feet per second.
Reservoir levels current as of midnight on date indicated.
Click on gaging stations (red dots) for streamflow hydrographs.

```
Upper Snake River system (Jackson Lake,Palisades,
Grassy Lake,Island Park,Ririe,American Falls,LakeWalcott)
is at  68 % of capacity.
Total space available:       1289853 AF
Total storage capacity:      4045695 AF
```

Graph of Total System Storage

Key to Station Codes
Minidoka Project Information
Ririe Project Information
Palisades Project Information

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Upper Snake River Basin



PROVISIONAL DATA - SUBJECT TO CHANGE!

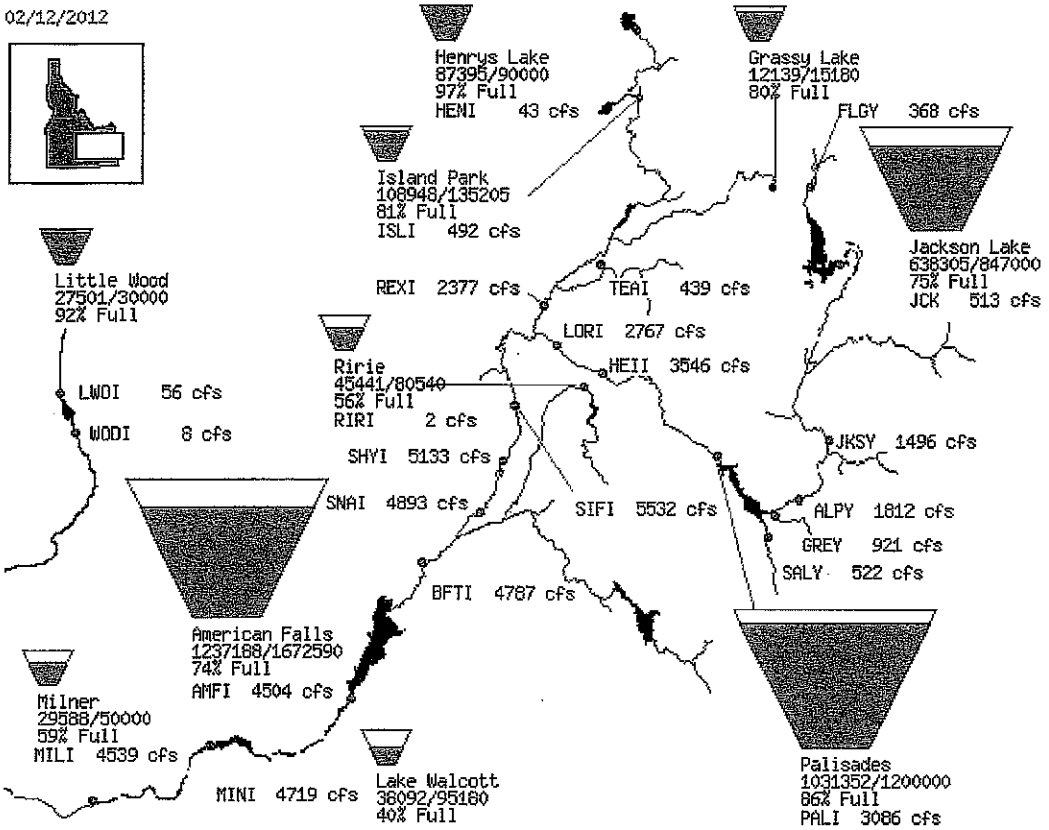
Average daily streamflows indicated in cubic feet per second.
Reservoir levels current as of midnight on date indicated.
Click on gaging stations (red dots) for streamflow hydrographs.

```
Upper Snake River system (Jackson Lake,Palisades,
Grassy Lake,Island Park,Ririe,American Falls,LakeWalcott)
is at  72 % of capacity.
Total space available:       1124086 AF
Total storage capacity:      4045695 AF
```

Graph of Total System Storage

Key to Station Codes
Minidoka Project Information
Ririe Project Information
Palisades Project Information

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Upper Snake River Basin



PROVISIONAL DATA - SUBJECT TO CHANGE!

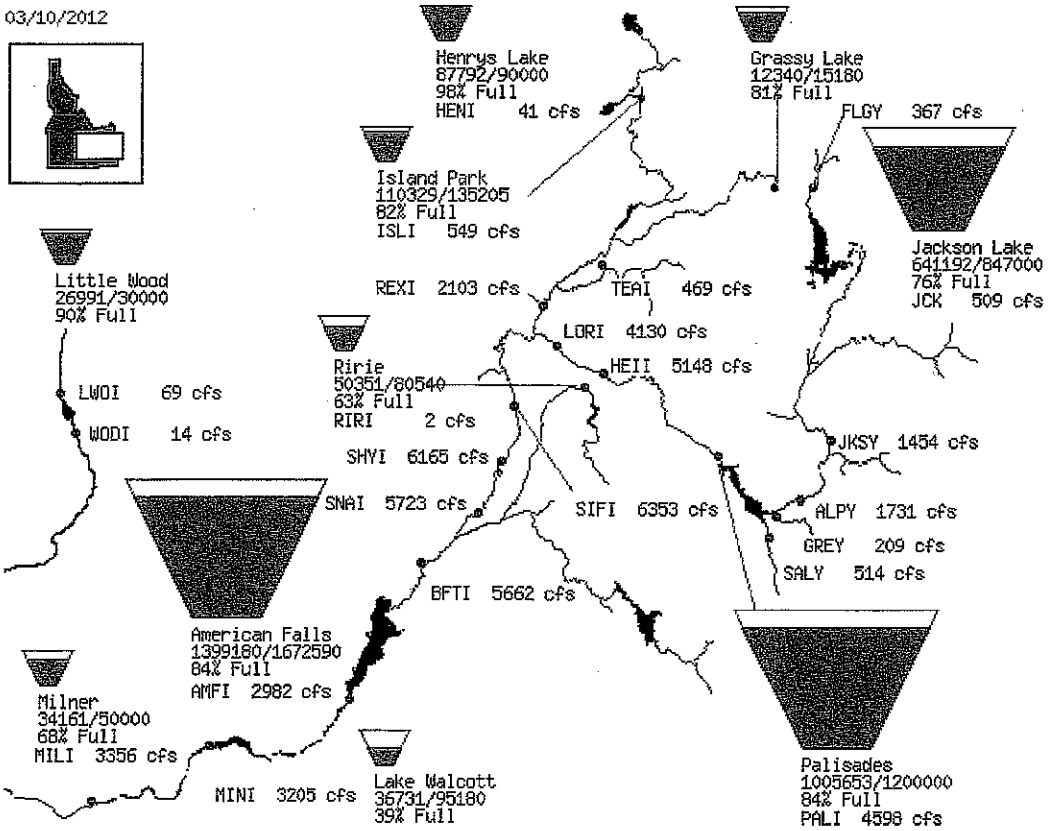
Average daily streamflows indicated in cubic feet per second.
Reservoir levels current as of midnight on date indicated.
Click on gaging stations (red dots) for streamflow hydrographs.

```
Upper Snake River system (Jackson Lake,Palisades,
Grassy Lake,Island Park,Ririe,American Falls,LakeWalcott)
is at  77 % of capacity.
Total space available:        934226 AF
Total storage capacity:      4045695 AF
```

Graph of Total System Storage

Key to Station Codes
Minidoka Project Information
Ririe Project Information
Palisades Project Information

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Upper Snake River Basin



PROVISIONAL DATA - SUBJECT TO CHANGE!

Average daily streamflows indicated in cubic feet per second.
Reservoir levels current as of midnight on date indicated.
Click on gaging stations (red dots) for streamflow hydrographs.

```
Upper Snake River system (Jackson Lake,Palisades,
Grassy Lake,Island Park,Ririe,American Falls,LakeWalcott)
is at  80 % of capacity.
Total space available:        789916 AF
Total storage capacity:      4045695 AF
```

Graph of Total System Storage

Key to Station Codes
Minidoka Project Information
Ririe Project Information
Palisades Project Information

Exhibit 5

4117

4117

Recorded 01-0006

State of Idaho

License and Certificate of Water Right

Water License No. 15134 Amount 1,700 c. f.s.

Water District No. Priority March 30, 1921

THIS IS TO CERTIFY that UNITED STATES OF AMERICA, Acting through B. E. Stoutemyer, District Counsel, of U.S. Reclamation Service Portland, Oregon, made application for a permit to appropriate the public waters of the State of Idaho, dated March 30, 1921, 19; that Permit No. 15134 was issued under said application; that Certificate of Completion of works, with a carrying capacity of 1,700 second feet, was issued thereunder on July 12, 1932, 19, showing that said works were completed on the 16th day of May, 19 31; and that on the 22nd day of April, 19 41,

UNITED STATES OF AMERICA

of Portland, , State of Oregon, made proof to the satisfaction of the Commissioner of Reclamation of Idaho, of the right to use the waters of Snake River and tributaries, a tributary of Columbia River, for the purpose of irrigation and domestic, under Use Permit No. 15134 of the Commissioner of Reclamation and that said right to the use of said waters has been perfected in accordance with the laws of Idaho, and is hereby confirmed by the Commissioner of Reclamation of Idaho and entered of record in Volume 7 of Licenses, at page 4117, on the 9th day of July, 19 42;

The right hereby confirmed dates from March 30, 1921, 19;

The Point of Diversion is located in the SW¼ ¼ SE¼ ¼, Sec. 30, Tp. 7 S, R. 31 E, B. M. Power County

That the amount of water to which such right is entitled and hereby confirmed, for the purposes aforesaid, is limited to an amount actually needed and beneficially used for said purposes, and shall not exceed 1,700 cubic feet per second.

Description and location of use:

Twp.	Range	Sec.	Forty-acre Tract	No. Acres Described in Permit	No. Acres Actually Irrigated
The place where said water is used is on the lands in the following irrigation districts and on the lands of the projects of the following irrigation companies: Aberdeen-Springfield Canal Company, American Falls Reservoir Dist., American Falls Reservoir Dist. No. 2, Blackfoot Irrig. Co., Burgess Canal & Irrig. Co., Butte & Market Lake Canal Co., Corbett Slough Ditch Co., Dilts Irrigation Co., Enterprise Canal Co., Enterp Irrig. Dist., Harrison Canal & Irrigation Co., Hillsdale Irrig. Dist., Idaho Irrig. Dist., Lenroot Canal Co Milner Low Lift Irrig. Dist., Minidoka Irrig. Dist., New Sweden Irrig. Dist., Peoples Canal & Irrig. Co., P Irrig. Dist., Progressive Irrig. Dist., Reid Canal Co., Rudy Irrig. Canal Co., Chas D. Smith (individual), River Valley Irrig. Dist., Trego Ditch Co., Utah-Idaho Sugar Co., the land in the upper Snake River Valley supplied by means of exchange water. The names of the canals or ditches or other works by which said water conducted to such place of use are: Aberdeen, Martin, North Side Project, Twin Falls Canal Co., Woodville, Gooding, Blackfoot, Burgess, Butte & Market Lake, Corbett, Dilts, Enterprise Canal Co., Enterprise Dist., H Idaho, Lenroot, Milner Low Lift, Minidoka, New Sweden, Peoples, Poplar Irrig. Dist. Progressive Irrig. Dist. Rudy, Smith, Snake River Valley, Trego, Utah-Idaho Sugar Co.					

Reed,

The right to the use of the water aforesaid hereby confirmed is restricted to the lands or place of use herein described, as provided by the laws of Idaho.

WITNESS the seal and signature of the Commissioner of Reclamation, affixed at Boise, Idaho, this 9th day of July, 19 42

E. V. BERG
Commissioner of Reclamation

(SEAL)

Exhibit
6

Palisades Hearings by Senate & House Committees

STATEMENT BY LYNN CRANDALL

My name is Lynn Crandall. I live at Idaho Falls, Idaho. For the past twenty years I have been elected annually by the waterusers as watermaster on Snake River in Idaho, in charge of the distribution of the waters of that stream and its principal tributaries to over 100 canals that supply irrigation water to more than one million acres of irrigated lands.

The dry year of 1931 with crop losses of $3,000,000 due to water shortage demonstrated that the existing reservoirs on Snake River were of insufficient capacity to provide an adequate water supply in years of drought. Largely due to Senator Borah's influence, Mr. Elwood Mead, then Commissioner of Reclamation, was induced in 1933 to begin the exploration of new reservoir sites on the stream. While these investigations were in progress the extremely dry year of 1934 occurred causing crop losses of over $7,000,000, followed by losses in 1935 of $1,000,000 due to water shortages. Some losses also occurred in 1940. These losses are in terms of prices for crops prevailing at the time and would be more than doubled if expressed in terms of present day crop prices.

There are many diverse and conflicting water rights and interests on Snake River in Idaho and the Bureau of Reclamation has spent 16 years of study in its efforts to find some satisfactory location and plan for the construction and operation of a new reservoir that would, insofar as possible, harmonize and be acceptable to the great majority of the many existing viewpoints of what ought to be done on Snake River. The result of these years of study, investigations, and innumerable conferences with the water-users is embodied in the reports by the Bureau of Reclamation on the Palisades Dam and the Minidoke North Side Pumping Project that are before you for consideration.

I do not know of a more feasible or meritorious or necessary project under consideration by the Bureau of Reclamation than this one proposed on Snake River. It will repay its cost many times to the nation during its useful life, which will last for centuries due to the relatively small amount of silt carried by Snake River. It combines insurance water for the dry years for lands now under irrigation, flood protection, needed power generation, new lands for war veterans, recreation and wildlife benefits of substantial magnitude.

Many of the canals in the Snake River Valley above American Falls Reservoir do not own enough storage water to carry them thru the irrigation season after their natural flow rights are cut off due to decreased stream flow. They have been obliged to rent 200,000 acre-feet annually of additional storage water from the Government and other sources even in years of ordinary run-off, and adequate amounts of storage are not available for rent in years of sub-normal run-off.

Such rentals involve temporary year to year agreements with various parties owning storage rights in both American Falls and Jackson Lake

Reservoirs whereby the water may be temporarily exchanged between the reservoirs. These agreements have been difficult to secure at times and may be terminated any time when some company might feel that its rights were being adversely affected. There can be no permanent assurance of an adequate water supply for these upper valley canals serving over 1/3 of a million acres until Palisades Reservoir is built and their storage rights are established in upstream reservoirs above their lands.

The need for flood protection is also a pressing matter on Snake River, particularly in the section from Heise to Roberts, Idaho, where the river flows in an unstable channel on the so-called Heise "Cone" built up by gravel deposits during past geologic ages. In addition to existing flood damages by erosion and overflow of the adjacent lands there is an ever-present danger that in some high floodwater year the river will leave its present course and cut a new channel thru improved farm lands, resulting in damages of large magnitude to such lands and for relocation of canals, diversion works, etc.

The Snake River water-users are ready to sign repayment contracts and have already subscribed to all the available space in the reservoir. It is their earnest hope that the project will be speedily authorized by Congress.

Exhibit
7

S T A T E M E N T
of
R. P. Parry
before
Irrigation and Reclamation Subcommittee of the
Public Lands Committee of the House
August 9, 1949

My name is R. P. Parry, from Twin Falls, Idaho. I am attorney for several canal companies and irrigation districts that divert water from Snake River, and whomare interested in this entire Palisades Reservoir situation. Also, I am interested in farm lands irrigated from Snake River.

In a sense I am appearing in two capacities. First, as a representative of Governor C. A. Robins of our State of Idaho. Last minute matters interrupted his plan of attending this hearing in person. But, on his behalf, I can advise you that he wholeheartedly approves both the Palisades Reservoir project and the North Side Pumping Extension. His formal letter approving the latter has been already placed in the record, and he wishes me to equally make a record of his approval of the Palisades Reservoir project, and the setting aside of definite blocks of storage water in both American Falls and Palisades Reservoirs for the development of new lands on the North Side Pumping Extension and the Michaud Flat Development near American Falls.

It is obvious that the far-reaching and diverse effects of this whole integrated plan will have a very beneficial effect upon the entire economy of our State. A large percentage of the State's population will, directly or indirectly, receive benefits if this entire development is authorized and completed. Established farms will be made secure in their water rights; new lands will be opened in proven and successful territory; all the cities, industries and businesses in the eastern half of the State will be aided. On Governor Robins' behalf, we request a favorable report on the pending bill.

As a representative of the American Falls Reservoir District, I appear for a district which comprises approximately 500,000 acres of highly productive

land. It includes among others the systems of the Twin Falls Canal of 200,000 acres; also the North Side Canal Company and Springfield-Aberdeen Canal Company, mentioned by other witnesses, and some others.

This District was formed to acquire badly needed supplemental water. It made the great American Falls Dam project a possibility by meeting the very unusual requirement then made of raising the money and paying the Bureau of Reclamation approximately Two and Three-quarter Million Dollars' cash, on the barrel head, in advance of any construction. This, I believe, is a performance unique in Reclamation history.

But even the water so acquired proved inadequate in the "short water" years that came after the Reservoir was constructed. Consequently, the District for eighteen years now has been leasing 433,000 acre-feet of reserved space from the Bureau; and in turn sub-leasing the water to 28 established Canal Companies and Irrigation Districts. These organizations serve lands of excellent character, capable of high production when water supplies are adequate. The water has been beneficially used and is truly needed by these organizations.

The point has been raised that this eighteen years of use amounts to a dedication of this water to the lands where it has been so used, under the Idaho Constitution. However, in order to facilitate this overall rearrangement of Snake River water rights, these companies have expressed a willingness, as a compromise, to reduce their demands to a total of 315,000 acre-feet of this reserved space for permanent acquisition, in order that the balance may assist in the development of new lands. In view of the fact that these organizations made American Falls Reservoir possible by contributing nearly Four Million Dollars of its cost and, in many cases, will be under additional expense drilling wells to effectuate the winter water saving plan which is a part of this project, as well as in purchasing space in Palisades Reservoir, it can be seen that this reduction of demand is a

real sacrifice.

By the same token, it is obvious that the permanent acquisition of this water cannot be indefinitely delayed. These companies cannot be asked to sign the necessary contracts covering all the complicated and interrelated rearrangement of rights necessary to effect this Palisades project, unless they know definitely what portions of this reserved space they are going to acquire on a permanent basis. Accordingly, permission to purchase 315,000 acre-feet, by those now leasing the water in the reserved space, as outlined in the Report, is an essential and necessary part of this whole plan. The water is needed and the repayment of its cost is certain.

Exhibit 8

Box 697, Idaho Falls, Idaho
May 14, 1947

Regional Director
U. S. Bureau of Reclamation
Box 937
Boise, Idaho

Re: Project Planning

Dear Sir:

In reply to Mr. Nelsen's letter of the 13th instant, I have had in mind the necessity for some new gaging stations above the Palisades Reservoir flow line, when and if the construction of the dam is authorized.

If the Bureau reaches a decision this summer to build the dam I believe the stations both below the damsite and on the upstream tributaries above the flow line should be installed this fall as the best time to do this work is when the stream flow is low. The conditions prior to reservoir construction should be determined for as wide a variation of wet and dry years as possible. After the cost of installing the stations is once paid it won't cost much more to get the records for an additional year or two as there will doubtless be someone on the Bureau's staff at the dam who can look after the gages, change record sheets, etc.

The likelihood of getting the Palisades Reservoir under contract appears to me at present to depend upon whether the Bureau of Reclamation will reconcile itself to the abandonment of its plans to irrigate the Minidoka Extension Project with American Falls lease water. If it is willing to do that and can announce an irrigation cost for Palisades space of say about $7.00 per acre-ft. it will be able to get repayment contracts for the reservoir capacity signed speedily. If the Bureau still holds out for the new land development the Palisades Project will have to rest in cold storage until there is some change in the situation and sentiment and in that event there will be no use to install the gaging stations at present.

If the Bureau is really planning on getting Palisades under contract there is a matter it should be thinking about that will probably have to be conceded to the North Side Canal Company to secure that company's agreement to giving up winter water in addition to selling it the American Falls space it has leased. This company wants holdover privileges in the top Jackson Lake space. To secure the consent of bottom space owners, it will probably be necessary to permanently trade the Minidoka Project Jackson Lake space for upper valley American Falls space. This appears to me to be a fair trade under future conditions of winter water conservation accruing first to American Falls. I don't believe there will be any objection from upper valley users of bottom Jackson Lake water to the proposal if it is made a part of the Palisades contract.

Very truly yours,

District Engineer.

cc: USBR, Burley

Exhibit 9

Idaho Falls, Idaho
May 29,1947

Mr. F.M.Clinton,
U.S.Bureau of Reclamation
Boise, Idaho

Dear Clinton,-

In one of the discussions on the last day of the State Reclamation meeting Mr. Brazeal invited the American Falls lease-holders to meet with his Board to reach an understanding on the disposal of the lease space. I have no idea that the invitation will be accepted because the other canals are stronger than ever in their attitude on this subject since it has been demonstrated that a market exists for all of Palisades space. They also feel that the Govt. is so deeply involved in Palisades that it will be obliged to accede to their view-point on the final show-down.

The Minidoka Irrigation District, however, comes into the picture to an extent that perhaps is not fully appreciated by the upper valley lease holders. Some exchange, preferably a permanent one, between the American Falls and Jackson Lake reservoirs must still be worked out before the upper valley users can get any additional lease water they might buy. If Palisades wasn't full in some year enough Am. Falls priority water could be caught in Palisades to make the exchange that year but in any year when all the reservoirs fill this cannot be done. Lower valley companies realize that under certain circumstances the free and easy exchange of past years may operate to their detriment in years when Jackson Lake doesn't fill and hence they are going to be reluctant to tie themselves up to future exchanges on the present basis. I feel it is a matter of great importance to future peace on the river, if at all possible, to get a permanent transfer into Jackson Lake of all American Falls rights now owned or that hereafter may be acquired by upper valley wanals. The consent of the Minidoka Irrigation District will be necessary to any such proposal and it is only to be expected that the District would want something in exchange for such consent, in addition to being convinced that the Am. Falls right under future conditions will be a sgood a right as the bottom right in Jackson Lake.

I talked about such a permanent exchange a little with Brazeal but got neither encouragement or discouragement from him on the proposal. His Board is also studying the matter of the annual exchanges as at present practised in view of the requirement in this years lease that its approvalm is required before any exchange for lease water can be made from its Jackson Lake space . It is possible that his Board might want to discuss this latter matter with me soon , either in Idaho Falls or Rupert, and I have been debating as to whether, in that case,I should endeavor to ascertain from them on what basis they would settle on with the other users. It is apparent that the other users will not settle on the basis of the Govt. keeping 50% of the lease water which I proposed to several of the leaders at the time of the annual meeting only to meet with a strong resentment. I thought of trying to find out if the Minidoka District would agree to the Govt. keeping 25% of the lease water, plus any Palisades water if it wanted any,for the Minidoka Ext. project, and that all of the Minidoka space in Jackson Lake be exchanged for AM. Falls space.

I have no idea whether or not they would accept such a proposal but if they would I could then discuss the matter with the N.S.Canal Co. and the upper valley users. The N.S.C.Co.,of course, is the key figure in the controversy and its

consent is essential to any plan. If the Minidoka Project could be traded out of its Jackson Lake water, holdeover rights on J.L. water could probably be established which might be deemed enough advantage by the N.S.C.Co. so it would concede a 25% cut in its lease water. The N.S.C .Co. has never expressed to any outsider, as far as I know, the terms upon which it will settle and perhaps has not even determined them definitely itself.

I have not heard of any objection or protests from any applicant for Palisades space against the cut in this years Palisades appropriation by the House, in fact there is a feeling that too much of the present appropriation is being used up, in advance of construction, as overhead costs in the Idaho Falls and Boise Regional offices which will be charged against the cost of the dam. This feeling wasn't eased any by the unloading here a few days ago of six new Pontiac station wagons for the Palisades Project. In accordance with advice from the local office I have explained to people who asked me about it that these were ordered a year ago when they thought Palisades would be under construction by now, but th e explanation is not very well received. And so it goes.

Yours truly

Exhibit 10

Box 697, Idaho Falls, Idaho
December 18, 1947

Mr. F. M. Clinton
Planning Section
U. S. Bureau of Reclamation
Box 937
Boise, Idaho

Dear Clinton:

I had quite a talk with Messrs. Parry and Welteroth of the North Side Canal Company today. That company apparently is prepared to carry their case, if necessary, to the U. S. Supreme Court before they will give up either their winter water or the right to buy the lease water. I think, however, that an agreement can be reached with them on a percentage of the lease water to be retained by the Government for new land provided they keep the winter water. They are willing to agree to use as little as possible for this purpose and might agree to some specified flow in second-feet.

I asked them if they would agree that the upper valley savings of about 130,000 acre-feet from winter water could accrue to Palisades Reservoir. They seemed agreeable to this proposal. If approved by other users this would give Palisades some firm water supply each year which would largely offset the winter use on the North Side. In 80% of the years there will be enough spill past Milner to let them draw winter water anyhow. If future years are dry enough to affect the North Side's water supply they will then be in a frame of mind to shut off the winter water themselves, provided they can get credit for it to be stored in some reservoir space they own.

I think the future will take care of this matter if the years become dry enough.

If you think that it would serve any useful purpose I would be glad to come over to Boise any time soon and discuss this situation with you in more detail.

Very truly yours,

District Engineer

cc: R. J. Newell, Regional Director.

Exhibit 11

REFER IN REPLY TO

Project Planning

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Region I
Box 937 - Boise, Idaho

March 5, 1948

Mr. Lynn Crandall, Watermaster,
Water District 36,
Idaho Falls, Idaho.

Dear Mr. Crandall:

At the request of the officials of the Burley and Minidoka Irrigation Districts, Mr. Clinton has made a study of the effect on their water supply of the several recent proposals with respect to operation of Jackson Lake and American Falls Reservoirs. Copies of the several tabulations prepared in connection with this study are enclosed for your information and files.

I would appreciate it if you would review these tables and advise us of any comments you may have. Since Table A is based on your records and was used in making some of the other computations, you should check it carefully.

In order to have your verbal comments before our next meeting with the Minidoka and Burley officials in Jerome on March 9, Mr. Clinton will call you by phone next Monday afternoon, March 8, at 3:00 P.M.

Sincerely yours,

R J Newell

Regional Director.

Enclosures (7)

I answered this in a pencil note to Clint
fc
3/6/48

May 12, 1948

COPY

R. J. Newell, Regional Director,
United States Bureau of Reclamation
Box 937
Boise, Idaho

Dear Mr. Newell:

The Burley Irrigation District has heretofore been requested to consent to the establishment of storage hold over rights in Jackson Lake Reservoir. After due consideration the Board of Directors of the Burley District has concluded to give its consent to the right of the owners of storage space in Jadkson Lake Reservoir to hold over in the space of such owner any water stored therein that is not used during any irrigation season, subject to the following conditions:

1. That the Burley Irrigation District be permitted to purchase from the Bureau of Reclamation 25,000 acre feet of the leased storage space in American Falls Reservoir.

2. That there be delivered at the Minidoka Power Plant, without cost to the Burley or Minidoka Irrigation Districts, each year, during the time that power water is being stored, the amount of power that could be generated at the Minidoka Power Plant, if the amount of water that the government is entitled to use for the generation of power at the Minidoka Power Plant were permitted to flow through the wheels of the Power Plant. The amount of water that the government is entitle to use for the generation of power at the Minidoka Power Plant includes 2700 s.f. of decreed water and the right that has been acquired by approp-

riation and use for the operation of the sixth unit.

3. That the right to hold over storage in Jackson Lake Reservoir shall not in any manner impair of affect the right of the owners of bottom right storage in Jackson Lake Reservoir to have this space first filled from water accumulated in Jackson Lake Reservoir after the gates have been closed at the end of any irrigation season.

4. That the Burley Irrigation District be not charged any transportation loss, for transporting water stored in its space in Jackson Lake Reservoir from Jackson Lake to its point of diversion.

5. That the Burley Irrigation District be given credit, either in Jackson Lake or American Falls Reservoir, for any unused stored water drawn out of or transferred from Jackson Lake during any irrigation season.

6. That the right to carry over stored water in Jackson Lake shall not take effect or be enforced until Palisades Reservoir is constructed, completed, and in operation.

7. That the Burley and Minidoka Districts be relieved of the annual payment of $50,000.00 per year for so-called Black Canyon power, and that they only be required to pay for such power that is brought onto the two divisions of the Minidoka Project in excess of the power that could be generated at the Minidoka Power Plant if all water that the government is entitled to use for power purposes at such plant were being used for the generation of power at the Minidoka Power Plant. That such excess power be sold to the two districts at the reasonable market proce per kilowatt hour of the excess power used.

COPY

8. That all water users on Snake River consent to a decree being entered in a summary proceeding for the difference between the amount of the natural flow water that was decreed to the Secretary of the Interior for use upon the two divisions of the Minidoka Project and the amount of natural flow water that has actually been used on the two divisions for irrigation purposes over and above the decreed rights.

Respectfully submitted,

S. T. LOWE
Attorney for Burley Irrigation District

COPY

cc: Mr. S. R. Marean
Proj. Supt., Burley, Idaho

R. P. Parry, Attorney
North Side Canal Co.
Twin Falls, Idaho

N. V. Sharp, Director
Twin Falls Canal Co.
Filer, Idaho

Minidoka Irrigation District

Exhibit
12

MEMO.

The operation of Snake River as affecting various rights is greatly complicated at present and will be even more so after Palisades Reservoir is built by two principal facts:

1. No holdover privileges exist on Jackson Lake rights but will exist in all other reservoirs.

2. Exchange of water between upper and lower valleys and between the reservoirs.

Unless some measures are taken to simplify these matters it appears likely that considerable confusion and possibly controversy will exist in the future after Palisades dam is built in years of short supply when the reservoirs do not all fill.

The situation would be greatly simplified if all of the present lower valley rights in Jackson Lake were permanently exchanged for American Falls water. The present American Falls contracts provide that the Secretary of the Interior may make a permanent exchange of 265,853 acre-ft. of bottom Jackson Lake rights for the same amount of American Falls space owned by upper valley canals whenever he finds that the American Falls right is as good a right as the bottom right at Jackson Lake. In the dry year of 1934 the % yield of the two rights was about the same and if the winter water conservation plan is put into effect the American Falls right will be fully equal to and probably superior to the Jackson Lake bottom right, especially considering the 12.8% transmission loss on Jackson Lake water.

At present the Minidoka Project water in Jackson Lake is exchanged each spring for water in American Falls. If the upper valley canals use all the exchanged water and the Minidoka Project does not the latter project is left with its holdover in American Falls where it has no holdover rights with no way of moving it upstream to Jackson Lake. To protect the Minidoka Project it should have holdover rights in American Falls on its exchanged water, or else a permanent exchange as above suggested.

The present lower valley rights in Jackson Lake are

Minidoka Project	325,810 acre-ft.
North Side Canal Co.	322,007 "
Twin Falls Canal Co.	97,183 "

For the past 20 years the average yield of the North Side Canal Co. and Twin Falls rights from Jackson Lake has been (see attached table)

North Side Canal Co.	246,860 acre-ft.
Twin Falls Canal Co.	73,890 "

Assuming that American Falls rights could be permanently exchanged for Jackson Lake rights on the above average yield basis less 12.8% transmission loss, the amount of American Falls water so required would be

Minidoka Project	325,810	acre-ft.
N. S. Canal Co. 246,860 - 12.8%	215,260	"
T. F. Canal Co. 73,890 - 12.8%	64,440	"
Total	605,510	"
Am. Falls space owned by upper valley projects	265,853	"
Balance required from Govt. unsold space	339,657	"

This would still leave 433,593 - 339,657, or 93,936 acre-ft. of the Government unsold space in American Falls Reservoir.

After such exchange was made the amount of firm water suitable for new land projects would be

American Falls space	93,936	acre-ft.
N. S. Canal Co. bottom right in Jackson Lake	10,000	"
Minidoka bottom right in Jackson Lake after exchanging 265,853 with upper valley canals	59,957	"
Total	163,893	"

If the Twin Falls Canal Co. did not participate in the winter water conservation plan there would be 64,440 acre-ft. additional of American Falls water or 228,333 acre-ft. of firm water for new lands.

The Palisades water and Jackson Lake top rights could be lumped together and subscriptions to the combined space invited from existing projects. Any space not subscribed for could be added to the 163,893 acre-ft. of firm water and made available for new lands.

Probably all the upper valley owners of bottom rights in Jackson Lake will also be subscribers to Palisade space and the Palisade contracts could provide for a revision in the Jackson Lake contracts to the extent of permitting individual holdovers in Jackson Lake. Present lower valley projects having exchanged all their Jackson Lake water would not be affected by allowing holdovers at Jackson Lake.

Under the plan herein suggested the upper valley rights would all be in Palisade and Jackson Lake reservoirs and the present lower valley rights would all be in American Falls. Any new lands would have 93,936 acre-ft. in American Falls, 69,957 acre-ft. in the bottom of Jackson Lake, and whatever

additional water is not desired by existing canals in a combination of Palisade and top Jackson Lake water. The Jackson Lake top right is a much better right than the Palisade right and during the past 20 years has had an average yield of 76% of the full space. With holdover privileges in the top Jackson Lake space it would furnish much more water in dry years in the future than in the past. The acreage of new lands cannot be determined until the present canals decide how much of the combined Palisades and top Jackson Lake right they desire to acquire.

YIELD OF RIGHTS IN JACKSON LAKE IN ACRE-FEET

YEAR	NORTH SIDE CANAL CO.	TWIN FALLS CANAL CO.
1927	322,007	97,183
1928	322,007	97,183
1929	322,007	97,183
1930	298,730	89,930
1931	6,870	0
1932	263,154	78,700
1933	258,954	77,543
1934	5,258	0
1935	147,176	42,760
1936	322,007	97,183
1937	276,430	82,980
1938	322,007	97,183
1939	287,980	86,590
1940	145,358	42,158
1941	54,584	13,887
1942	294,680	88,670
1943	322,007	97,183
1944	322,007	97,183
1945	322,007	97,183
1946	322,007	97,183
Average 20 years	246,860	73,890
	= 76.66% of space	= 76.03% of space

The higher % yield of the North Side Canal Company right is due to 10,000 acre-ft. of bottom right included therein. The average % yield of the top right alone was 76.03%.

Exhibit
13

January 4th, 1951

COPY

Hon. Howard A. Stinson
Regional Counsel
Bureau of Reclamation
Box 937
Boise, Idaho

Dear Sir:

Since the death of Mr. James I have been appointed as attorney for American Falls Reservoir District No. 2.

One of the first things the Board of Directors urged me to do is to confer with your office concerning the district's rights to the natural flow of Snake River. Since the creation of the American Falls District No. 2 it has in many years been afforded use of the natural flow, in addition to its storage rights in American Falls Reservoir, for limited periods and in varying amounts. The Board of Directors feels that it is its duty to the users in the district to get this right crystalized and made more definite.

In recent years there has been a good supply of water and this perhaps has not been given too much prominence. However, we all understand that these years of abundance will not continue indefinitely, and so the Board feels that it should use its best efforts to get the water rights of the district in good order. There is the additional consideration that an increased acreage has been put into cultivation under the system, and also the Hunt project is developing, and from year to year increased demands are being made upon the river.

I believe this right in its original state was for 8000 second feet with priority of March 30, 1921, Idaho permit 15,134. Of course this permit has been whittled down to something like 1700 second feet. The Woodville decree which was entered in 1929 was designed to include the entire river, awards to the Secretary of the Interior for use upon projects which may become entitled to these waters by contract with the Government, this water right. Mr. Stoltemyer was district counsel for the Commissioner of Reclamation in 1928, and in that year amended said application 15,134 by adding the new lands in American Falls District No. 2, the amount of the additional acreage being given as 46,419.

It seems fairly well established by the various steps that have been taken that American Falls District No. 2 is entitled to this natural flow right to the extent of its canal capacity. Of course the right in a normal year would only be effective for ten to twenty days, but even so this is valuable to the users in the district.

The Directors and officers of the district will appreciate very much indeed if you will give this matter some thought and study and advise us what the attitude of your department is, and if consistent with your position in the matter also advise what can be done to make this right more definite and certain.

Sincerely yours,

Branch Bird, Attorney for
American Falls Res. Dist. #2

BB:gh

COPY

January 5, 1951

Mr. Branch Bird
Bissell & Bird
First Security Bank Bldg.
Gooding, Idaho

Dear Mr. Bird:

In reply to yours of the 4th instant, I have not discussed this matter with Bureau of Reclamation officials since my letter of August 8, 1948 to Mr. James.

I imagine, however, that the matter has been held in abeyance awaiting preparation of contracts for disposal of space in Palisades Reservoir and the Government space in American Falls reservoir. There are a number of questions about water rights, exchange of water between reservoirs, etc., that should be approved by the various waterusers, including your natural flow right, and it perhaps would be best to include them all in one agreement between the Government and the waterusers, in connection with Palisades agreements.

Very truly yours,

Watermaster.

cc: U. S. Bureau of Recl.,
Box 937, Boise

Exhibit
14

IN REPLY REFER TO

UNITED STATES
DEPARTMENT OF THE INTERIOR

150

BUREAU OF RECLAMATION
REGIONAL OFFICE, REGION I
BOX 937, BOISE, IDAHO

AUG 8 - 1952

Mr. Franch Bird
Attorney at Law
First Security Bank Building
Gooding, Idaho

Dear Mr. Bird:

I have your letter of August 6 concerning the language proposed to be inserted in the Palisades contracts as to the handling of water license No. 15134.

A further refinement of the language transmitted by Mr. Clinton's letter of August 4 has been suggested by the Watermaster, Mr. Crandall. That suggestion is reflected in the enclosed language which has been prepared so as to indicate wherein the language is different from the draft sent to you on August 4. If possible, Mr. Clinton and Mr. Stinson would like to meet with you sometime next week. August 13 or 14 would be convenient. If that meeting can be arranged, Mr. Crandall also should attend, and he said that he will if he can be given at least one day's notice. For that reason we suggest that the meeting be in Gooding. If either of the dates suggested is convenient, please call either Mr. Clinton or Mr. Stinson on Monday, August 11, so that arrangements can be completed with Mr. Crandall.

Sincerely yours,

(Signed) H. T. Nelson

Regional Director

Enclosure

Copy to: Mr. E. P. Parry, Twin Falls, Idaho
Mr. Lynn Crandall, Idaho Falls, Idaho
Mr. Ival V. Goslin, Aberdeen, Idaho

Note to Mr. Crandall: The enclosed language has been revised to meet the point raised by you in the telephone conversation on August 8 with Mr. Stinson.

34. (b) In connection with Idaho Permit No. 15134, a direct diversion permit with a priority date of March 30, 1921, held in connection with American Falls Reservoir, the United States may contract with American Falls Reservoir District No. 2 to recognize the right of that district to have water license No. 15134 exercised substantially as follows:

> American Falls Reservoir District No. 2 to have the right to divert as natural flow during each irrigation season under water license No. 15134, having a March 30, 1921 priority, as follows: From May 1 of each irrigation season continuing during that season so long as there is natural flow available for that priority, the first 1,700 cubic feet per second of flow to be available one-half (1/2) to American Falls Reservoir District No. 2 and one-half (1/2) to American Falls Reservoir, except that in any year in which American Falls Reservoir is full to capacity on April 30 or fills after that date, ~~[illegible]~~ taking into account any water that may be temporarily stored to its credit in upstream reservoirs, all water diverted by American Falls Reservoir District No. 2 within the maximum of 1,700 cubic feet per second during the ~~[illegible]~~ year prior to the initial storage draft on American Falls Reservoir after the reservoir finally fills in that year shall be considered as natural flow under water license No. 15134. Nothing herein shall prevent American Falls Reservoir District No. 2 from

diverting water under said license prior to May 1 of a given irrigation season but all such diversions shall be charged as storage in the event the Reservoir is not full on April 30 of that season or does not fill after April 30 of that season.

Water available at American Falls Reservoir for the March 30, 1921 priority under water license No. 15134, other than that to be available to American Falls Reservoir District No. 2 as above provided, to be available for storage in American Falls Reservoir.

The contract by the United States with American Falls Reservoir District No. 2 shall be on the condition, however, that that district assume its proportionate share of the obligation for the cost of replacement power under the provisions of article 24. When such contract has become operative, the United States shall make application to the State of Idaho for amendment of water permit No. 15134 and the issuance thereunder with a priority date of March 30, 1921, requiring that the remainder of the right under the permit, 6,309 second-feet, to the extent such right remains outstanding, be used for storage in American Falls Reservoir, such right, however, if issued to the United States not to carry voting privileges in water users meetings under the laws of the State of Idaho. Such application shall, however, leave unaffected reservoir permit No. R-269 having a priority dated March 20, 1921.

Aberdeen-Springfield Canal Company

Telephone 26

Aberdeen, Idaho

August 1, 1952

Mr. H. R. Stinson, Regional Counsel
U.S. Bureau of Reclamation
Box 937
Boise, Idaho

Dear Mr. Stinson:

I have carefully studied your letter of July 29, 1952 to Mr. Crandall, your Substitute Language, Article 34 (b), Palisades Contract (R.O. Draft - 7/29/52), and Mr. Crandall's letter of July 30 to you, all pertaining to the 1700 second-foot right of March 30, 1921 priority.

With due respect to your efforts in drafting your substitute language for Article 34 (b), I am firmly of the opinion that the language proposed in Mr. Crandall's letter of July 30 better expresses the intent of the original order than does yours, and, as you will undoubtedly remember from our previous negotiations, we have been agreed that the 1700 second-foot right of the American Falls Reservoir District # 2 should follow the Secretary of Interior's order of 1936 as closely as practicable.

The language pertaining to this 1700 sec-ft. should be very specific and well-defined in the contract in order to reduce the chances for disagreement or misunderstanding in the future. There are many irrigation companies on the river which do not realize the significance of the Secretary's order or the fact that there are two water right filings on the river dated March 30, 1921.

Among the specific reasons why I prefer Mr. Crandall's language to that of yours are:

(1) Your language would divide the 1700 sec-ft. of March 30, 1921 priority 50-50 between the American Falls Reservoir District # 2 natural flow right and the American Falls Reservoir storage right beginning April 1 instead of May 1. If during some year during April there were 1700 sec-ft. available for the March 30,1921 priority and half of it were not stored in the reservoir there would be a loss of over 50,000 acre-ft. to the reservoir storage.

Aberdeen-Springfield Canal Company

Telephone 26

Aberdeen, Idaho

(2) Your language does not define the American Falls Reservoir storage right between October 1 and May 1.

(3) Your language does not, except by inference, state what disposition is to be made of water available for the March 30, 1921 priority in excess of one-half of 1700 sec.-ft.

Unless you have some specific objections to it, I wish that you would seriously consider the more definite language proposed by Mr. Crandall.

Sincerely yours,

IVC:ei

Ival V. Goslin

IN REPLY REFER TO:

150

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

REGIONAL OFFICE, REGION I
BOX 937, BOISE, IDAHO

August 1, 1952

Mr. Lynn Crandall
Watermaster, District No. 36
Idaho Falls, Idaho

Dear Lynn:

A review of the substitute language set forth in your letter of July 30 gives rise to two questions in my mind on which I need to be clear before the exact language to be written into the contract can be worked out. It is my understanding, as it is yours, that the right to be made available to the Gooding Division is to be substantially as stated in the Secretary's order of 1936, but with some modifications.

One of the modifications that I have understood has to be made was to permit the District to make diversions as natural flow during the month of April as well as in other months of the irrigation season. That was indicated in your letter of August 5, 1948, to the District. If the District is to have that privilege during April, then your substitute language will have to be revised somewhat.

The other modification that may be necessary concerns the operation in years when American Falls Reservoir fills and spills. It is my understanding that there are years in which there are storage drafts before the maximum storage is finally reached. I do not know what your method of accounting has been in those circumstances, but it seems to me that the language of your draft might have to be read as cutting down the District's right to natural flow from the date of the initial storage draft even if that draft was in advance of the final filling for the season. Is that intended?

I have made a further redraft of the language for insertion in the Minidoka-Palisades contract in an attempt to cover the two points here discussed, but along the lines of your draft. However, I want to look at it again tomorrow morning and may wait to discuss it with Mr. Parry before trying it on you.

Sincerely yours,

Samuel R. Stinson

Regional Counsel

Enclosure
Copy to: Mr. R. P. Parry, Twin Falls, Idaho
Mr. Ival V. Goslin, Aberdeen, Idaho

Idaho Falls, Idaho
Aug.2,1952.

~~150~~
Reference 150

Mr. H.R.Stinson,
Bureau of Reclamation
Boise, Idaho.

Dear Mr. Stinson,-

In reply to yours of the 1st inst.;-

It was my intention that the Gooding Canal should be entitled to divert natural flow water during April provided the reservoir later filled but otherwise the April diversions would be charged as storage in accordance with the Secretarys present order.

In some years the reservoir has filled, then storage draft occured, and later more water became available for storage that in some years refilled the reservoir and in some years did not entirely refill it. The Gooding project would be entitled to natural flow for all of its diversions, up to 1,700 sec.ft., prior to the date when storage draft first began after the latest filling date each year. If the reservoir only partially refills after the first storage draft the Gooding Project gets as natural flow ½ of the first 1,700 sec.ft. of any water later available for the 1921 priority.

You can doubtless modify the language I suggested to make these matters clearer. The foregoing is the way we have operated under the present order.

Yours truly

Watermaster

CC; R.P.Parry
Ival Goslin.

Exhibit 15

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
Region 1
P. O. Box 937 - Boise, Idaho

December 7, 1948

Mr. John E. Kelley, Chairman
Snake River Committee of Nine
Shelley, Idaho

Dear Mr. Kelley:

At the meeting of the Committee of Nine, myself, and others of my staff in Idaho Falls on December 23, 1947, tentative agreement was reached on some major aspects of the American Falls-Palisades reservoirs water problems. Since that meeting, modifications and additions to those proposals have been suggested by various interested parties. In the circumstances, it seems desirable that there be now a restatement in one document of all the essential conditions and provisions that must be agreed to in principle by the interested water users and the United States, and of the actions that must be taken in order to clear Palisades Dam for major construction activities. Such a document may serve also to bring to a head some as yet unsettled aspects of these water problems.

The conditions and provisions in question fall into two major categories:

I. There are, first, those with respect to the saving of winter water, the definition and redefinition of the various storage rights, existing and to be acquired, and some aspects of the operation of Palisades and related reservoirs.

II. The second category covers the matters as to disposition of the reserved American Falls space and the terms concerning the purchase of American Falls and Palisades space.

I

In the first category the essential provisions, in principle, are these:

1. Winter water savings resulting from the elimination of winter diversions in the upper valley (above American Falls Dam) to the amount of 135,000 acre-feet as an

annual average shall be assured contractually, the savings to be effected through the stopping of winter diversions for a total of five months out of the period from November 1 through April 30 of each winter season. The savings will be credited annually to Palisades Reservoir with priority over the American Falls Reservoir right, and will be allotted to the Palisades space of contracting upper valley canal operators in the proportion that the acreage irrigated under each operator's canal bears to the total acreage irrigated under canals governed by winter savings contracts. The amount to be credited in any year to each contractor will be limited to the amount required, with holdover, to fill the Palisades space of that contractor.

2. The North Side Canal Company shall be recognized as having the right to divert at Milner Dam for domestic and livestock uses not to exceed 126,000 acre-feet during the winter months of November to March, inclusive, of each year. This limitation will operate substantially as follows:

If, taking account of all storable water whether stored or not, Palisades and American Falls reservoirs fail to fill during any storing season (November through March), any water diverted by the North Side Canal Company during that storing season in excess of 126,000 acre-feet (but not to exceed the amount of deficiency in fill) will be charged as of the end of the storing season against the Company's allotment of American Falls storage.

Beginning with the irrigation season immediately following the first storing season during which the North Side Canal Company eliminates all winter diversions, the Company shall have the right to store each year in Palisades space, or in American Falls space to the extent that such will not be detrimental to other American Falls storage rights, an amount of water equivalent to that which it could have diverted as winter water without charging against storage under the preceding formula, this storage right to have the same priority as rights of the upper valley users as defined in 1 above.

A similar storage right in the amount of 150,000 acre-feet shall be available to the South Side Twin Falls Canal Company beginning with the first irrigation season immediately following the storing season in which that Company eliminates completely its winter diversions from Snake River.

3. There shall be either:

(a) A permanent exchange of rights in Jackson Lake space assigned to the Minidoka Project for rights in the same amount of space in American Falls Reservoir held or to be held by upper valley users, with provisions to this effect:

> In any year in which the allotment of seasonal storage in the American Falls Reservoir space assigned to the Minidoka Project as the result of such a transfer (325,810 acre-feet of space), plus any carryover in that space, is not sufficient to fill that space completely and it is found that the per cent of fill from seasonal storage of Jackson Lake bottom space exchanged for American Falls space by upper valley canals is greater than at American Falls, the difference between the two will be credited to the Minidoka Project's 325,810 acre-feet of American Falls space and charged to the Jackson Lake bottom space exchanged for American Falls space by upper valley canals, but not in an amount exceeding that required to fill that American Falls space;

or

(b) A redefinition of rights in the top space in Jackson Lake so as to accord to that space the right to hold over from one irrigation season to the next any Jackson Lake water credited to top space and not used, the total storage credited to top space, however, never to exceed the top space available.

Under (a), the amount of the outstanding construction cost obligation as of the date the exchange is effected and thereafter and the parties responsible therefor shall be determined as though no exchange had been made, but the exchange will be conditioned on a redefining of Jackson Lake space so as to provide like holdover privileges to all parties having rights therein. And in any redefinition of Jackson Lake rights there will be recognized the right of the United States, after consultation with the water users, to lower Jackson Lake each fall (but not beyond the point which can be refilled the following spring) in order to avoid damage to the dam during winter weather.

4. To the extent of space in Palisades Reservoir contracted for by lower valley users, there shall be, so far as possible, provisions for (a) a permanent transfer of that space and priority to American Falls Reservoir, and, correspondingly, the transfer from American Falls to Palisades of a like amount of American Falls space, with its priority, in which contract rights are held by upper valley users; and (b) such other transfers of water between the two reservoirs as can be made without detriment to any American Falls storage rights.

5. All who contract for either American Falls or Palisades space shall agree that, to permit greater conservation of water, storage water accruing to American Falls, Palisades, or Jackson Lake reservoirs may be held temporarily in unoccupied space in and may be exchanged among any of these reservoirs, but such exchange or temporary retention of water in other reservoirs shall not deprive any contractor of any water accruing to its storage rights. This privilege shall extend to the transfer of Jackson Lake water to American Falls during the storing season for the purpose of maintaining a minimum firm power production at Palisades, to the extent that this can be done without loss to contractors having rights in Jackson Lake.

6. Because Palisades Dam, a multiple-purpose project, has as one important function the control of floods, it is necessary that its operation for that purpose be in accord with rules and regulations to be laid down by the Secretary of the Army in accordance with the provisions of section 7 of the act of December 22, 1944 (58 Stat. 890). Agreement has been reached between the Department of the Interior and the Department of the Army as to the basic operating plan so far as flood control operations are concerned. All contracts for Palisades space will necessarily be made subject to that plan and the implementing regulations issued under section 7 of the 1944 Flood Control Act. There is enclosed a statement of that operating plan—a plan that was worked out most carefully by the Bureau of Reclamation and the Corps of Engineers with the object of obtaining the maximum amount of flood control benefits and nonreimbursable cost allocations, while permitting the making of the use of all of the space in Palisades for irrigation. Appropriate provisions for the equitable proration of shortages, if any, resulting from the failure of Palisades Reservoir to fill as the result of operations under that plan will be included in contracts for Palisades space.

The priority for special storage rights in Palisades Reservoir, in connection with the winter water savings program, raises a water-right problem that needs consideration. This and some other water-right problems are proposed to be made the subject of special discussion with all interested water users at a later date.

II

In the second category the essential provisions, in principle, are these:

1. Of the 433,593 acre-feet of American Falls reserved space, 315,000 acre-feet will be made available under contract to water users who have heretofore leased this space; 71,000 acre-feet will be made available for the Michaud Flats area; and 47,593 acre-feet for the North Side Pumping Division of the Minidoka Project.

2. As to price and terms of repayment:—

American Falls space will be made available at its cost less that portion of the rentals heretofore realized from the entire reserved space which the Secretary of the Interior finds to be properly accounted for as return of investment. This portion of the rentals will be distributed ratably, as nearly as practicable and equitable, between the total of the space to be sold to prior lessees (315,000 acre-feet) and the total of the space to be allocated to the North Side Pumping Division (47,593 acre-feet). In determining American Falls costs, account will be taken of, among other things, costs heretofore allocated to power if it is finally determined by the Secretary that power is not to be developed at American Falls Dam.

The price tentatively set for Palisades space is $7.75 per acre-foot. This amount is considerably less than the estimated costs properly allocable to irrigation. The actual costs allocable to irrigation are dependent, of course, on what actual construction costs are and on action by the Congress recognizing allocations of costs on a nonreimbursable basis to purposes not heretofore recognized by the Congress with respect to this project (recreation and fish and wildlife benefits) and on the proposed increase in allocations by reason of increased flood control benefits. The difference between irrigation costs and the amount to be repaid, it is proposed, will be met from power revenues, on the assumption that the United States can build the project for substantially the present estimate of cost.

Construction costs to be assumed by water users will be repayable without interest over a period of not to exceed 40 years, these terms and other repayment provisions being those provided principally by the Reclamation Project Act of 1939 (53 Stat. 1187).

3. No solution has yet been reached as to the difficult problem arising out of the interference with winter power production at Minidoka Dam that will result when, and if, winter diversions for the North and South Side Twin Falls tracts are eliminated and that water is stored at American Falls or Palisades, but we are proposing to proceed now without reaching a solution. The solution ultimately to be reached, however, will require recognition by those having rights to American Falls or Palisades space that some part of the costs associated with winter water savings and the operation of an equitable settlement of the related power problem at Minidoka Dam may properly be chargeable to the water users benefiting from winter water savings.

4. Repayment contracts for American Falls and Palisades will be entered into directly with various districts and, with possible exceptions, canal companies. It will not be necessary ordinarily to organize reservoir districts covering several different canal companies as was the case with American Falls Reservoir. It will not be the policy of the United States, however, to enter into contracts with individual landowners desiring to contract for space in either reservoir.

5. The Federal Reclamation Laws provide that as a condition to receiving water from a Federal reclamation project the owners of excess land (160 irrigable acres for a single person and 320 acres for a man and wife are the maximum permitted holdings) shall agree to sell their excess lands for their appraised value, and that water shall not be delivered to land held in excess ownership so long as the construction obligation owed to the United States and apportionable to that land remains unpaid. It is the policy of the United States, also, with respect to nonexcess new land, to reduce speculation in land by controlling its resale price to a limited extent through so-called incremental value contracts. These provisions will be applicable to lands to be served by American Falls and Palisades space. They will, of course, have special significance with respect to the Michaud Flats area and the North Side Pumping Division.

The repayment contracts will recognize the right of companies and districts to resell space under contract in either reservoir or to rent such space from time to time, but only with the approval of the United States and only on provisions such as will preclude the companies or districts from realizing a profit either from the resale or rental of water.

Proceeding with the main contracts for construction of Palisades Dam is, as the Bureau now sees it, contingent on having the various conditions and provisions assured by contracts with all the necessary water users. The execution of such contracts is, however, contingent on the enactment of legislation by the Congress to cover the disposal of American Falls reserved space and the recognition of additional purposes to be served by Palisades Dam as the basis of additional nonreimbursable allocations. It is the Bureau's plan also to cover by such legislation the authorization of the North Side Pumping Division and possibly the Michaud development. However, depending on procuring the requisite advance assurances, it is now planned to proceed with some preliminary construction contracts early in February 1949.

Both in order to make the preliminary start on construction and as a basis for drafting and presenting to the Congress the necessary legislation, the Bureau wishes to obtain immediately, by means of resolutions from the governing boards of the various companies and districts, acceptance by the appropriate companies and districts in principle of the conditions and provisions stated above.

Acceptance of point 1, category I, should be indicated by substantially all the companies and districts operating canals in the upper valley. There must be assured as a minimum, through curtailment of winter diversions, an average annual savings of 135,000 acre-feet of water.

Acceptance of point 2, category I, should be indicated by the North Side Canal Company.

In connection with point 3, category I, it is our hope that all parties now having storage rights in Jackson Lake will indicate acceptance, but for our immediate purpose it will be enough to have acceptance by the top right and upper valley contractors, it being understood that the privilege of contracting for Palisades space or for additional American Falls space will be conditioned on acceptance of this point.

Acceptance of point 4, category I, should be indicated by all upper valley users having or expecting to contract for rights in American Falls Reservoir, and lower valley users expecting to contract for Palisades space.

Acceptance in principle should be indicated as to points 5 and 6, category I, and all points of category II, by all companies or districts expecting to contract for American Falls or Palisades space. In addition, there should be, with respect to American Falls space, an indication of concurrence in the apportionment of the 315,000 acre-feet of American Falls space as

shown in Mr. Crandall's letter to me dated March 23, 1948. Redistribution of that amount will presumably be the subject of a further recommendation by your committee if any of the prospective contractors fail to indicate the intention to proceed on the basis of the conditions and provisions herein stated. Also, we wish to have a current statement by each company and district of the amount of Palisades space it intends to contract for on the basis above set out.

Sincerely yours,

R. S. Marshall

Regional Director

Enclosure

Operating Plan Referred to in Point 6 of Category I of Mr. Newell's Letter of December 7, 1948, to Mr. John E. Kelley.

D R A F T

Palisades Project
Operating Plan for Palisades Reservoir

The Bureau of Reclamation plans to construct and operate Palisades Reservoir for the optimum multiple-purpose use of the entire storage of 1,400,000 acre-feet. To attain this objective, the storage below elevation 5,497 feet mean sea level, approximating 200,000 acre-feet, will be reserved for dead storage and allocated exclusively to the production of hydroelectric power and the maintenance of a permanent pool for the preservation and propagation of fish and wildlife. The remainder of the storage capacity in the amount of 1,200,000 acre-feet will be operated in the joint interests of irrigation and flood control governed by the best available run-off forecasts.

The Bureau of Reclamation will forecast from time to time during the period from February 1 to July 31 of each year, on the basis of precipitation, temperature, snow survey and run-off data, the volume of run-off that may be expected in the drainage area tributary to the Snake River above Heise, Idaho. To the extent that such services can be arranged for by cooperative agreements, the Bureau of Reclamation will make the forecasts hereunder after consultation with the Reclamation Engineer of the State of Idaho or his authorized representative, and the Chief of Engineers or his authorized representative. To facilitate the forecasting of run-off the Bureau of Reclamation will expand the existing hydrologic network and will establish and operate continuously a system for the efficient assembling and analyzing of the basic data. Until such time as a better method of forecasting be devised, the forecasts will be based upon

estimates of area-elevation weighted snow water content as determined from periodic snow surveys on or about February 1, March 1, April 1, and May 1, and upon precipitation for September of the preceding year. A sample curve of the correlation between weighted snow water content on April 1 of a given year plus precipitation of the preceding September and the resultant run-off from April 1 to July 31, inclusive, of the year in question, is shown on Plate II.

To the end of accomplishing the optimum multiple-use of the reservoir, the Bureau of Reclamation, beginning with the first year the reservoir is put into operation, will operate the reservoir on the basis of the forecasted run-off as nearly as practicable in accordance with the following plan:

1. For the purpose of rules and regulations to be prescribed by the Secretary of the Army under section 7 of the Flood Control Act of 1944 (58 Stat. 887, 890) the storage space allocated to flood control is defined as follows:

> It is the reservoir space which, using the governing forecast of flood run-off for the year, according to the curves shown on Plate I is required to the end of controlling the forecasted flood volume from the time in that year that reservoir inflow first exceeds 20,000 second-feet through the succeeding July 31 by releases from the reservoir during that period such that the flow at the Heise gage will not exceed 20,000 second-feet, in so far as this control can be accomplished with a reservoir capacity not exceeding 1,200,000

acre-feet. The governing forecast of flood volume for each year is the forecast made as of the day when reservoir inflow in that year first exceeds 20,000 second-feet.

The parameters shown on Plate I, empirically derived from floods of record, are enveloping curves of the storage requirements for various volumes of total forecast run-off from any given date to July 31. The reservoir capacity required to control the flood to a discharge of 20,000 second-feet (or less) below the dam is indicated by the ordinate of the parameter corresponding to the forecasted run-off on the date when the inflow to the reservoir exceeds 20,000 second-feet.

2. During the period of each year from the date of the first forecast about February 1 to the date of making the governing forecast for that year (approximately the middle of May) herein designated as the evacuation period, the reservoir will be operated in such a manner that the required reservoir level as determined by the parameters on Plate I at the time inflow to the reservoir exceeds 20,000 second-feet can be attained with minimum practicable rates and fluctuations of discharge. The rate of discharge during the evacuation period would be determined as follows: The reservoir level required on or about May 15 (the date on which inflows normally may be expected to exceed 20,000 second-feet) would be estimated by use of the parameters on Plate I and a May 15 forecast would be derived by deducting probable minimum inflows for the intervening period

from the date of periodic forecasts beginning on February 1. The reservoir levels thus estimated would comprise tentative allocations of flood control space at which to aim the evacuation procedure. The rate of discharge then would be selected as that required to release the probable maximum inflow for the period between date of forecast and May 15 plus the evacuation necessary to attain the required reservoir level indicated by the latest tentative allocation.

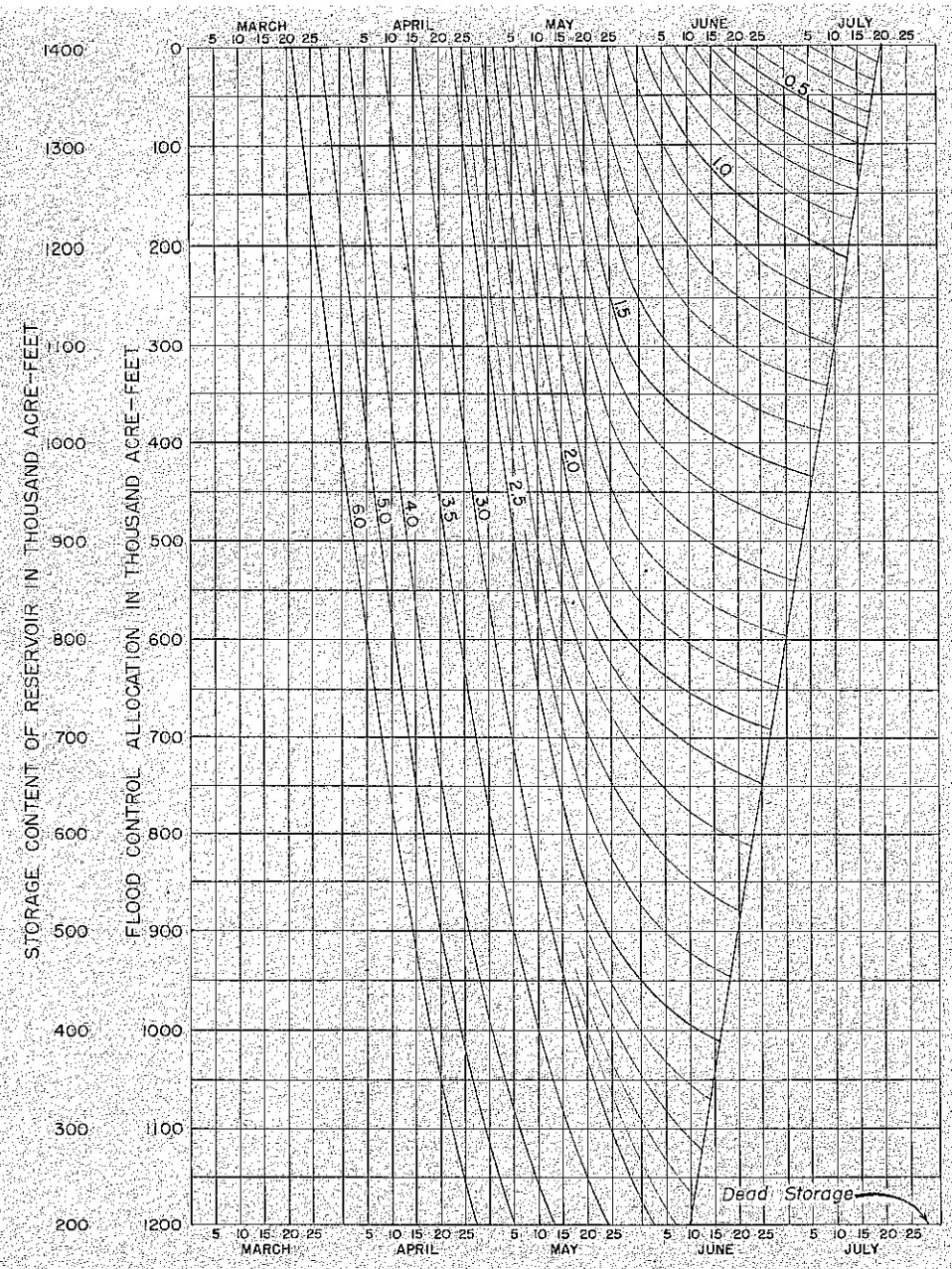
3. From the date of the governing forecast each year through July 31 of that year herein designated the filling period, the reservoir shall be operated in such a manner that the reservoir content shown on the chart (Plate I) will be maintained but not be exceeded except when storage above those levels is required to limit the flows to 20,000 second-feet at Heise. When the forecasted run-off indicates a required storage capacity in excess of the total active storage capacity of the reservoir, releases in excess of 20,000 second-feet will be made as required but at rates not to exceed 30,000 second-feet, except as indicated in paragraph 4 below.

4. Whenever the pool shall have risen above elevation 5,620, the full reservoir level, due to an extraordinary excess of inflow over the maximum releases permitted under paragraph 1 or is expected to rise above that level within the next 48 hours, releases may be increased temporarily above those previously specified, so as to minimize the peak rate of release and to draw the reservoir down to the full reservoir level as rapidly

as possible. However, the maximum rate of such extraordinary release shall not exceed the estimated maximum mean daily rate of inflow to the reservoir during the period when the reservoir level is above elevation 5,620.

5. All reservoir releases made as herein provided are subject to the condition that no releases shall be made at rates or in a manner that would be inconsistent with whatever operating rules and regulations are laid down by the Chief Engineer of the Bureau of Reclamation for the purpose of protecting the dam and reservoir from damage.

If operating experience indicates the desirability therefor, the Secretary of the Interior may, after consultation with the Secretary of the Army, modify from time to time the operating plan herein described with respect to the amount of space allocated to flood control each year on the basis of advance forecasts as to run-off, but no modification which would result in a substantial change in the control of floods herein stated to be the objective of the original operating plan shall be made without the concurrence of the Secretary of the Army. Revisions of the rules and regulations prescribed under the Flood Control Act of 1944 will be made by the Secretary of the Army if, in his judgment, these are requisite because of such modifications in flood control space allocations. Modifications in the operating plan not requiring the concurrence of the Secretary of the Army shall not be the occasion for a revision of the conclusions originally reached as to the flood control benefits to be realized from the original operating plan or of the formula adopted for the allocation of construction costs to flood control purposes.



NOTES:

1. Parameters are anticipated flood run-off of Snake River at Heise in millions of acre-feet for the remainder of the season from any given date to July 31. The anticipated run-off is the forecasted flow at Heise less the storage capacity available in Jackson Lake. A minimum of two hundred thousand acre-feet of storage space in Jackson Lake will be held vacant until May 1 of every year unless the forecast indicates that storage should begin earlier to insure filling that space.

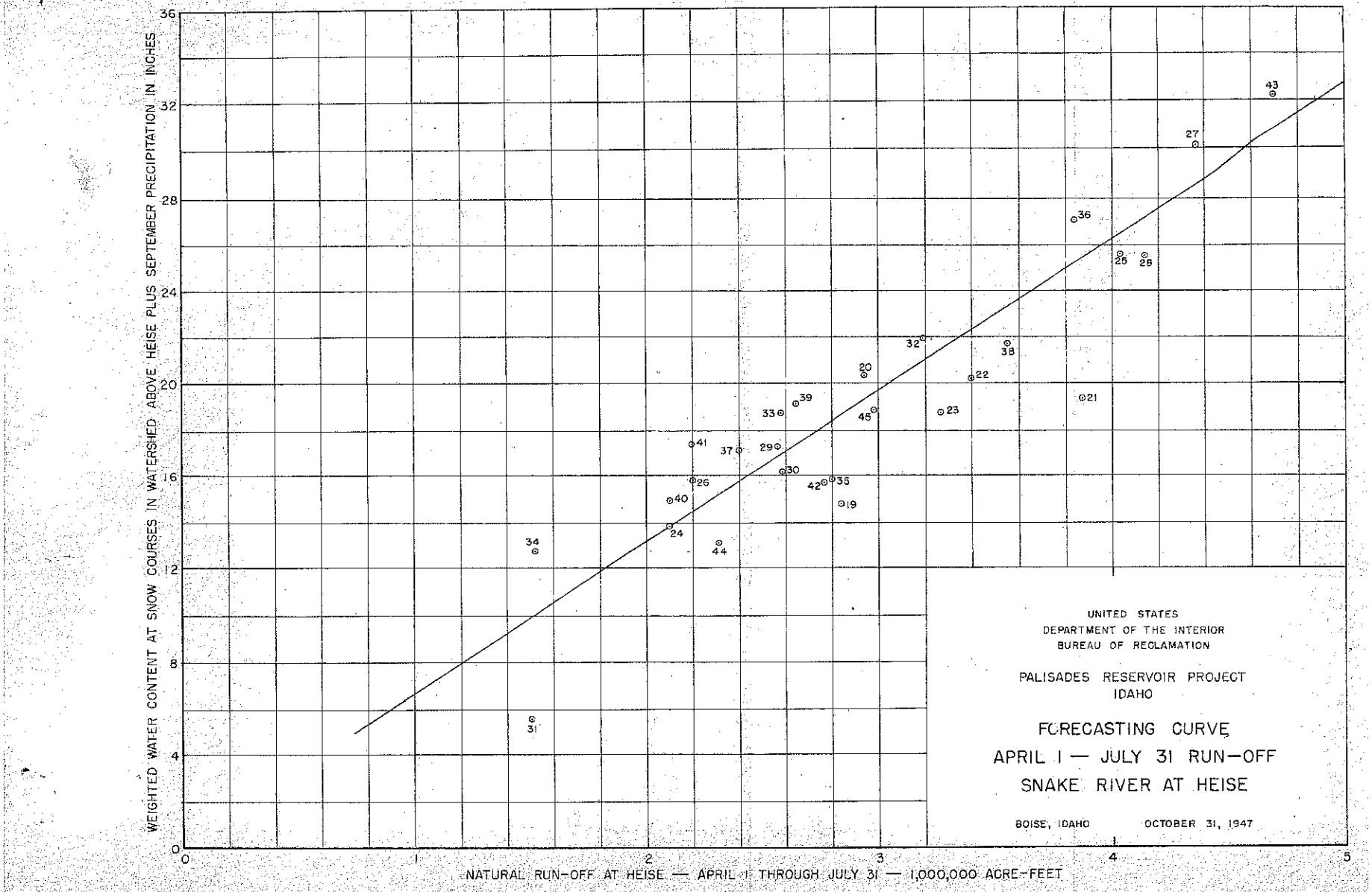
2. Storage reservation based upon a release which would give a maximum regulated flow at Heise of twenty thousand second-feet.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

PALISADES RESERVOIR PROJECT
IDAHO

ALLOCATION OF FLOOD CONTROL SPACE

BOISE, IDAHO OCTOBER 31, 1947


WEIGHTED WATER CONTENT AT SNOW COURSES IN WATERSHED ABOVE HEISE PLUS SEPTEMBER PRECIPITATION IN INCHES
0
4
8
12
16
20
24
28
32
36
0
1
2
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4
5
NATURAL RUN-OFF AT HEISE — APRIL 1 THROUGH JULY 31 — 1,000,000 ACRE-FEET
43
27
36
25
28
32
38
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22
21
39
33
45
23
41
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31
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
PALISADES RESERVOIR PROJECT
IDAHO
FORECASTING CURVE
APRIL 1 — JULY 31 RUN-OFF
SNAKE RIVER AT HEISE
BOISE, IDAHO
OCTOBER 31, 1947

Exhibit 16

In Reply Refer To:

440

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P
Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Reclamation
Washington 25, D.C.

June 17, 1952

Memorandum

To: Secretary of the Interior

From: Commissioner, Bureau of Reclamation

Subject: Repayment and Water Savings Contracts—Minidoka and Palisades Projects

I present herewith for your consideration in connection with the Palisades Project in Idaho a form of contract proposed to be entered into under the terms of the Act of September 30, 1950 (Public Law 864, 81st Congress) with various water users organizations in the Snake River Valley. Contracts are required to be entered into with some 55 different companies and districts and a number of special provisions will be required to meet special problems. It is believed, however, that in the form attached, identified as Form A, are provisions of the kind needed to meet all major problems that will be encountered, and this form will be found suitable in its entirety in a majority of the cases. In any event, it is being presented for your consideration now as a vehicle for establishing policies and provisions to be used even in the cases that may require handling by a somewhat different form of contract.

The regional office of the Bureau of Reclamation has been carrying on negotiations with a representative committee of the 55 water user organizations concerned since early in 1951, but only as recently as May 17 reached agreement with that representative group (South Fork Reservoir Committee) on the major issues involved in the negotiations. Secretary Krug, in reporting on the bills that finally became the Act of September 30, 1950, stated to Senator O'Mahoney in a letter of August 10, 1949, that enactment of that legislation would constitute a long step forward in the development of the water resources of the Snake River Valley in Idaho and in the settlement of an extremely complicated water right problem in that area. With the agreement having been tentatively reached with the South Fork Reservoir Committee and your approval of the proposed contract provisions, the remaining steps in the negotiation and formal execution of the contracts can be taken rapidly, and the settlement of the water right problem will be accomplished.

The principal purposes to be served by the proposed contract are these:

1. To make available to each contracting entity a part of the active capacity of Palisades Reservoir and to provide for the repayment of the part of the costs of that capacity that is to be repaid by the water users. In keeping with the provisions of section 1 of the 1950 Act and House Document No. 720, 81st Congress, 2d Session, the contract provides that the maximum construction charge obligation against each acre-foot of space in Palisades reservoir shall be $9. Disregarding the space that may ultimately be used for the Grays Lake exchange as provided by section 1 of the 1950 Act, the total amount of construction cost of Palisades dam and reservoir to be repaid by the water users under contracts with repayment provisions similar to Form A will be $10,305,000.

2. To provide for the use of a part of the 315,000 acre-feet of American Falls Reservoir reserved space that is, by section 3 of the Act, to be made available to water users heretofore having had the use of that space under lease arrangements between the United States and the American Falls Reservoir District. Such American Falls space is to be paid for at its original cost (about $4.35 per acre-foot) less net rental revenues that will accrue to 386/434ths of American Falls reserved space until the date Palisades Reservoir is ready for storage. The net rentals accrued to December 31, 1951, total $901,806, thus averaging $2.86 per acre-foot of reserved space. The actual distribution of that net revenue is indicated by the attached table entitled "American Falls - Distribution of Revenues from Leased Space". The proposed distribution of the 315,000 acre-feet of American Falls reserved space is indicated by the attached table entitled "American Falls, Jackson Lake, and Palisades Space - Minidoka Project". The remainder of the reserved space—119,000 acre-feet—is dedicated to development of new irrigable lands in the Michaud Flats area and in the North Side Pumping Division of the Minidoka Project.

3. To effect the saving of water for irrigation use, both by provisions for curtailments in the winter diversion of water for stock and domestic use in areas the return flows of which are not tributary to the Snake River above Milner Dam and by curtailment of winter power operations at the Minidoka powerplant. The achievement of the definite contractual arrangements to save 135,000 acre-feet annually in the first category of curtailments here described was, by

the 1950 Act, made a condition to the continuing of construction beyond December 31, 1952. Under the authority given to you by statute, you have heretofore established the controlling date as June 30, 1952. But in view of the agreement reached with the South Fork Reservoir Committee and the fact that actual execution of the repayment contracts including the water savings feature cannot reasonably be expected to be accomplished before early fall, it is believed now that you should exercise your discretion to extend the date to the full extent permitted by the statute. The agreement to continue a curtailment of winter power operations at the Minidoka Dam is a major accomplishment. Since 1934 the United States has carried on a water savings program at the Minidoka Dam without fully compensating the Burley and Minidoka irrigation districts for the resulting decrease in net power revenues and without formal arrangements with the beneficiaries. It is believed highly desirable, therefore, to formalize arrangements for continued winter water savings operations at the Minidoka Dam and to agree on a plan whereby the beneficiaries of that water saving program—the holders of irrigation storage rights in American Falls, Island Park, and Palisades reservoirs—would participate in the cost of the curtailed power operation. Such a plan is represented by the provisions of article 24 of the attached draft, and the plan is acceptable to the Burley and Minidoka irrigation districts of the Minidoka Project, the two districts entitled to net power revenues resulting from Minidoka powerplant operations. The plan in general involves the providing of replacement power to the Minidoka power system to the extent required by reason of a curtailed power operation. The cost of the replacement power will be apportioned among the holders of the storage rights in the three reservoirs above named. It is proposed that the plan would go into operation beginning October 1, 1952. The initial annual cost to beneficiaries will be $23,000, and will continue at about that rate if the runoff for the past 20 years is representative of future water conditions. Such curtailment of power operations at Minidoka dam will realize the saving of about 450,000 acre-feet of water annually during a repetition of dry cycles such as occurred in the early 1930's.

4. To effect a permanent exchange of storage rights as between American Falls and Jackson Lake reservoirs. There are now 335,810 acre-feet of bottom right storage space owned in Jackson Lake, the reservoir farthest upstream, which rights are for the benefit of lands downstream from American Falls reservoir. There are, on the other hand, rights to American Falls reservoir storage owned by companies and districts upstream from American Falls reservoir. It has been necessary,

therefore, through the years to work out temporary annual exchanges. Under the permanent exchange plan that will now be carried out, the annual exchanges except in a few instances will not be required.

5. To provide that during the first five years beginning with the date the first unit of the Palisades powerplant is ready for service, that powerplant may be operated to a greater extent than it would normally be operated during the period October through February of each storage season if the flow of the river at the dam is equal to or greater than that for that period of the median year during the period 1928 through 1947 if such extraordinary operation is required to meet defense loads. Such power operation is consistent with the representation that was made by this Bureau to the Defense Electric Power Administration in connection with the determination by the latter agency that there was justification for initiation of construction of the project at this time by reason of its relation to the requirements of the Nation for power in the defense emergency.

The additional irrigation water covered by these contracts that will result from the construction and operation of Palisades Dam will be used almost entirely as supplemental and insurance water in connection with irrigated lands already developed in the Snake River Valley above Milner Dam. One or two of the existing districts or companies may wish to attempt an expansion of their irrigable area based on additional storage that will now be made available. With this possibility in mind, the attached draft of contract includes standard provisions to control speculation on non-excess lands, if the new land to be served by any company or district exceeds 1,500 acres in new farms not previously irrigated. Such land may be served only pursuant to arrangements to be made with respect to the sale price of such new lands during the first five years that water is made available to them. With respect to all lands irrigated and to be irrigated, all contracts will provide that project water shall not be delivered to any such irrigable lands held by any one owner in excess of 160 acres so long as the construction charges with respect to that owner's land remain unpaid. Provision is made, however, for delivery of water to excess lands after the owner thereof executes a recordable contract pursuant to the provisions of section 46 of the Act of May 25, 1926 (44 Stat. 636).

As indicated earlier in this letter, the form of contract attached is not one that will fit all situations that need to be met in contracting with the some 55 companies and districts involved. It now appears that a special form of contract will be required with respect to the North Side Canal Company, the company that will have the largest

single interest in all three reservoirs. A special contract will also be required to meet the problems of the Burley and Minidoka irrigation districts. Other contracts will have to be varied from the attached form, depending on whether the contracting entity now owns space in both American Falls and Jackson Lake reservoirs and whether it is seeking to acquire additional rights in either or both American Falls and Jackson Lake reservoirs. In general, each contractor will be required to give consent to the special arrangements governing the curtailment of winter diversions for domestic and livestock purposes and to the curtailed winter power operations. In general, also, it will be the plan, wherever practicable, to restate the existing obligations and rights of the contracting entities so that all rights of the entity in the entire reservoir system will be represented by but one contract.

I recommend that you approve (1) the attached form of contract as the general basis and pattern for contracting with the some 55 irrigation districts and canal companies which will receive primarily a supplemental water supply from the Palisades project and that you delegate to me with authority to redelegate to the Regional Director the authority to make necessary adaptations to meet special problems and conditions of certain individual companies or districts consistent with the basic policies and contract pattern established by the approval of this memorandum and attached contract form. Any such adaptations as may be necessary will be fully explained and justified as each contract is submitted to you for execution on behalf of the United States; (2) the proposed distribution of the 315,000 acre-feet of American Falls space; and (3) the net revenue from American Falls leases (after deduction of an appropriate share for operation, maintenance, and replacements) to be set off against the construction costs of the 315,000 acre-feet of American Falls space, and (4) that you set November 1, 1952, as the controlling date for the making of the requisite water savings agreements by the water users in accordance with the provisions of section 4 of the 1950 Act.

/s/ Michael W. Straus
Commissioner

Enclosures

Approved: June 25, 1952

/s/ Oscar L. Chapman
Secretary of the Interior

Exhibit
17

October 9, 1953

Mr. Charles H. Welterath, Manager
North Side Canal Co.
Jerome, Idaho

The building of the Palisades reservoir on the Snake River and related matters has resulted in the need for certain agreements between the Government and the Snake River water users. These agreements cover matters relating to additional water conservation, such as storage of water to which the Minidoka power plant has a prior right as well as storage of winter water now used by the canals for domestic purposes. They provide for allowing individual holdover credits in all reservoirs from one year to another on unused storage water. They also cover many details of methods of river and reservoir operation, all designed to afford an equitable and efficient method for full utilization of the water resources of the Upper Snake River. Included in and an integral part of these plans is a provision for distribution among the canals and sale to them of 315,000 acre feet of government owned space in American Falls Reservoir, and of 1,200,000 acre feet in Palisades Reservoir.

These agreements as proposed are the result of about four years of innumerable meetings and negotiations between the Government and committees representing the various canal companies and irrigation districts on Snake River. They have been formally approved by all companies to whom they have been submitted except the Minidoka Irrigation District. This District would apparently like to buy its allotted share of the American Falls space without agreeing to the other features of the proposed contracts, which are all part of the general agreement.

Exhibit 18

PARRY, KEENAN, ROBERTSON & DALY
FIDELITY BANK BUILDING
TWIN FALLS, IDAHO

January 14, 1955

Board of Directors
North Side Canal Company
Jerome, Idaho

Gentlemen:

REPORT OF ATTORNEY

This is a report on the activities of your legal Department for the past year. Members of this firm have attended most of the Directors' meetings and performed the routine matters such as contracts, advice to the manager, advice relative to transfers and other matters regularly and continuously coming before you. There are several matters of particular significance upon which we should like to comment in more detail.

STATUS OF PALISADES CONTRACTS

Your counsel at the last two annual meetings of the stockholders advised you in some detail in regard to the so-called Palisades Contract between the United States and the North Side Canal Company. While this contract is now in effect, the complete adjustment of this matter is of such major significance to the Canal Company that we believe it would be appropriate to refer briefly to this matter and to advise you of the status of the Palisades contract program. The Act of Congress authorizing the construction of Palisades Dam and Reservoir passed on September 30, 1950, (64 Stats. 1083) provided that construction should not be continued beyond a certain date unless contracts were entered into previding for winter water savings of approximately 135,000 acre feet of water. The same Act authorized the Secretary of the Interior, in addition to contracting for the sale of Palisades storage space, amounting to more than 1,000,000 acre feet, to also contract for the sale of not to exceed 315,000 acre feet of reserved American Falls storage space to those who had heretofore had the use of the reserved capacity under lease arrangements, including, of course, the North Side Canal Company.

Following the enactment of this Act, the United States, through the Bureau of Reclamation, has been engaged in the negotiation of contracts with Upper and Lower Snake River Irrigation Districts and Companies, to accomplish the purposes provided for in the authorizing Act. Provision also has been made in these contracts for the exchange and re-definition of existing American Falls and Jackson Lake storage rights, and the curtailment of winter power operations of

COPY

Minidoka Dam to save water for irrigation as well as many other provisions. It is not an exaggeration to say that under these contracts with the various districts and companies there has been a re-statement and re-definition of storage rights on the Snake River. With respect to this Company's contract, the Company purchased 125,000 acre feet of American Falls space that it had heretofore leased and also purchased 100,000 acre feet of Palisades storage. Also, of major importance, the Company's top rights in Jackson Lake's reservoir are re-defined and the contract provides specifically for hold-over privileges, an objective that the Company has been trying for for many years. With respect to the winter water savings program, the Company consents to such program, and the United States gives consent to the Company, under certain circumstances, to the storing and saving of winter water in the American Falls Reservoir, and the Company's right to divert winter water not to exceed 126,000 acre feet is recognized. With respect to other contracts, most of these were negotiated by the several districts and companies during 1953. I have recently had occasion to discuss the status of this matter with the Regional Director at Boise, Idaho. He informs us that all major contracts have now been executed with the exception of the Minidoka Irrigation District. This District had an election on a contract more than a year ago but the contract was defeated. Following this election, the Board of Directors retained a prominent Idaho Falls law firm to make a study and report on the proposed contract and it was the opinion of this firm that the proposed contract was fair and equitable and that it should be accepted by the District. There have been several meetings since that time and the chances appear to be extremely favorable that a contract will be executed this year.

MICHAUD FLATS PROJECT

At the last session of Congress, Congressman Budge introduced H.R. 5492 to authorize the Secretary of the Interior to construct, operate and maintain the Michaud Flats Project for the irrigation of 11,000 acres in southeastern Idaho within the Falls Irrigation District along the southeastern shore of American Falls Reservoir and along the Snake River below the reservoir. As introduced it was confined solely to non-Indian lands. When the bill came up for consideration last March, however, an amendment was proposed to include the reauthorization of the Michaud Division of the Fort Hall Indian Project for the irrigation of 21,000 acres within the Indian Reservation east of the Michaud Flats Project. The water supply for the Indian lands would be derived from stored water in American Falls Reservoir (47,400 acre feet) and Palisades Reservoir (83,900 acre feet) but it was proposed that the water be pumped from the Fort Hall Bottoms, one of the major sources of water supply for downstream natural flow rights from Snake River, to reduce the pump lift. This would be on an exchange basis and the amount of water to be pumped would be that which the lands would be entitled to from

storage. Your counsel vigorously objected to the authorization of the Michaud Division of the Fort Hall Project unless there was included in the bill language fully protecting the early natural flow rights of the North Side Canal Company and the Twin Falls Canal Company.

These natural flow rights were established under state law when the project was started. However, the Indians have for many years asserted a right to the water under their treaties and under the doctrine of the so-called Winters case, which in substance is that when Congress creates an Indian Reservation adjacent to a stream, it impliedly reserves for the Indians the amount of water necessary for the irrigation of the reservation lands. Under this doctrine the Indian rights would be superior to any natural flow rights established under state law subsequent to the time the reservation was created. Thus the claims of the owners of natural flow rights established under state law conflict and we have always been aware of that threat.

Your counsel appeared at the hearing before the House Committee on Interior and Insular Affairs at Washington and after extended conferences we were successful in having included in the bill language which in our opinion fully protects for all time the natural flow rights of the North Side Canal Company against any possible claim by the Indians. By the express terms of the Act, as passed, there is a consent to a priority in time and right in such beneficial consumptive uses of the Snake River, and its tributaries, as are established under the laws of the State of Idaho prior to the date of the Act as against any use of the waters arising on or flowing from the Fort Hall Bottoms within the Fort Hall Indian Reservation, and an express waiver of any rights to the use of water arising on or flowing through the Fort Hall Bottoms within the Fort Hall Indian Reservation. Thus, we believe, there is laid at rest for all time the Indian threat which in effect has always constituted a cloud on the title to your water rights.

AMENDMENT OF FAIR LABOR STANDARDS ACT

Your counsel has been endeavoring for several years to secure an amendment to the Fair Labor Standards Act of 1938 to include the operations of canal companies in the definition of agricultural. Under the present statutes, all mutually owned and operated canal companies are subject to the National Labor Relations Act and the Wage-Hour Law. It has always been assumed that the National Labor Relations Act and the Wage-Hour Law constitute remedial legislation for relief in the industrial rather than the agricultural economy of the nation and that activities agricultural are intended to be exempt therefrom. The effect of this proposed amendment would be to exempt canal companies, such as the North Side Canal Company, from operation under these acts.

We have taken this matter up with Congressman Budge and Senator Dworshak and they have introduced bills in the last two sessions of Congress to accomplish this purpose, but have not been successful in securing their passage. As a temporary measure Congressman Budge, at our instance, has succeeded in having a rider included in the Labor-Federal Security Appropriations Bill placing employees of canal companies in an agricultural status, thus accomplishing the same objective as an amendment to the Fair Labor Standards Act, but this is only a temporary measure. We believe it highly desirable that this be made permanent legislation and we propose to again have bills introduced at this session of Congress and to do everything possible to secure their passage at this session.

COLUMBIA INTERSTATE COMPACT

After more than two years of negotiation the Columbia Interstate Compact was formally approved on December 29, 1954, by the seven Columbia Basin states. It will now be submitted to the respective state legislatures and to the Congress for approval. This compact, and its objectives, are of vital concern to all canal companies and irrigation districts in southern Idaho, since our major concern is developing the Snake River to its fullest utilization for existing and future irrigation. The aim of the compact is the full, long term, multi-purpose development of the Columbia River system, of which the Snake River is a part, with consideration given to all phases of that development through a commission named byand representing the states concerned. That part of the compact which is the most important from the standpoint of southern Idaho is the provision dealing with the apportionment of water. Idaho, as well as the other upstream states, has always taken the position that there should be no limitation on upstream beneficial consumptive uses and the provisions of the compact fully protect Idaho in that respect. In brief substance, this provision provides that all waters of the Columbia River system within the boundaries of upstream states or areas shall be available for appropriation for beneficial consumptive uses, whether heretofore or hereafter established under the laws of the states, shall be recognized as against any rights, existing or future, to such waters for non-consumptive uses by means of developments located wholly or partly within a downstream state whether the rights to such non-consumptive uses are established under the laws of the downstream states, or are being asserted under the authority of the United States in connection with any water use or control development constructed by or under the authority of the United States. This simply means that downstream states and the United States subordinate any non-consumptive use, such as uses for power or navigation, to any existing or future beneficial consumptive use in the upstream states or areas. Applying that rule to this area, it means that no downstream non -consumptive use will interfere with the future development of irrigation in southern Idaho. This will remain in effect until the year 2000 when the Commission may in effect take a "new look" and may extend the

controlling date until the year 2050. Considering that estimated that there are approximately 2,000,000 acres in is Idaho not now irrigated which will eventually be irrigated thern the SnakeRiver and its tributaries, one can readily see the importance of this provision to us. Your counsel, Mr. R. P. Par. is the chairman of the Idaho Commission and actively participated in compact negotiations during the past several years. Your manager, Mr. Welteroth, was appointed by the Governor as an alternate to Mr. Parry and has attended many meetings over the past two years in Mr. Parry's absence.

STATUS OF PENDING LEGISLATION

There are at the present tine no actions pending either brought by the Company or against the Company.

CONCLUSION

In conclusion, in our opinion the legal affairs of the company are in sound shape. We believe that the company's water rights are more firmly established and protected at this time than at any time in the history of the project. Your manager, and the Board of Directors, in our opinion, deserve much credit for this accomplishment.

Very truly yours,

CLIFFORD E. FIX

CEF:ff

Exhibit 19

File Minn. Irr. Dist.

Box 697.
Nov.21,1957

Mr. E.Ray Garner,
President Minidoka Irrigation District
Rupert, Idaho.

Dear Mr. Garner;

In response to your request I am listing below my views on the principal features of the currently proposed contract between your District and the Government. I am not attempting to cover the many minor matters as it would require too long a statement. However if there are any ~~remaining~~ additional particular items on which you would like me to comment please advise me and I will do so.

Jackson Lake vs American Falls Storage

It was originally proposed to exchange your right in Jackson Lake for an equivalent amount of space in American Falls. This was proposed because in the original American Falls contract signed by your District you agreed that such an exchange would be made with upper valley owners of American Falls space to the extent of about 266,000 acre-feet of the Minidoka# projects Jackson Lake right and that the upper valley users could retain any unused portion of this water as holdover to their credit in Jackson Lake ; Also as an operating procedure it became the practice to supply all of the Minidoka Projects storage demand from American Falls in such years as sufficient water was available in that reservoir to do so. In most years the run-off from below Jackson Lake is sufficient to fill American Falls and any American Falls water holdover in Jackson Lake becomes Jackson Lake water whenever American Falls fills.

This proposal accompanied by the so-called guarantee provision in years when American Falls space filled to a lesser per cent than Jackson Lake bottom space proved unacceptable to the Minidoka District users. Consequently the present contract provides that the Minidoka District retain its present Jackson Lake rights and it shall have the right to effect annual exchange of its Jackson Lake water for American Falls water , not to exceed its actual use of Jackson Lake storage in any year, without charge for transmission losses currently calculated at 12.8%, and provided that water is available in American Falls to make the exchange.

Prior to the construction of American Falls reservoir in 1926 there were no individual holdover rights recognized in the annual allotments of Jackson Lake water. This was the operating procedure of the Bureau of Reclamation but has never been confirmed by Court decision. The owners of the top space in Jackson Lake feel that the Bureau of Reclamation was incorrect in the interpretation of the Kunn & Co. contract of 1913 which provided for the Jackson Lake enlargement and which stated " The Company shall be entitled to receive an amount of water made available by storage above elevation 6752 ' . They feel that any holdover that they had left in Jackson Lake at the close of any season was made available by storage above that elevation and that they are therefore entitled to receive it under the terms of the Kunn contract.

Since 1926 upper valley owners of American Falls space have had the right to hold over in Jackson Lake any unused portion of the 266,000 acre feet of American Falls space owned by them. The proposed contract proposes to grant individual holdover rights in all reservoirs. This is proposed because;

1; is a matter of equity. The holdover water would not be available unless the owner had provided the space to hold it and maintenance and operation costs on such space

2; With Jackson Lake, American Falls and Palisades reservoirs on the River the problem of calculating reservoir rights, allotments, holdovers etc becomes quite complex. Many owners own rights in all three reservoirs and if two of the reservoirs (Am. Falls and Palisades) have individual holdover rights and Jackson Lake has holdover rights on 266,000 acre feet of space with no holdover rights on the balance of its space there will be only continuous confusion and controversy. Each user will seek to have his holdover credited to space where individual holdover rights exist and in the driest years it could readily occur that nobody but the Minidoka District would be left with any holdover to be credited to Jackson Lake which it would have to share with other bottom right owners, if individual holdovers for all users are not provided in that reservoir.

In my opinion the Minidoka District will fare better to have its individual holdover rights in Jackson Lake than to take its chances on what will occur without full individual holdover rights in that reservoir under present conditions on Snake River. I don't think that there is too much to choose in the long run between the Jackson Lake bottom right and the American Falls right. If you keep the Jackson Lake right you will have to stand the transmission loss in occasional years running the water down the river. On the other hand the American Falls right may be affected by groundwater pumping and by silt deposits encroaching on its capacity. It has probably lost something like 3% of its capacity from silt deposits during the past 30 years, while Palisades reservoir should reduce the rate of silt accumulation in the future.

Purchase of Additional space to be purchased

The contract provides for the following additional space by the Minidoka District.

1. 16,960 acre feet being the Districts share of the reserved space in American Falls Reservoir owned by the Government. This will be sold at original cost less credit for payments made to the Government by the District for leased water.

2. 16,600 acre feet being part of the American Falls reserved space now under contract to other canals which the Government expects to be relinquished to it for resale to the Minidoka District if the District approves an acceptable contract. This will be sold to the District at the original cost of the American Falls space.

3. ~~65,000~~ 35,000 acre feet of Palisades space

There is no compulsion on the District to purchase this additional storage space as we have applications on hand for purchase of far greater amounts that cannot be filled. It is a matter for you to determine before voting on the contract. However there can be no question concerning the Districts advantage in purchasing the first two items of American Falls space. If put up for bids this space would sell readily today for five times what the District will pay for it under this contract. The 35,000 acre feet

of Palisades space should be regarded as dry year insurance water, only for occasional use. There must still be a few farmers under the Minidoka District who remember the dry years of the early thirties, especially 1934 when that District started to draw storage on April 10, drew only about 60% of a normal diversion from April thru July and had no water at all in August and September. The normal irrigation diversion by the Minidoka District from April thru Sept. is now running at about 470,000 acre feet annually. Your storage rights are:

Jackson Lake	186,030	acre feet
Am. Falls	50,000	"
Lake Walcott	54,000	"
Gain Neeley to Milner	38,000	"
Total	328,030	"

In years of average run-off such as we have had for some years past when you run on natural flow until July 1st you have now an adequate storage supply. However in dry years your storage use may start in May or even earlier and the above sources of water supply should be discounted. In a series of dry years the Jackson Lake and American Falls rights may not be fully filled. The Lake Walcott right is somewhat deceptive in that the head at Minidoke dam has to be held up to supply power needs on the Minidoka Project and you could not ordinarily expect to withdraw more than 25,000 acre feet of your Lake Walcott storage during the irrigation season. The gain Neeley to Milner is a variable item. In 1934 it was non-existent due to low water supply on the Minidoka project and there are indications this year that it is being depleted somewhat, perhaps due to groundwater pumping in the Raft River area and elsewhere.

When American Falls reservoir was built many canals limited their purchase of space because they felt that $5 an acre foot was too great a price. However that cost has been paid off and forgotten and every year the water from that reservoir produces crops of greater value than the original cost of the reservoir. Palisades Reservoir is the last chance to secure any substantial storage rights on Snake River. If you pass it by you won't have another opportunity to buy more storage in the future. During the past decade we have been passing thru a series of as good run-off years on Snake River as have occured during historic time but we don't know what is ahead due to climatic conditions or greater use by man of the rivers waters. In the past the purchase of stored water has been the best investment ever made by the Snake River canals and I think it would be a very short sighted policy if the Minidoka District failed to avail itself of the opportunity to purchase the 35,000 acre feet of Palisades space. It would cost about 22¢ an acre-foot per year for payment of construction and maintenance costs or about $7,700 annually which is about 11¢ an acre on the District lands. If you only used it once in 10 years on an average you would only have to get an additional production of $1.10 per acre in the year of use to repay the cost and besides the assurance of a better water supply would add far more to land values than its cost.

The present contract now being considered by the Minidoka District in its written form is mostly the work of H.R.Stinson, formerly Regional Counsel of the Bureau of Reclamation, and recently deceased. However it embodies suggestions resulting from numerous conferences by Mr. Stinson with the Minidoka District Board, with Mr. Duffin and with myself and it represents the results of five years of study, the expenditure of thousands of dollars and many man-months of time.

No contract ever prepared in the water history of Snake River has been subject to such detailed study and critical scrutiny. It has taken much argument and discussion to make it acceptable to other water-users on the river and if in the essential provisions it is now unacceptable to the Minidoka District I believe that the other river water-users will withdraw from further negotiations, feeling that they would be fruitless, and allow the Minidoka District to rest on its present rights and take such action as it deems appropriate.

The Snake River water system to day is a vast complex conglomeration of hundreds of different rights and interests. The people have the choice of trying by agreement and co-operation to develop some fair and equitable method of handling the more or less conflicting interests or else be embroiled in continual controversy and litigation that will only add to their financial burdens without producing any more water.

Yours truly

Lynn Crandall
Watermaster

Exhibit
20

Draft B
July 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Contract No.
14-06-100-1833

CONTRACT WITH MINIDOKA IRRIGATION DISTRICT CONCERNING STORAGE CAPACITY IN AMERICAN FALLS, JACKSON LAKE AND PALISADES RESERVOIRS, AND RELATED MATTERS

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Draft B
July 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Contract No.
14-06-100-1833

CONTRACT WITH MINIDOKA IRRIGATION DISTRICT CONCERNING STORAGE CAPACITY IN AMERICAN FALLS, JACKSON LAKE AND PALISADES RESERVOIRS, AND RELATED MATTERS

THIS CONTRACT, made this 2d day of February 1960, pursuant to the Federal Reclamation Laws, between THE UNITED STATES OF AMERICA, hereinafter called the United States, acting through the Secretary of the Interior, and MINIDOKA IRRIGATION DISTRICT, hereinafter called the District, a corporation organized and existing under the laws of the State of Idaho and having its principal place of business at Rupert, Idaho,

WITNESSETH, THAT:

2. WHEREAS, the United States, under the Federal Reclamation Laws, has heretofore constructed and is now operating Jackson Lake, Island Park, American Falls, and Lake Walcott reservoirs, among others, and is now constructing Palisades Dam and Reservoir Project, herein called the Palisades Project; and

3. WHEREAS, the District, desiring to cooperate with the United States and the various other water users organizations that enter into like contracts in the water conservation program that will be made possible with the construction of Palisades Reservoir and its operation in conjunction with other Federal reservoirs on the Snake River, as herein proposed, has heretofore made application to contract for the use for its benefit of storage capacity in American Falls and Palisades reservoirs; and

4. WHEREAS, the United States has heretofore allocated for the benefit of lands within the jurisdiction of the District certain rights to water, both natural-flow and storage, held by the United States for the benefit of the Minidoka Project, and the United States and owners having lands within the District and the United States and the District, serving a lower valley area, have heretofore entered into the following contracts with respect to water rights, both natural-flow and storage, held by the United States with respect to waters of the Snake River:

> All general water-right applications and related public notices covering rights appurtenant to the irrigable lands within the jurisdiction of the District;
>
> The contract of October 21, 1915, as amended by the contracts of May 2, 1916, September 6, 1921, and June 1, 1938, Symbol and No. Ilr-849; the contract of December 2, 1916, as amended by the contract of May 21, 1932, Symbol and No. Ilr-396; the contract of February 11, 1927, as supplemented by the contracts of March 19, 1929, and March 2, 1936, Symbol and No. Ilr-115 (hereinafter referred to as the contract of February 11, 1927); the contract of January 1, 1935, Symbol and No. Ilr-806; the contract of May 3, 1938; and the contract of December 12, 1950, Symbol and No. I74r-1497;

5. WHEREAS, the Secretary hereby assures the District and its water users that none of the rights of the District or the water users as acquired by the contracts above enumerated or otherwise are modified or altered except as herein specifically provided;

NOW, THEREFORE, in consideration of the mutual and dependent covenants hereinafter stated, it is hereby agreed between the parties hereto as follows:

DEFINITIONS

6. The following terms, wherever used in this contract, shall have the following respective meanings:

"Secretary" shall mean the Secretary of the Interior or his duly authorized representative.

"Federal Reclamation Laws" shall mean the act of June 17, 1902 (32 Stat. 388) and acts amendatory thereof or supplemental thereto, including the act of September 30, 1950 (64 Stat. 1083).

"Advisory Committee" shall mean the committee defined by article 44 of this contract or its duly authorized representative.

"Irrigation season" shall mean a period of each year beginning April 1 and ending October 31 of that year.

"Storage season" shall mean, with respect to the reservoir involved, the period beginning October 1 of one year and ending during the next year when, as to the particular reservoir, no more water is available for storage under its priority rights.

"Reservoir system" shall mean the existing and authorized Federal reclamation reservoirs on the Snake River and its tributaries down to and including Lake Walcott.

"Upper valley" shall mean the irrigated areas of the Snake River Basin that are served by canals diverting from the Snake River and its tributaries above American Falls Dam.

"Lower valley" shall mean the irrigated areas of the Snake River Basin that are served by canals diverting from the Snake River and its tributaries between American Falls Dam and Milner Dam.

"Watermaster" shall mean the officer of the State of Idaho charged by law with the distribution of Snake River water in the lower and upper valleys, or such other officer properly authorized by law and designated by mutual agreement of the Secretary and the Advisory Committee.

PROVISIONS RELATING TO NATURAL FLOW RIGHTS AND STORAGE IN LAKE WALCOTT
(Articles 7, 8 and 9)

NATURAL FLOW RIGHTS

7. (a) There are held for the Minidoka Project (Gravity Division and South Side Pumping Division) these amounts of natural flow from Snake River with these priorities:

	Amount	Priority
(1)	1/ 1726 cubic feet per second	March 26, 1903 1/
(2)	1/ 1000 cubic feet per second	August 6, 1908 1/
(3)	The amount of lawful gain in flow coming into the river between the Neeley gage and Milner Dam when stored water is being drawn for the project as measured by the Watermaster from time to time.	

The total of these three amounts shall be divided on a daily basis, when the maximum amount is not available to both divisions, in these percentages:

To the Gravity Division	62%
To the South Side Pumping Division	38%

1/ These are amounts and priorities of natural flow rights established by decree of the Fourth Judicial District of Idaho on June 20, 1913, in the case of Twin Falls Canal Company v. Charles N. Foster et al.

(b) The District shall use its allotment of natural flow first whenever available at the points of diversions.

LAKE WALCOTT STORAGE

8. The District shall have 66.5% of the water accruing to the right to store in Lake Walcott, under a priority of December 14, 1909, for the Gravity and South Side Pumping Divisions for use for irrigation and domestic uses under the decree to which reference is made in article 7, but this shall not preclude the making of any delivery of stored water, on paper, to the District to the extent that the District and its water users have rights in Lake Walcott.

LATER NATURAL FLOW RIGHTS

9. The United States will not oppose the establishment of natural flow rights for the Minidoka Project of a priority in advance of the priority established for the Palisades Dam and Reservoir in an amount of 430 cubic feet per second. This amount, so to be established by a summary supplemental decree, or other appropriate decree, will be divided between the Gravity Division and the South Side Division in these percentages:

Gravity Division	62%
South Side Pumping Division	38%

PROVISIONS RELATING TO STORAGE CAPACITY IN AMERICAN FALLS RESERVOIR (Articles 10 through 14)

CAPACITY TO BE AVAILABLE TO THE DISTRICT

10. (a) The United States will operate and maintain the existing American Falls Dam and Reservoir, and beginning with the 1958-1959 storage season will make available to the District during the 1959 irrigation season, stored water accruing to four and nine thousand one hundred fifty-five ten thousandths percent (4.9155%) of the active capacity of that reservoir within the limits and on the terms and conditions provided in this contract. This percentage shall, so long as the reservoir has an active capacity of 1,700,000 acre-feet, be treated as the equivalent of 83,563 acre-feet of active capacity. The latter figure may, however, be adjusted from time to time by agreement between the Secretary and the Advisory Committee whenever there are determinations that the active capacity is other than above stated.

(b) The amount of active capacity defined in (a) of this article comprises 83,563 acre-feet, which amount is derived from the sum of these: 50,000 acre-feet heretofore held and operated for the District under the contract of February 11, 1927; 16,963 acre-feet, being a portion of the reserved capacity with respect to which the Secretary is authorized to contract under the provisions of the act of September 30, 1950; and 16,600 acre-feet, being a portion of the reserved capacity now under contract to other water users organizations, but which cpacity is expected to be relinquished to the United States for resale to the District on the condition that the District accepts this contract.

CONSTRUCTION CHARGE OBLIGATION

11. (a) The District shall continue to pay with respect to the 50,000 acre-feet of American Falls Reservoir capacity as provided in the contract of February 11, 1927, except that beginning with the year 1959 and succeeding years until that contract has been paid out as to construction charges the instalments shall be paid annually on December 31 of each year rather than semiannually, as provided in the contract of March 2, 1936. The remaining balance of those charges at the beginning of 1958 is forty-eight thousand five hundred forty-four dollars ($48,544) and the total of the instalments for that year will be six thousand sixty-eight dollars ($6,068).

(b) The District shall pay to the United States with respect to the 16,963 acre-feet of the reserved capacity made available as provided in (b) of article 10, as the construction charge obligation, the sum of seventy-four thousand ninety-two dollars and five cents ($74,092.05), less the District's proportionate share of the net leasing revenues creditable to the 315,000 acre-feet of reserved American Falls space, determined by the Secretary in accordance with the provisions of section 3 of the act of September 30, 1950. The District's share of the net leasing revenues available for application hereunder through December 31, 1951 is fifty-one thousand seven hundred twenty-five dollars and seventy-nine cents ($51,725.79). The amount of such net leasing revenues thereafter becoming available for application under that 1950 act and the District's share thereof shall be determined on or before December 31 of the year when stored water for irrigation purposes in Palisades Reservoir

is first declared available by the Secretary and a written statement of such declaration shall be furnished promptly to the District.

(c) The District shall pay to the United States with respect to the 16,600 acre-feet of reserved capacity as described in (b) of article 10, as the construction charge obligation, the sum of seventy-two thousand five hundred six dollars and fifty-three cents ($72,506.53).

(d) The construction charge obligation under (a) of this article shall be repaid by the District to the United States in successive annual instalments beginning December 31, 1959, each instalment after those due in 1958 to be paid on or before December 31, of the year for which it is due.

(e) The construction charge obligation under (b) and (c) of this article shall be repaid by the District to the United States in ten successive annual instalments, beginning December 31, 1959, each instalment to be paid on or before December 31 of the year in which it is due. Prior to the determination and announcement of the total amount of net leasing revenues that is apportionable to the District's construction charge obligation for the 16,963 acre-feet of capacity under this article, each annual instalment under (b) and (c) of this article shall be nine thousand four hundred eighty-seven dollars and twenty-eight cents ($9,487.28). After such determination has been made, the then unaccrued balance of the construction charge obligation, taking account of the deductions of the District's share of leasing revenues applicable to the 16,963 acre-feet of capacity as provided in (b) of this article, shall be paid over the

remaining years of the repayment period in annual instalments that are as nearly equal as is practicable.

OPERATION AND MAINTENANCE OBLIGATION

12. (a) The District, during the period of operation and maintenance of American Falls Dam and Reservoir and related works (herein called storage works) by the United States, shall pay to the United States the share of costs of operation and maintenance of the storage works, including whatever costs may be incurred in the delivery of water therefrom, which is apportionable to the irrigation and other primary storage rights therein and which is allocable to the District's rights defined in article 10, including the 50,000 acre-feet of capacity made available heretofore under the contract of February 11, 1927. In determining the total costs apportionable annually to the irrigation and other primary storage rights in these works there shall be included payments required to be made in accordance with the provisions of article 13, but there shall be excluded whatever amounts are required to be paid as American Falls operation and maintenance charges under the contract of June 15, 1923, between the Idaho Power Company and the United States, as it may hereafter be amended. And with respect to those costs coming under (e) of article 24 applicable to American Falls reservoir capacity, there shall be included only those apportioned to that capacity made available under article 10 hereof, including the 50,000 acre-feet of capacity made available by the provisions of the contract of February 11, 1927.

(b) Beginning with the 1959 irrigation season, payment of the District's share of operation and maintenance costs of American Falls Reservoir shall be made for each calendar year on the basis of annual estimates by the Secretary. The notice of these annual estimates, hereinafter referred to as the operation and maintenance charge notice, shall contain a statement of the estimated cost of operation and maintenance of the storage works to be incurred for the calendar year involved, the amount thereof apportionable to the irrigation and other primary storage rights therein, and the amount of the District's share of these estimated costs, including the 50,000 acre-feet of capacity made available under the contract of February 11, 1927. The operation and maintenance charge notice shall be furnished to the District on or before February 1 of the calendar year for which the notice is issued, or as soon thereafter as is practicable for the year, but, when requested by the District, a preliminary estimate shall be given at such earlier date as agreed on in writing. The District shall pay the amount stated in the notice on or before April 1 of the year for which it is issued or such other date as may be agreed on in writing.

(c) Whenever in the opinion of the Secretary funds so advanced will be inadequate to operate and maintain the storage works, he may give a supplemental operation and maintenance charge notice, stating therein the amount of the District's share of the additional funds required, and the District shall advance that additional amount on or before the date specified in the supplemental notice. If funds advanced by the District under this article exceed the District's share of the actual cost of

operation and maintenance of the storage works for the year for which advanced, the surplus shall be credited on the operation and maintenance charges to become due for succeeding years.

ADJUSTMENT FOR TWIN FALLS CANAL COMPANY'S SHARE OF NET LEASING REVENUES

13. Of the net leasing revenues creditable to the 315,000 acre-feet of American Falls reserved space, as of December 31, 1951, seventy-three thousand seven hundred seventy-three dollars and fourteen cents ($73,773.14) would have been available to the Twin Falls Canal Company for application on the construction charge obligation of American Falls reserved space which that company might have acquired. In consideration of the Twin Falls Canal Company's foregoing participation in that reserved space and of the canal company's share of the credit being applied against the construction charge obligation of the reserved space made available to the water users, including the District, the District will pay to the United States the sum of four thousand two hundred thirty-one dollars and twenty-eight cents ($4,231.28) for payment to the Twin Falls Canal Company or for crediting on obligations in connection with the reservoir system to become due from the canal company to the United States. This amount shall be paid to the United States in ten (10) annual instalments of four hundred twenty-three dollars and thirteen cents ($423.13), each annual amount to be paid along with the District's operation and maintenance obligation as provided by article 12.

NATURE AND EXTENT OF AMERICAN FALLS RESERVOIR STORAGE RIGHTS

14. (a) Beginning with the 1959 irrigation season, the District shall be entitled to have delivered to it during each irrigation season its proportionate share of all irrigation waters stored in American Falls Reservoir during the storage season ending during or immediately preceding that irrigation season, together with its share of water, if any, credited to the lower valley exchanged space under the interim operation of (d) of article 22 at the close of the District's 1958 irrigation season. The District shall also be entitled to have held over from one irrigation season to the next for its use in that next season stored water to which it is entitled, but the total amount of stored water which will be held over for the use of the District during an irrigation season shall not exceed the amount that can be stored in the space made available to the District under (a) of article 10.

(b) Stored water available under the rights in American Falls Reservoir as defined in this contract shall be available for delivery to the District during any irrigation season within these limitations:

> Deliveries shall be limited at any time to the amount which can be delivered by means of the District's proportionate share of the outlet capacity, taking into account the requirement of passing through the reservoir water accruing to prior natural-flow rights and the physical limitations of the existing outlet works.

PROVISIONS RELATING TO STORAGE CAPACITY IN PALISADES RESERVOIR (Articles 15 through 20)

UNITED STATES TO CONSTRUCT WORKS

15. (a) Within the limits of the authorization therefor, the United States is now constructing and will complete and operate and maintain Palisades Dam on the Snake River in the vicinity of Irwin, Idaho, to provide a reservoir of an active capacity of about 1,200,000 acre-feet, and related facilities, substantially in accordance with the plans set forth in House Document No. 720, 81st Congress.

(b) When the dam and reservoir are ready for the storage and delivery of water for irrigation purposes, the Secretary shall so announce, including a statement of the active capacity that will be available for irrigation storage.

CAPACITY TO BE AVAILABLE TO THE DISTRICT

16. The authorized dam will provide a reservoir with an estimated active storage capacity of 1,200,000 acre-feet and, based on that estimated capacity, the use and benefit of two and nine thousand one hundred sixty-seven ten thousandths percent (2.9167%) of that capacity is allocated hereby to the District. Beginning with the first full irrigation season after the Secretary has announced that the reservoir is ready for storage and delivery of water for irrigation purposes, the United States will make available to the District the stored water accruing to that percentage of the active capacity of that reservoir, within the limits and on terms and conditions provided in this contract. That percentage

shall, so long as the reservoir has an active capacity of 1,200,000 acre-feet, be treated as the equivalent of 35,000 acre-feet of active capacity. The latter figure may, however, be adjusted from time to time by agreement between the Secretary and the Advisory Committee, whenever there are determinations that the active capacity is other than above stated.

CONSTRUCTION CHARGE OBLIGATION

17. (a) The District shall pay to the United States for the use of space as provided in article 16, as the construction charge obligation, the sum of three hundred fifteen thousand dollars ($315,000.00), this being determined at the rate of nine dollars ($9.00) per acre-foot of capacity and on the assumption that the reimbursable construction costs of the Palisades Project finally allocated to joint facilities equal or exceed the sum of twenty-three million two hundred one thousand one hundred dollars ($23,201,100). If the reimbursable joint facility construction costs, as finally determined, are less than twenty-three million two hundred one thousand one hundred dollars ($23,201,100), and, as a result, the amount of joint facility costs allocated to irrigation is less than the amount expected so to be allocated according to the Secretary's report of July 1, 1949,[1/] the amount of the reduction shall be proportioned between irrigation construction costs assigned to be repaid by the water

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1/ Of the estimated joint facility construction costs, $21,724,400 were allocated to irrigation under the report approved and adopted by the Secretary on July 1, 1949 (H. Doc. No. 720, 81st Cong.).

users and those assigned for repayment from power revenues on the basis of the amounts of estimated irrigation construction costs so assigned in the Secretary's report of July 1, 1949. The amount of reduction, if any, when determined by the Secretary, shall be distributed equally as a credit against the construction charge obligation of all space the costs of which are allocated to irrigation. The total amount of credit and the portion thereof to which the District is entitled shall be announced in writing by the Secretary promptly after final construction costs are determined and the allocations thereof are made. In no event, however, shall the credit be such as to reduce the District's total construction charge obligation to less than two hundred seventy-one thousand two hundred fifty dollars ($271,250.00), this being at the rate of seven dollars and seventy-five cents ($7.75) per acre-foot of capacity as initially stated in article 16.

(b) The construction charge obligation under this article shall be repaid by the District to the United States in forty (40) successive annual instalments to be as nearly equal as is practicable. The due date of the initial instalment, established in relation to the date announced by the Secretary as the date that the dam is substantially complete and ready for storage, will be as follows:

(1) If, on the announced date, the provisions of (d) of article 34 are still in effect, the first instalment shall be payable on or before December 31 of the third full calendar year after that date, the project for repayment purposes being treated as incomplete during the first two years; and

(2) if, on the announced date, the provisions of (d) of article 34 are no longer in effect, the first instalment shall be payable on or before December 31 of the first full calendar year after that date. In the event there is, under the operation of (a) of this article, a reduction in the District's total obligation after the payment of instalments has started, the amount of credit available shall be distributed evenly over the remaining unaccrued instalments as of the time the amount of the credit is announced.

OPERATION AND MAINTENANCE OBLIGATION - PALISADES

18. (a) The District, beginning as provided in (b) of this article and continuing during the period of operation and maintenance of the Palisades Dam and Reservoir by the United States, shall pay to the United States in advance two and nine thousand one hundred sixty-seven ten thousandths percent (2.9167%) of the costs of operating and maintaining that dam and reservoir, including whatever costs may be incurred in the delivery of water therefrom, which are apportionable to the irrigation storage rights therein. There shall be determined from time to time by the Secretary, after consultation with the Advisory Committee, the basis for distributing among the various purposes which by law are to be served by the dam and reservoir the costs of operation and maintenance thereof and the basis for assigning those costs for repayment. In determining the total costs annually apportioned to the irrigation storage rights

there shall be deducted from the total annual cost of operation and maintenance of the dam and reservoir, those costs which are determined to be properly chargeable to other purposes served by the reservoir and for which other provision for repayment, in whole or in part, is made pursuant to law. The costs apportionable to the irrigation storage rights shall be distributed annually to all storage space that is made available for irrigation purposes.

(b) Beginning with January 1 of the year in which the use and benefit of Palisades space is first available to the District as provided in article 16, payment of the District's share of Palisades Dam and Reservoir operation and maintenance costs shall be made for each calendar year on the basis of annual estimates by the Secretary. The notice of these annual estimates, hereinafter referred to as the operation and maintenance charge notice, shall contain a statement of the estimated cost of operation and maintenance of the dam and reservoir to be incurred in the calendar year involved and the amount of the District's share of those estimated costs. The operation and maintenance charge notice shall be furnished to the District on or before February 1 of the calendar year for which the notice is issued, but, when requested by the District, a preliminary estimate shall be given at such earlier date as is agreed on in writing. The District shall pay the amount stated in the notice on or before April 1 of the year for which it is issued or such other date as may be agreed on in writing.

(c) Whenever, in the opinion of the Secretary, funds so advanced will be inadequate to meet the District's share of the costs

of operating and maintaining the dam and reservoir, he may give a supplemental operation and maintenance charge notice, stating therein the amount of the District's share of the additional funds required, and the District shall advance that additional amount on or before the date specified in the supplemental notice. If funds advanced by the District under this article exceed the District's share of the actual costs of operation and maintenance of the dam and reservoir for the year for which advanced, the surplus shall be credited on the operation and maintenance charges to become due for succeeding years.

NATURE AND EXTENT OF PALISADES STORAGE RIGHT

19. (a) Beginning with the storage season indicated in article 16, the District shall be entitled to have the following storage rights in Palisades Reservoir:

(1) The right to have stored to its credit during each storage season two and nine thousand one hundred sixty-seven ten thousandths percent (2.9167%) of all water stored in Palisades Reservoir during that season under the Palisades storage right.

(2) The right to have stored to its credit during each storage season and with a priority as indicated in article 20, water to which it is entitled through the curtailment of water diversions as provided in that article.

(3) The right to have held over from one irrigation season to the next, stored water to which it is entitled.

The total amount of stored water to the District's credit at any time shall not, however, exceed the total amount of space in the reservoir available to the District under this contract, and the District's storage rights in Palisades Reservoir are hereby made subject to the provisions of (c) of this article.

(b) Stored water available under the rights in Palisades Reservoir created by this contract shall be available for delivery to the District during any irrigation season within these limitations:

(1) Except in cases of emergency, deliveries shall be limited to periods when the District's natural-flow rights and stored water in reservoirs downstream from Palisades Reservoir are not sufficient to meet the District's irrigation water requirements, but this provision shall not preclude the District for purposes of allocation, on paper, from designating the reservoir from which the District is to receive waters, or from designating the reservoir in which the carry-over water will be stored at the end of a particular season to the extent of its capacity in the particular reservoir.

(2) Deliveries shall be limited at any time to the amount which can be delivered by means of the District's proportionate share of the outlet capacity, taking into account the requirement of passing through the reservoir water belonging to prior rights and the physical limitations of the existing outlet works.

(c) Under the provisions of the act of September 30, 1950, the active capacity of Palisades Reservoir will be used jointly for irrigation and flood control storage in accordance with the operating plan set forth in House Document No. 720, 81st Congress, and attached hereto as Exhibit A, as that plan is implemented by rules and regulations issued pursuant to section 7 of the act of December 22, 1944 (58 Stat. 890). All the District's storage rights are subject to the operation of the reservoir in accordance with this subarticle. In the event Palisades Reservoir fails to fill during any storage season by reason of such flood control operations, the amount of shortage so attributable shall be prorated equally over all space allocated to storage of water for irrigation, municipal, or other miscellaneous purposes and shall be charged against all stored water including that, if any, carried over from prior irrigation seasons.

SAVING OF WINTER WATER; SPECIAL STORAGE RIGHT

20. (a) Beginning with the date announced by the Secretary as the time when Palisades Reservoir will be ready for operation as provided in article 15, the District shall, for a period of 150 consecutive days during the period from November 1 through April 30 of each storage season, make no diversion of water from the Snake River or any of its tributaries by means of its existing diversion works or by any other means.

(b) The total savings of water during each storage season as the result of curtailment of winter diversions by the District and all other water users organizations diverting from the Snake River who

have contracted with the United States to curtail or cease diversions is agreed to be 143,000 acre-feet, of which 135,000 acre-feet are attributable to curtailments by those diverting above American Falls Dam and 8,000 acre-feet below that point. The District, diverting below American Falls Dam, shall be entitled to store during each season during which curtailment of winter diversions is made as provided in (a) of this article, 5,328 acre-feet, such storing to be in Palisades Reservoir under the provisions of article 19 or in any other storage capacity available to it.

(c) The right to store water pursuant to this article shall be prior in time over the storage rights held by the United States for American Falls Reservoir (the latter having a priority dated March 30, 1921), or any storage rights held by the United States or the District that are junior to the American Falls rights. The District hereby consents to the granting of special storage rights with a like priority to all water users organizations and all water users who, directly or indirectly, contract to curtail storage season diversions substantially as provided in (a) of this article within these maxima as to total special storage rights:

(1) For water users organizations and water users diverting above American Falls Dam — 135,000 acre-feet.

(2) For water users organizations and water users diverting between American Falls Dam and Milner Dam — 8,000 acre-feet, exclusive of the special storage rights described in (d) of this article.

(d) The District also hereby consents to permitting the North Side Canal Company, Ltd., and the Twin Falls Canal Company to store, in any capacity available to them in either American Falls or Palisades Reservoir, during the months of November through March of any storage season under a priority like that provided in (c) above, water that would otherwise accrue to them within these rights:

> The rights of the North Side Canal Company, Ltd., and of the Twin Falls Canal Company, respectively, to divert at Milner Dam for domestic and livestock uses during those months as follows:
>
> North Side Canal Company, Ltd. . . 126,000 acre-feet
>
> Twin Falls Canal Company . . . . . 150,000 acre-feet
>
> within this limitation:
>
> > If, taking account of all storable water whether stored or not, Palisades and American Falls reservoirs fail to fill during any storage season, any water diverted during that storage season by the North Side Canal Company, Ltd., in excess of 126,000 acre-feet (but not to exceed the amount of deficiency in fill), and by the Twin Falls Canal Company in excess of 150,000 acre-feet (but not to exceed the amount of deficiency in fill), will be charged as of the end of that storage season against the allotment of American Falls storage to these respective companies.

This limitation in the case of the North Side Canal Company, Ltd., shall become operative from the date Palisades Reservoir is ready for operation, but in the case of the Twin Falls Canal Company need not be made operative until the first year in which that company exercises the special storage provision to which consent is here given.

PROVISIONS RELATING TO REDEFINITION OF EXISTING JACKSON LAKE STORAGE RIGHTS AND ANNUAL EXCHANGES THEREOF; HOLDOVER RIGHTS AND RIGHTS TO RELEASE OF WATER AND RELATED MATTERS; OPERATION AND MAINTENANCE OBLIGATIONS—JACKSON LAKE; WINTER POWER OPERATION; MINIDOKA POWERPLANT
(Articles 21 through 24)

REDEFINITION OF JACKSON LAKE STORAGE RIGHTS OF DISTRICT AND WATER USERS COMING WITHIN ITS JURISDICTION; AND ANNUAL EXCHANGES THEREOF

21. (a) The United States will continue to operate and maintain the existing Jackson Lake Reservoir and, beginning October 1, 1958, will make available to the District stored water accruing to 42.49% of the active capacity of that reservoir below elevation 6752, within the limits and on the terms and conditions provided in this contract. This percentage shall, so long as the reservoir has a total active capacity of 847,000 acre-feet, be treated as the equivalent of one hundred eighty-six thousand thirty (186,030) acre-feet of active capacity below elevation 6752. The latter figure may, however, be adjusted from time to time by agreement between the Secretary and the Advisory Committee whenever there are determinations that the active capacity is other than above stated.

(b) After the District's irrigation season commences in any calendar year, as determined by the Watermaster, the District shall have the right to effect annual exchanges of water out of stored water that is exchangeable, not to exceed the extent of the District's use of Jackson Lake stored water in that year, if requested by written notice within 60 days after the commencement of the District's irrigation season in that calendar year. Any such exchanges shall be made out of water stored to the credit of upper valley water users in American Falls Reservoir or out of any water in that reservoir that is available for exchange. To the extent that there is water to effect such exchanges, they shall be effected without charge for transmission losses between Jackson Lake and American Falls Reservoir. The request for such exchanges made by the District shall be directed in writing to the officer in charge of the Minidoka Project and the Watermaster and those officers shall forthwith initiate and carry through the exchanges within the limits herein stated.

HOLDOVER RIGHTS AND RIGHTS TO RELEASE OF WATER AND RELATED MATTERS

22. (a) Beginning with the 1958-1959 storage season, the United States will operate Jackson Lake Reservoir so as to hold over, in any space available in the reservoir, from one irrigation season to the next for use in that next season, stored water to which any holder of space in the reservoir is entitled, but the total amount of stored water which will be held for the use of any holder of space during any irrigation season shall not exceed the space available to that holder.

The United States shall, however, in its operation of the reservoir, have the right, after consultation with the Advisory Committee, to lower the water surface elevation in Jackson Lake in each storage season in order to avoid damage to the dam during winter weather and to provide incidental flood control, but, except in cases of operation and maintenance emergencies, such release of water shall not result in loss of storable water in that storage season. If losses do result these shall be prorated equally over all space in the reservoir and shall be charged against stored water including that, if any carried over from prior irrigation seasons. Determination of the relative rights of the various holders of space in the reservoir to reservoir inflow during each storage season shall, however, continue to be on the basis of the difference in priorities for the storage of water held by the United States for the capacity below elevation 6752 and those held for the capacity above that elevation. Reservoir permits issued by the state of Wyoming for the capacity below elevation 6752 are as follows:

Permit No.	Capacity in acre-feet 2/	Priority
R 894	299,000	August 23, 1906
R 1903	392,990	August 18, 1910
R 2185	438,000	July 24, 1911

The capacity below elevation 6752 shall continue to be operated, as it has been historically, on a pooled or vertical basis as to priorities with respect to storable inflow.

(b) Stored water accruing to the rights in Jackson Lake Reservoir as defined in this article shall be available for physical delivery to the District during any irrigation season within these limitations:

2/ Capacities are stated in cumulative totals.

(1) Except in cases of emergency, deliveries shall be limited to periods when the District's natural flow rights and rights to water stored in Palisades and American Falls Reservoirs downstream from Jackson Lake Reservoir are not sufficient to meet the District's irrigation water requirements, but this provision, except for limitations in the District's and in the landowners' reservoir capacity, does not preclude the District from designating for purposes of allocation, on paper, reservoirs from which the District and its water users are to receive the water, or from designating the reservoir in which the carry-over water will be stored at the end of a particular irrigation season.

(2) Deliveries shall be limited at any time to the amount which can be delivered by means of the District's proportionate share of the outlet capacity, taking into account the requirement of passing prior natural flow rights through the reservoir and the physical limitations of the existing outlet works.

(c) All carry-over of stored water in Jackson Lake Reservoir, whether held under individual water right applications coming within the jurisdiction of the District or in the name of the District itself, shall be restricted to the carry-over rights as defined in this article as being held for the District and to those held under water right applications

to lands within the jurisdiction of the District, and other carry-over or drop-down rights or claims of rights are hereby abandoned.

(d) Rights under the interim exchange arrangement which was consummated in 1955 and extended from year to year since that date are terminated as of October 1, 1958, but any stored water then carried over in the District's share of the lower valley exchanged space, as defined in that interim arrangement, will be carried as a credit to the District's Jackson Lake capacity as defined in this article as of the beginning of the 1958-1959 storage season.

OPERATION AND MAINTENANCE OBLIGATION—JACKSON LAKE

23. (a) The District, during the period of operation and maintenance of Jackson Lake Reservoir by the United States, shall pay to the United States twenty-one and nine thousand six hundred thirty-four ten thousandths percent (21.9634%) of the costs of operating and maintaining that reservoir, including whatever costs may be incurred in the delivery of water therefrom.

(b) Beginning with the 1959 irrigation season, payment of the District's obligation under (a) above shall be made for each calendar year on the basis of annual estimates by the Secretary. The notice of these annual estimates, hereinafter referred to as the operation and maintenance charge notice, shall contain a statement of the estimated cost of operation and maintenance under (a) above to be incurred in the calendar year involved, and the amount of the District's share of these estimated costs. The operation and maintenance charge notice shall be furnished to the District on or before February 1 of the calendar year

for which the notice is issued, but, when requested by the District, a preliminary estimate shall be given at such earlier date as is agreed upon in writing. The District shall pay the amount stated in the notice on or before April 1 of the year for which issued or such other date as may be agreed on.

(c) Whenever, in the opinion of the Secretary, funds so advanced will be inadequate to meet the costs under (a) above, he may give a supplemental operation and maintenance charge notice, stating therein the amount of the District's share of the additional funds required, and the District shall advance that additional amount on or before the date specified in the supplemental notice. If the funds advanced by the District under this article exceed the District's share of the actual cost under (a) above for the year for which advanced, the surplus shall be credited on the charges to become due for succeeding years.

WINTER POWER OPERATION; MINIDOKA POWERPLANT

24. (a) The United States, in its operation of American Falls and Minidoka dams during the storage season of each year is required to pass through enough water to satisfy existing diversion rights in the stretch of river down to and including Milner Dam and certain power rights below Milner Dam, and has the privilege under an existing decree to use at Minidoka Dam 2700 cubic feet per second of water for the development of power. While the United States must operate the American Falls and Minidoka dams so as not to interfere with these third-party rights, it will be the objective of the United States in the operation of both its

American Falls and Minidoka powerplants to curtail the release of additional water from American Falls Reservoir for power production at those powerplants during the storage season of any year whenever operation of those powerplants to the full extent of their respective water rights for power production would result in loss of irrigation water otherwise storable in the reservoir system. Accordingly, except as it is determined by the Secretary that additional water may be passed through American Falls and Minidoka dams without the loss of water that could be stored for irrigation in the reservoir system, the United States has, during each storage season beginning October 1, 1952, and ending in 1958, and will, commencing with the storage season of 1958-1959 and continuing so long as the provisions of (c) of this article remain operative, limit the release of water through those dams as follows:

> To the amount of water required to provide flows below Minidoka Dam sufficient to meet existing diversion rights in the reach of the river through Milner Dam and the power rights required to be recognized under the provisions of the contract of June 15, 1923, between the United States and the Idaho Power Company (Symbol and No. Ilr-733), as those diversion and power rights may be modified from time to time.

To the extent that it is practicable to do so, the Advisory Committee and the District will be informed in advance of any plans for the release of water in excess of the foregoing limitations; and that Committee will be furnished written reports as of the close of the storage season of each year showing, among other things, the releases actually made and the minimum releases required to be made.

(b) Curtailment of releases as provided in (a) of this article will result in there being, in some years, additional water available for storage for irrigation purposes in American Falls, Island Park, and Palisades reservoirs. In any storage season when these reservoirs fail to fill, the saved water attributable to such curtailment shall be credited, first, to Island Park Reservoir to the extent of 45,000 acre-feet without regard to the priority of the storage permits held for that reservoir, and thereafter to American Falls, Island Park, and Palisades reservoirs in the order of priority of their respective storage permits, the crediting to Island Park Reservoir and to any storage right in any other reservoir (except the lower valley exchanged space in American Falls Reservoir) being contingent on the owners of these rights obligating themselves for their share of the annual payments for power replacement in keeping with the provisions of (e) of this article.

(c) For the purposes of this contract and without relinquishment of any part of the power rights herein described, it is assumed that but for curtailment of operations as provided in (a) of this article, units 1 through 6 of the Minidoka powerplant would be operated to the maximum extent practicable within the limits of the power rights therefor (2,700 second-feet as decreed by the District Court of the Fourth Judicial District of Idaho on June 20, 1913, in the case of Twin Falls Canal Company v. Charles N. Foster et al.), and that in consequence of operations under this article there may be losses in the production of power and energy attributable to those

units. Payment for such power and energy losses shall be made, on the basis of an average annual replacement requirement, by all contractors having reservoir rights benefiting from the water savings resulting from operations under the provisions of (a) of this article in annual amounts determined as follows:

(1) Prior to the date when either the American Falls powerplant or Palisades dam powerplant is first in service, the payment for any year shall be the product, in dollars, of the then controlling average annual replacement requirement, in kilowatt-hours, times four mills ($0.004).

(2) Beginning with the date when either the American Falls powerplant or Palisades dam powerplant is first in service, the payment for any year shall be the product, in dollars, of the then controlling average annual replacement requirement, in kilowatt-hours, times the price per kilowatt-hour, figured at 100 percent load factor, under the then existing rate schedule for the sale of firm power and energy from the plant or plants involved.

In determining replacement requirements under this article, no account is intended to be taken, by way of offset or otherwise, of the effect of any reservoir system storage operations on the seventh unit of the Minidoka powerplant. The amount to be paid by the District annually shall be limited, however, to that apportionable under the provisions

of (e) of this article to the District's rights in American Falls Reservoir under the provisions of article 10 and the District's rights in Palisades Reservoir under the provisions of article 16.

(d) The replacement requirements for the year ending September 30, 1953, shall be 5,699,000 kilowatt-hours, being the average annual replacement requirement for the period beginning October 1, 1931, and ending September 30, 1951. The average annual replacement requirement under either (1) or (2) of (c) above for the year ending September 30, 1954, shall be the average of the annual replacement requirements for each year of the 20-year period ending September 30, 1953, and for each 12-month period after September 30, 1954, shall be the average of the annual replacement requirements of each year of the 20-year period ending on September 30 of the prior year. In deriving this average there shall be used, as annual net power production losses for each year, the annual figures for the years through September 30, 1951, as shown in Table 1 of the document entitled "Criteria and Method for Determination of Certain Minidoka Powerplant Production Losses from Restrictions on Use of Water Rights"[3/], and for each year thereafter, a net power production loss calculated on the basis of the comparison of (1) the total energy that could have been produced by units 1 through 6 of the Minidoka powerplant based on the

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3/ Duplicate originals of this document shall be filed with the Watermaster of District No. 36, the officer of the United States in charge of the Minidoka Project, and the Burley Irrigation District.

water flows actually recorded at the U.S.G.S. Minidoka gaging station (hereinafter called the Minidoka gage), corrected as hereinafter provided, and (2) the energy which theoretically could have been generated at those units with the flows at the Minidoka gage without a curtailment in winter power operation as provided in this article and exclusive or irrigation storage releases. Using calculations reached as to flows and heads, the power loss calculations will be made by utilizing the power production curves shown in drawing No. 17-100-139, as revised, incorporated by reference in the document identified above, but increases in energy in any year by reason of taking American Falls storage into account as provided in subparagraph (3) of this subarticle (d) shall be accounted for as compensating offset up to but not exceeding energy losses accruing in that year by reason of curtailment in power operations under this article.

To correct flows under (1) above, all storage releases except American Falls shall be excluded and the measure of American Falls storage passing the Minidoka gage shall be the increase in storage at that gage over that computed at the Blackfoot gaging station as shown in the annual report entitled "Water Distribution and Hydrometric Work, District 36, Snake River, Idaho", the latter further corrected for any American Falls storage that may have been present by reason of having been stored temporarily upstream and that portion of Palisades storage which was diverted above the Minidoka gage. In measuring American Falls storage, it shall be assumed that storage is released in the order provided in article 19. The flow at the Minidoka gage

without storage shall be taken to be the normal flow at that gage as shown by that same report. In determining water flows, with and without curtailment of power operations as provided in this article, these assumptions shall be used with respect to units 1 through 6 of the Minidoka powerplant:

(1) There is a right for power production to maintain a flow of 2,700 second-feet at Minidoka Dam during the storage season of each year in accordance with the decree entered June 20, 1913, supra, if that flow, disregarding the storage of saved water in the reservoir system under the provisions of this article, would be available at Minidoka Dam.

(2) There is a right to use, within the hydraulic capacity of these units, whatever natural flow passes Minidoka Dam during each irrigation season.

(3) Although there is no right to have water stored under American Falls Reservoir rights released for power production during the period that such storage is being released for irrigation there will be more energy produced by these units than is attributable to the natural-flow rights therefor, which shall be taken into account as a compensating offset as provided above in this subarticle (d).

To determine controlling power heads, the effective power head for any period shall be derived on the basis of recorded forebay and tailwater elevations for that period.

The foregoing criteria for determinations of annual net power production losses may be changed from time to time but only if the changes are made in writing with the approval of the Secretary, the Advisory Committee, and the boards of directors of both the Minidoka and Burley irrigation districts. Determinations as to net power production losses for each year and the average annual replacement requirement under this article shall be made by the committee of three comprising the State Watermaster of District No. 36, a representative to be selected jointly by the Burley and Minidoka irrigation districts and the North Side Canal Company, Ltd., and the officer of the United States in charge of the Minidoka Project, but, should the Committee fail to make a determination for any year by January 1 of the year for which the determination is required, it may be made by the Secretary and reported to the District.

(e) The annual payment determined as provided in this article shall be apportioned among the benefiting reservoirs as follows: (1) prior to the first full storage season during which Palisades Reservoir is in operation, eighty-eight percent (88%) to American Falls Reservoir and twelve percent (12%) to Island Park Reservoir; and (2) beginning with the first full storage season of Palisades operation, seventy-eight percent (78%) to American Falls, twelve percent (12%) to Island Park, and ten percent (10%) to Palisades. The amount apportioned to each reservoir shall be accounted for as part of the operation and maintenance costs for which provisions for payment for the District's share is made elsewhere in this contract. The

amount apportioned to American Falls Reservoir shall be distributed equally over all space available for irrigation storage, including the 33,563 acre-feet of space available to the District under the provisions of article 10 and the 50,000 acre-feet that were initially made available to the District under the contract of February 11, 1927, except that in lieu of the lower valley exchanged space there shall be included the upper valley exchanged space in Jackson Lake Reservoir.

(f) If the owners of any storage rights to benefit from the operation of this article fail to obligate themselves for their share of the annual payments for power replacement hereunder, the saved water creditable to such rights and the power replacement costs chargeable thereto shall be redistributed according to a formula to be agreed on in writing between the Secretary and the Advisory Committee. Such formula shall, however, be as nearly consistent as practicable with the formula that would control but for such redistribution.

(g) In order to permit the operation of the Minidoka power system with a power supply undiminished by water savings operations under this article, the United States, as the operator of the Minidoka powerplant and of other interconnected powerplants operated under the Federal Reclamation Laws, will, to the extent authorized by law, make available to the Minidoka powerplant at rates established under law an amount of power and energy equivalent to that lost by reason of such water savings operations. In determining the net profits attributable to the first six units of the Minidoka powerplant which are, under the provisions of subsection I of section 4 of the act of December 5, 1924

(43 Stat. 703), and under existing contracts with the District and others, to be credited to the lands of the Gravity and South Side Pumping divisions of the Minidoka Project, all payments made by the owners of storage rights in the reservoir system in pursuance of the apportionment of power replacement charges as provided in (e) of this article shall be accounted for as revenues attributable to those six units, and such payments will, for the period that the United States is obligated to curtail power operations as provided in (a) of this article, be accepted by the District, to the extent of its interest in the net profits attributable to the first six units, as full settlement for losses resulting from such curtailed operations.

PROVISIONS RELATING TO STATUS OF CERTAIN EXISTING RIGHTS; DELIVERY OF WATER AT HEADWORKS
(Articles 25 through 26)

STATUS OF CERTAIN EXISTING CONTRACTS WITH THE DISTRICT

25. Except to the extent that the provisions of this contract are in conflict therewith, the provisions of the existing contracts between the United States and the District, particularly the provisions of the contract of February 11, 1927, with respect to the 50,000 acre-feet of storage capacity in American Falls Reservoir, shall remain unaffected by this contract.

DELIVERY OF WATER AT HEADWORKS

26. Deliveries to the District of water to which it, or its water users, are entitled, both natural flow and stored water, will be made at the headworks of the main canals in the amounts requested by the

District within the limits of safe operating capacity of the facilities involved and the limitations of the contract of December 12, 1950, as to the main South Side Canal, if water within the entitlements of the District is available in sufficient quantity to meet the requests.

PROVISIONS OF GENERAL APPLICATION TO ALL RIGHTS ESTABLISHED OR DEFINED BY THIS CONTRACT (Articles 27 through 54)

TEMPORARY STORAGE AND EXCHANGE OF WATER; RELEASE OF JACKSON LAKE AND PALISADES WATER FOR POWER PRODUCTION

27. (a) It is the purpose of the United States and the water users having storage rights in the reservoir system (including the District) to have the reservoir system so operated as to effect the greatest practicable conservation of water, but this provision deals exclusively with the physical storing of water and does not derogate from the right of the District, on paper, to the extent of available capacity held either in the District's name or in the name of its water users under water right applications, from designating the reservoir from which water will be received during the irrigation season involved, or from designating at the end of particular seasons where the carryover waters will be held. In keeping with this purpose, the endeavor will be to hold stored water in reservoir system space that is farthest upstream. Water in storage in any of the reservoirs of the system may, however, when the Watermaster and the Advisory Committee determine this to be in the interest of water conservation, be held temporarily in unoccupied space in any other reservoir of the system. And the District hereby consents to the making, with the

approval of the Watermaster, of annual exchanges of stored water among the various reservoirs of the system. No such temporary holding of water or such annual exchanges shall, however, deprive any entity of water accruing to space held for its benefit.

(b) During any storage season, the United States, after consultation with the Advisory Committee, may release stored water from Jackson Lake and Palisades reservoirs for the maintenance of power production at Palisades dam powerplant and may store such water, as Jackson Lake or Palisades water as the case may be, in American Falls Reservoir. The release of such water will be confined, however, in storage seasons when it appears that American Falls, Palisades, and Jackson Lake reservoirs will fail to fill, to water required for the maintenance of a minimum firm power production (estimated to be about 11,000,000 kilowatt-hours per month at an average production of 15,000 kilowatts) and which can be stored in American Falls Reservoir; and no such release shall be made that will preclude the later delivery of water, by exchange or otherwise, to the upper valley entities entitled thereto.

RENTAL OF WATER; SALE OF SPACE

28. (a) The District may rent stored water which has accrued to its credit in any reservoir of the system, but such rentals shall be for only one year at a time and at rates to be approved in advance by the Secretary and the Advisory Committee. Rates shall not exceed the annual costs under the District's obligations to the United States

which are properly apportionable to such water, plus an amount sufficient to cover other annual costs of the District which are properly apportionable thereto.

(b) No sale of storage rights in the reservoir system, created or defined by this contract, shall be made except on terms and conditions approved by the Secretary.

POINTS OF DELIVERY OF WATER;
MEASUREMENT AND LOSSES

29. (a) Stored water to which the District is entitled under this contract will be delivered and measured at the outlets of the reservoir in which the water is actually stored, without regard to whether it is water accruing to storage rights in that reservoir. The District will bear all losses chargeable to such water between the outlets of the delivering reservoir and the District's point of diversion from the river.

(b) In addition to other specific provisions as to the distribution of losses chargeable to stored water, there shall be charged against stored water held under this contract to the credit of the District in any reservoir of the system at the end of any irrigation season one and one-half percent (1½%) to offset evaporation losses. Such charge shall be made as of not later than the end of the ensuing storage season.

ORDERING OF WATER

30. (a) The ordering of stored water shall be effected by the District by notifying the Watermaster, giving notice a reasonable period in advance, of the amount of water, within the limits of its water entitlements, to be diverted during each day of the irrigation season. The Watermaster will be responsible for determining from day to day the amount of stored water required to be released from the various reservoirs of the system to comply with the requirements of the District and all other entities entitled to the delivery of stored water only in response to orders from the Watermaster. The Watermaster shall be responsible for determining what portion of the District's diversions is chargeable to stored water being held in the reservoir system for the District, and diversions by the District in excess of entitlements shall be charged against stored water subsequently accruing to the District's credit under this contract or any other contract with respect to storage in the reservoir system.

(b) Actions by the Watermaster under the provisions of this article shall be as agent of the District.

COMPLAINTS REGARDING WATER SUPPLY

31. The United States and its officers, agents and employees in charge of reservoirs in the reservoir system and the Watermaster will use their best efforts and best judgment to deliver to the District its proportionate share of the water to which it is entitled under this contract. Should the District feel aggrieved because of an alleged mistake or inaccuracy in the delivery of water or in the division of

stored water among the parties entitled to such water from the reservoir system, the District shall immediately report such alleged mistake or inaccuracy to the Watermaster and to the official of the United States in charge of the reservoir involved. If the Watermaster finds that the District's proportionate share of stored water is not being delivered, he will correct the error as early as possible. No liability, however, shall accrue against the United States or the District or any of their officers, agents or employees, or the Watermaster for damage, direct or indirect, arising by reason of shortages in the quantity of water available through the reservoir system by reason of drought, inaccuracy in distribution, hostile diversions by third parties, prior or superior claims, accident to or failure of the facilities comprising the reservoir system, whether or not attributable to negligence of officers, agents or employees of the United States, or the District or other similar causes of whatsoever kind; but nothing in this article shall alter the right of the District to have delivered to it water to which it is entitled under this contract. The District's obligations to the United States under this contract shall not be reduced by reason of such shortages or interruptions.

PAYMENT OF COSTS IN DELIVERY AND DISTRIBUTION OF STORED WATER

32. (a) The District shall pay, in addition to its proportionate share of the costs of operation and maintenance of the various reservoirs as provided under articles 12, 18 and 23 of this contract, its proportionate share of all costs of the delivery and distribution of

water beyond the outlet works of the delivering reservoirs. These costs shall include, with respect to costs incurred by the United States, all costs and expense of whatsoever nature or kind in connection with, growing out of, or resulting from the distribution of stored water, the protection of stored water between the reservoir and the points of diversion from the river including the prevention of diversion of such water by parties not entitled thereto. Whatever costs of this character are incurred by the United States shall be distributed among the District and all others on whose behalf such costs have been incurred on the basis that the operation and maintenance costs of the reservoir from which the water was delivered are distributed among the various rights. Unless otherwise agreed in writing by the Secretary and the Advisory Committee, such costs shall be paid annually and for billing purposes shall be included as part of the operation and maintenance costs under articles 12, 18, and 23 of this contract.

(b) The District shall also pay its proportionate share of the costs incurred by the Watermaster in the delivery and distribution of water in accordance with the provisions of article 30 to the extent that those represent costs incurred other than by the activities of the United States in the delivery and distribution of water. The costs will be apportioned and paid in accordance with the provisions of the laws of the State of Idaho.

COMPUTATION OF COSTS

33. The costs which enter into the cost of operation and maintenance of the various reservoirs and the costs of delivery and distribution of water, portions of which costs are to be paid by the District, shall embrace all expenditures of whatsoever kind in relation to the function for which the charge is made, including, but without limitation by reason of this enumeration, cost of surveys and investigations, labor, property, material and equipment, engineering, legal, superintendence, administration, overhead, general expense, inspection, special services, and damage claims of all kinds whether or not involving the negligence of officers, agents or employees of the United States, but shall be exclusive of amounts which the law does not require to be repaid and which the Secretary determines as a matter of policy are to be treated as non-reimbursable.

TITLE TO AND OPERATION OF POWERPLANTS; POWER REVENUES

34. (a) Title to American Falls powerplant and Palisades powerplant and all works incidental and appurtenant thereto, built or to be built by the United States, shall remain in the United States until otherwise provided by the Congress.

(b) All revenues derived from the sale or other use or disposal of power and energy developed at the American Falls and Palisades powerplants shall be and remain the property of the United States, and the provisions of article 12 of the contract of February 11, 1927, with respect to the application of certain net power profits to the payment of costs of the American Falls powerplant are hereby terminated. The

net profits accumulated for this purpose, being one thousand seven hundred twenty-nine dollars and seventy-one cents ($1,729.71), will be applied in payment of construction charges due and to come due under the contract of February 11, 1927.

(c) The United States, in its operation of the American Falls powerplant, will be governed by the provisions of the contract of June 15, 1923, with the Idaho Power Company, as that may be amended, as further limited by the provisions of article 24. The United States, in its operation of the Palisades powerplant, will be governed by the provisions of article 27 of these criteria, among others: That the plant shall be operated so as to hold to a practicable minimum the loss of water that would otherwise be available for storage in the reservoir system for irrigation purposes; and that, until such time as a reregulating reservoir has been put into operation, wide fluctuations in the release of water to meet peak power loads will, during irrigation seasons, be confined to periods when this can be done without substantial variation from the flows that would otherwise be present in the river below the dam.

(d) Notwithstanding provisions to the contrary in this contract, the District consents to the operation of the Palisades powerplant, during a five-year period (but not beyond the end of the national defense emergency as declared by Proclamation of the President No. 2914 dated December 16, 1950, 3 CFR 1950 Supp., p. 271), beginning with the date when the first unit of that plant is first placed in service, in the following manner:

In addition to normal operation at other times within the limits provided by this contract the plant may be operated to produce an average of 60,000 kilowatts (217,440,000 kilowatt-hours) during the period October through February of each storage season when the flow of the river at the dam is equal to or greater than that for those months of the median year during the period 1928 through 1947 whenever such operation is required in the judgment of the Defense Electric Power Administrator, or his successor in functions, to help meet certified defense loads served from power systems with which the plant is interconnected, directly or indirectly.

(e) The rights of the District under subsection I of section 4 of the act of December 5, 1924, supra, and the contract of February 11, 1927, to share, with the lands of the South Side Pumping Division, in the net profits derived from the operation of the first six generating units of the Minidoka powerplant, as determined by the Secretary, shall remain unaffected by this contract.

TITLE TO STORAGE WORKS; MISCELLANEOUS REVENUES

35. (a) Title to American Falls and Palisades dams and reservoirs and all works incidental and appurtenant thereto, built or to be built by the United States, shall remain in the United States until otherwise provided by the Congress.

(b) Miscellaneous revenues realized in connection with the operation and maintenance of American Falls Dam and Reservoir and related costs shall be distributed among the irrigation storage rights on the same basis that operation and maintenance costs are distributed, such distribution to be effected annually in connection with the final annual adjustments of operation and maintenance costs. Having regard for the allocations of investment and repayment responsibilities, miscellaneous revenues realized in connection with the operation and maintenance of Palisades Dam and Reservoir and related costs shall be distributed annually as follows:

Twenty percent (20%) to be distributed among the District and other parties having storage rights in the reservoir on the same basis that operation and maintenance costs are distributed.

Eighty percent (80%) to remain the property of the United States.

PRIORITY OF CERTAIN EXISTING AND FUTURE WATER RIGHTS

36. (a) In connection with Island Park Reservoir, located on the North Fork (Henrys Fork) of Snake River, the United States holds water license No. R-590, with a priority date of March 14, 1935, and license No. R-686, with a priority date of June 12, 1940. Notwithstanding the later priority of license No. R-686, the District hereby agrees that all storage rights held by the United States in connection with Island Park Reservoir may be treated as having the same priority as rights under license No. R-590.

(b) In connection with Idaho Permit No. 15134, a direct diversion permit with a priority date of March 30, 1921, held in connection with American Falls Reservoir, the United States may contract with American Falls Reservoir District No. 2 to recognize the right of that district to have water license No. 15134 exercised substantially as follows:

> American Falls Reservoir District No. 2 to have the right to divert as natural flow during each irrigation season under water license No. 15134, having a March 30, 1921 priority as follows: From May 1 of each irrigation season continuing during that season so long as there is natural flow available for that priority, the first 1,700 cubic feet per second of flow to be available one-half (1/2) to American Falls Reservoir District No. 2 and one-half (1/2) to American Falls Reservoir, except that in any year in which American Falls Reservoir is full to capacity on April 30 or fills after that date, taking into account any water that may be temporarily stored to its credit in upstream reservoirs, all water diverted by American Falls Reservoir District No. 2 within the maximum of 1,700 cubic feet per second during the year prior to the initial storage draft on American Falls Reservoir after the reservoir finally fills in that year shall be considered as natural flow under water license No. 15134. Nothing herein shall prevent American Falls Reservoir District No. 2 from diverting water under said license prior to May 1 of a given irrigation season but all

such diversions shall be charged as storage in the event the reservoir is not full on April 30 of that season or does not fill after April 30 of that season.

Water available at American Falls Reservoir for the March 30, 1921 priority under water license No. 15134, other than that to be available to American Falls Reservoir District No. 2 as above provided, to be available for storage in American Falls Reservoir.

And the District agrees that it will not oppose an adjudication of a natural-flow right of the waters of the Snake River for the benefit of American Falls Reservoir District No. 2 consistent with the foregoing criteria. The contract by the United States with American Falls Reservoir District No. 2 shall be on the condition, however, that that district assume its proportionate share of the obligation for the cost of replacement power under the provisions of article 24. When such contract has become operative, the United States shall make application to the State of Idaho for amendment of water permit No. 15134 and the issuance thereunder with a priority date of March 30, 1921, requiring that the remainder of the right under the permit, 6,300 second-feet, to the extent such right remains outstanding, be used for storage in American Falls Reservoir, such right, however, if issued to the United States not to carry voting privileges in water users meetings under the laws of State of Idaho. Such application shall, however, leave unaffected water license No. R-269 having a priority dated March 30, 1921.

(c) If the United States, under the Federal Reclamation Laws, hereafter constructs storage facilities on the Snake River or its tributaries above Milner Dam in addition to those now constructed or authorized to be constructed to provide water for irrigation purposes, the District hereby agrees that, notwithstanding the establishment of a storage right for such additional facilities with a priority subsequent to that assigned to Palisades Dam and Reservoir, the United States may hereafter contract with water users organizations which then have storage rights in Palisades Reservoir, to operate not to exceed 300,000 acre-feet of such capacity for the storage of water for irrigation for the benefit of such organizations as though that capacity had a storage right of identical priority with that held for Palisades Dam and Reservoir.

PROTECTION OF WATER RIGHTS

37. In case any dispute arises as to the character, extent, priority or validity of any of the storage rights held in the name of the United States for the benefit of the District in connection with its rights under this contract, the United States may, independently of the District, bring and prosecute judicial proceedings for the determination of such dispute and take all other measures necessary toward the defense and protection of its water rights. Nothing in this article shall preclude the District from asserting and protecting, by appropriate judicial proceedings, its rights to water as defined in this contract.

REFUSAL TO DELIVER WATER IN CASE OF DEFAULT

38. No water available to the District under this contract shall be delivered to or for the District if the District is in arrears in the advance payment of operation and maintenance charges owed to the United States, if any, or more than twelve (12) months in arrears in the payment of construction charge obligation instalments, or more than twelve (12) months in arrears in the payment of any other amount owed to the United States under this contract. The District shall refuse to deliver water to lands or parties who are in arrears in the advance payment of operation and maintenance charges due from such lands or parties to the United States or to the District, or to lands or parties who are in arrears more than twelve (12) months in the payment of amounts due from such lands or parties to the United States or the District to the United States under this contract. The provisions of this article are not exclusive and shall not in any manner prevent the United States from exercising any other remedy given by this contract or by law to enforce the collection of any payments due under the terms of this contract; nor are they intended to be applicable to obligations created by the contract of March 15, 1926.

LEVIES AND ASSESSMENTS BY THE DISTRICT; ALL BENEFITS CONDITIONED UPON PAYMENT

39. (a) The District shall cause to be levied and collected all necessary assessments and charges and will use all the authority and resources of the District (including, without limitation by reason of this enumeration, its taxing power, the power to create liens in connection with its taxing power, and the power to withhold delivery of water) to meet the obligations of the District to the United States under this contract.

(b) The District shall make each year a reasonable estimate of probable delinquencies in collections based on past experience, and shall levy assessments, tolls, or other charges sufficiently large against the lands in the area under its jurisdiction to meet the requirements stated in (a) of this article, notwithstanding any individual delinquency which may occur in the payment to the District of any assessments, tolls, or other charges.

(c) Should the District fail to levy the assessments, tolls, or other charges against any lands under its jurisdiction as required by this contract, or, having levied, should the District be prevented from collecting such assessments, tolls, or other charges by any judicial proceedings or otherwise fail to collect them, such lands shall not be entitled to receive water made available under this contract and the District, except as otherwise ordered by a court of competent jurisdiction, shall not deliver such water to such lands unless or until arrangements for its delivery satisfactory to the Secretary have been made.

LANDS FOR WHICH WATER IS FURNISHED;
LIMITATIONS ON AREA

40. Pursuant to the provisions of the Federal Reclamation Laws, water made available to the District from space in the reservoir system for which the District is obligated to the United States for construction charges under the terms of this contract shall not be delivered to more than one hundred sixty (160) irrigable acres in the ownership of any one person or other entity nor more than three hundred twenty (320)

irrigable acres held by a husband and wife as community property, except that delivery may be made to lands held in excess of this limitation pursuant to the provisions of section 46 of the act of May 25, 1926 (44 Stat. 649), as amended by the act of July 11, 1956 (70 Stat. 524).

LIMITATION ON SERVICE TO NEW LANDS

41. The additional stored water made available to the District under this contract shall not be delivered to lands which have not heretofore been irrigated (so-called new lands), except pursuant to arrangements made with the Secretary to govern the sale price of such new lands during the first five (5) years that water is made available thereto under this contract. This limitation shall not apply, however, to new lands which are within the outer boundaries of an ownership heretofore entitled to the delivery of water through the District's canal system, nor to other new lands to be served by the District if the total irrigable area of these other new lands to be provided irrigation service within five (5) years after the date when the first Palisades construction charge instalment becomes due under the provisions of

article 17 does not exceed 1,500 acres; nor to lands which, by transfer or otherwise, have an independent right to water from the Snake River, which right is intended to be supplemented by water made available under this contract; nor to lands as to which the construction charge obligation has been paid as provided in article 40.

TERMINATION OR MODIFICATION OF EXCESS LAND PROVISIONS

42. (a) In the event there is a repeal of the so-called excess land provisions of the Federal Reclamation Laws, articles 40 and 41 of this contract will no longer be of any force or effect, and, in the event these provisions are amended in material respects, the United States will, at the request of the District, negotiate amendments of these articles in order to conform them to the excess land provisions of the law as so amended.

(b) Articles 40 and 41 will no longer be of force or effect if there is a determination by a court of final jurisdiction, binding on all necessary parties, declaring the provisions of these articles to be of no force or effect.

(c) For the purposes of this article, the provisions of articles 40 and 41 are hereby agreed to be severable from the other provisions of this contract.

PENALTY FOR DELINQUENCY IN PAYMENT

43. Every instalment or charge required to be paid to the United States under this contract which shall remain unpaid after it has become due and payable shall bear interest at the rate of one-half percent (1/2%) per month from the date of delinquency. The District shall impose, on delinquencies in the payment of assessments, taxes or other charges levied by it to meet its obligations under this contract, such penalties as it is authorized to impose under the laws of the State of Idaho.

ADVISORY COMMITTEE

44. (a) In its operation and maintenance of the various dams and reservoirs of the reservoir system, the United States, acting through the Regional Director of the Bureau of Reclamation or his designee or such other officer as may be designated in writing by the Secretary, shall consult from time to time with the Advisory Committee on the various matters specifically requiring consultation under the terms of this contract and on such other matters as will have a substantial bearing on the determination of the amount of stored water to be available in the various reservoirs and on the costs of operation and maintenance of those reservoirs which are required to be borne by the space allocated to irrigation storage. The representative of the United States will meet with the Advisory Committee from time to time, but not less often than two times each year at such dates and places as may be fixed by the Advisory Committee.

(b) Informal memoranda concerning working arrangements for the carrying out of the provisions of this article may be entered into from time to time between the Regional Director or other designated representative of the Secretary and the Advisory Committee.

(c) Beginning January 1, 1953, the Advisory Committee is agreed to be the Committee of Nine, as that committee may be constituted from time to time. The Committee of Nine shall continue to function as the Advisory Committee under this contract until a different representative body has been designated by a vote of the majority of the water users voting at any regular annual meeting of the water users of District No. 36 held as provided by law. Further designations of bodies to serve as the Advisory Committee may be made from time to time by this same election process.

CONFIRMATION OF CONTRACT

45. The execution of this contract shall be authorized or ratified by the qualified electors of the District at an election held for that purpose. The District, after the election and upon the execution of this contract, shall promptly secure a final decree of the proper court of the State of Idaho approving and affirming this contract and decreeing and adjudging it to be a lawful, valid, and binding general obligation of the District. The District shall furnish to the United States certified copies of such decrees and of all pertinent supporting records.

STATUS OF CONTRACT IN EVENT THAT 16,600 ACRE-FEET NOT MADE AVAILABLE AND RELATED CONTRACTS NOT MODIFIED

46. If neither the expected relinquishment of the 16,600 acre-feet of capacity defined in (b) of article 10 nor the amendment of the Minidoka-Palisades contracts with respect to the amount to be exchanged and to the redefinition of Jackson Lake storage rights are effected within twelve months after the approval by District electors this contract shall be of no further force and effect.

CHANGES IN DISTRICT'S ORGANIZATION

47. While this contract is in effect, no changes shall be made in the lands within the jurisdiction of the District by exclusion of lands, by partial or total consolidation or merger with another district, or by proceedings to dissolve or otherwise, except with the consent of the Secretary evidenced in writing.

RULES AND REGULATIONS

48. The Secretary reserves the right, after consultation with the Advisory Committee, to make such rules and regulations consistent with the provisions of this contract, as are proper and necessary to carry out its true intent and meaning, and as are proper and necessary to cover any details of the administration or interpretation of the contract which are not covered by its express provisions. The District shall observe such rules and regulations.

REPRESENTATIVE OF THE SECRETARY

49. Where this contract uses the term "Secretary", this shall be deemed to include in all cases the Under Secretary or any Assistant Secretary or other officer of the Department of the Interior of equal authority. Where this contract authorizes action by the Secretary, such action may also be taken for or on behalf of the Secretary by any representative duly authorized therefor in writing.

NOTICES

50. Any notice, demand or request required or authorized by this contract shall be deemed properly given, except where otherwise herein specifically provided, if mailed, postage prepaid, to the Project Superintendent (the present "project officer"), Bureau of Reclamation, Burley, Idaho, on behalf of the United States, and to the Secretary, Minidoka Irrigation District, Rupert, Idaho, on behalf of the District. The designation of the person to be notified or the address of such person may be changed at any time by similar notice.

DISCRIMINATION AGAINST EMPLOYEES OR APPLICANTS FOR EMPLOYMENT PROHIBITED

51. In connection with the performance of work under this contract, the District agrees not to discriminate against any employee or applicant for employment because of race, religion, color or national origin. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training,

including apprenticeship. The District agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Secretary setting forth the provisions of the nondiscrimination clause. The District further agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

CONTINGENT ON APPROPRIATIONS OR ALLOTMENT OF FUNDS

52. The expenditure of any money or the performance of any work by the United States herein provided for, which may require appropriations of money by the Congress or the allotment of Federal funds, shall be contingent on such appropriations or allotments being made. The failure of the Congress to appropriate funds, or the failure of any allotment of funds, shall not, however, relieve the District from any obligations theretofore accrued under this contract, nor give the District the rights to terminate this contract as to any of its executory features pending the appropriation or allotment of such funds. No liability shall accrue against the United States in case such funds are not so appropriated or allotted.

ASSIGNMENTS PROHIBITED;
SUCCESSORS AND ASSIGNS OBLIGATED

53. The provisions of this contract shall apply to and bind the successors and assigns of the parties hereto, but no assignment or transfer of this contract, or any part thereof, or interest therein, shall be valid until approved by the Secretary.

Exhibit
21

IN THE DISTRICT COURT OF THE ELEVENTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

BURLEY IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; MINIDOKA IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; MILNER LOW LIFT IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; TWIN FALLS CANAL COMPANY, a corporation; CLARENCE H. TILLEY; WILLIAM KENDELL; FALLS IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; A & B IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; OTIS ORTEN; AMERICAN FALLS RESERVOIR DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; AMERICAN FALLS RESERVOIR DISTRICT NO. 2, an irrigation district organized and existing under the laws of the State of Idaho; NORTH SIDE CANAL COMPANY, a corporation; ABERDEEN-SPRINGFIELD CANAL COMPANY, a corporation; REBECCA HOLDEN, a widow; BLACKFOOT IRRIGATION CO., a corporation; BRAMWELL DITCH CO., a corporation; BUTLER ISLAND CANAL CO., a corporation; BUTTE & MARKET LAKE CANAL CO., a corporation; CLARK & EDWARDS CANAL CO., a corporation; CORBETT SLOUGH DITCH CO., a corporation; DANSKIN DITCH CO., a corporation; DILTS IRRIGATION CO., LTD., a corporation; DEWEY FOX; HARRISON CANAL & IRRIGATION CO., a corporation; MARVON M. NEWBY; IDAHO IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; MARVIN M. JOHNSON; WILLIAM S. HOLDEN; TED BLOSCH, MARVEL JOHNSON and V. E. HIER; LaBELLE IRRIGATION CO., a corporation; LIBERTY PARK IRRIGATION CO., a corporation; LONG ISLAND IRRIGATION CO., a corporation; ROBERT D. MACKAY; JOHN L. NELSON, ADRIAN NELSON, ERVEN SCOTT, VELMA ANDERSON and LAURA ANDERSON; NEW SWEDEN IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; CARL JOHNSON; UTAH-IDAHO SUGAR CO., a corporation; PROGRESSIVE IRRIGATION DISTRICT, a corporation; REID CANAL CO., a corporation; RIVERSIDE DITCH CO., a corporation; SHATTUCK IRRIGATION CO., a corporation; SAM SAKAGUCHI; SNAKE RIVER VALLEY IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; TEXAS SLOUGH IRRIGATING CANAL CO., a corporation; R. DuWAYNE SCOTT; WEST LaBELLE IRRIGATION CO., a corporation; ENTERPRISE IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho;

COMPLAINT

RALPH D. MILLER; FARMERS FRIEND CANAL CO., a corporation; SALEM UNION CANAL CO., a corporation; EGIN IRRIGATING CO., a corporation; INDEPENDENT CANAL CO., LTD., a corporation; JAMES A. CROFT; PINCOCK-BYINGTON CANAL CO., a corporation; PINCOCK-GARNER DITCH COMPANY, a corporation; FALL RIVER IRRIGATION CO., a corporation; ST. ANTHONY UNION CANAL CO., a corporation; CONSOLIDATED FARMERS CANAL COMPANY, a corporation; WILFORD IRRIGATION & MFG. CO., a corporation; D. F. RICHARDS; D. V. HAGENBARTH; AL FRAZIER; SAUREY-SOMMER DITCH by LeRoy Saurey; FARMERS OWN DITCH CO., a corporation; TETON IRRIGATION & MFG. CO., a corporation; GEORGE BAUER, BENJAMIN STEWART, ANDREW STEWART, ANNIE WRIGHT, BOYD HOLLIST and ALICE P. BIRCH, operating as Stewart Canal; BURGESS CANAL & IRRIGATING CO., a corporation; CRAIG MATTSON CANAL CO., a corporation; ENTERPRISE CANAL CO., LTD., a corporation; FOOD MACHINERY & CHEMICAL CORP., a corporation; ISLAND IRRIGATION COMPANY, a corporation; J. R. SIMPLOT CO., a corporation; THE LENROOT CANAL CO., a corporation; LOWDER SLOUGH CANAL CO., LTD., a corporation; THE MARTIN CANAL CO., a corporation; THE NEW LAVA SIDE DITCH CO., a corporation; NORTH RIGBY IRRIGATION & CANAL CO., a corporation; OWNERS MUTUAL IRRIGATION CO., a corporation; PARKS & LEWISVILLE IRRIGATION CO., a corporation; PARSONS DITCH CO., a corporation; PEOPLES CANAL & IRRIGATION CO., a corporation; CITY OF POCATELLO, a municipal corporation of the State of Idaho; POPLAR IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; THE RIGBY CANAL & IRRIGATING CO., a corporation; RUDY IRRIGATION CANAL CO., a corporation; SUNNYDELL IRRIGATION DISTRICT, an irrigation district organized and existing under the laws of the State of Idaho; THE TREGO DITCH CO., a corporation; WATSON SLOUGH DITCH & IRRIGATION CO., LTD., a corporation; WEARYWICK DITCH CO., a corporation; WEST SIDE MUTUAL CANAL CO., a corporation; WOODVILLE CANAL CO., a corporation; and PALISADES WATER USERS, INC., a corporation,

Plaintiffs,

-vs-

HENRY EAGLE, Watermaster, Water District No. 36, State of Idaho,

Defendant.

Plaintiffs allege:

COUNT ONE

I.

Since on or about the 3rd day of March, 1959, the defendant, Henry Eagle, has been, and now is, the duly elected, qualified and acting watermaster of District No. 36 for the State of Idaho.

II.

Each of the above named plaintiffs and their predecessors have for many years been diverting water from Snake River and its tributaries to irrigate land owned by them or their stockholders or electors and each of the above named plaintiffs herein stipulate and agree that all provisions of the hereinafter mentioned decrees (attached hereto and marked Exhibits "A", "B" and "C" and made a part hereof as if specifically set out herein) are presently binding on all parties hereto, i.e.:

Exhibit A. The decree entered in the District Court of the Sixth Judicial District of the State of Idaho, in and for the County of Fremont, signed by Judge J. M. Stevens, in the case entitled Rexberg Irrigation Company, et al., Plaintiffs v. Teton Irrigation Canal Company, et al., Defendants, filed December 16, 1910, hereinafter referred to as the Rexberg Decree.

Exhibit B. The decree entered in the District Court of the Fourth Judicial District of the State of Idaho, in and for the County of Twin Falls, signed by Edward A. Walters, District Judge, in the case entitled Twin Falls Canal Company, Plaintiff v. Charles N. Foster, et al., Defendants, dated and filed June 20, 1913, hereinafter referred to as the Foster Decree.

Exhibit C. The decree entered in the District Court of the United States for the District of Idaho, Eastern Division, and signed by Charles C. Cavanah, District Judge, in the case entitled Woodville Canal Company, Plaintiff v. Clark & Edward Canal and Irrigating Company, et al., Defendants, dated and filed on June 25, 1929, and hereinafter referred to as the Woodville Decree.

"And it is stipulated and agreed that said rights in this paragraph above mentioned and each of them, shall be for the purpose of this stipulation, and the decree to be entered herein deemed to be of the same force and effect as if they had been included in the original Foster Decree; and that whenever the term "Foster Decree" is used herein, it shall be deemed to include the two rights of this paragraph above mentioned and that said rights shall have any and all rights and privileges herein granted to the other rights enumerated in the said Foster Decree, and that said rights shall be decreed herein as follows:

"Twin Falls Canal Co., 600 sec. ft., priority date, Dec. 22, 1915."

"North Side Canal Co., 300 sec. ft., priority date, Dec. 23, 1915."

IV.

Pursuant to said Woodville Decree and the stipulation incorporated therein, as set out in Count Three, Paragraph I, above, the Twin Falls Canal Company is recognized as owning and does own a right to 600 cubic feet per second of the waters of Snake River with a priority date of December 22, 1915.

COUNT FOUR

I.

Since on or about the 3rd day of March, 1959, the defendant, Henry Eagle, has been, and now is, the duly elected, qualified and acting watermaster of District No. 36 for the State of Idaho.

II.

Certain of the plaintiffs have heretofore entered into contracts with the United States of America, Bureau of Reclamation for the Minidoka and Palisades Projects, located in Idaho, in the forms attached hereto as Exhibits "D", "E", "F", "G", and "H", made a part hereof as if set out at length herein. Such exhibits are examples of the different types of contracts made between the parties hereto and the United States of America. Said contracts were later amended and modified by supplemental and amendatory contracts, copies of which are attached hereto and correspondingly marked Exhibits "D (1)", "E (1)", "F (1)", "G (1)", and "H (1)", and made a part hereof as if set out at length herein. Said contracts, as amended, supplemented and modified, include the following paragraphs which plaintiffs allege govern the rights of the parties hereto in and to the waters of the Snake River and its tributaries:

A. Paragraph entitled Saving of Winter Water; Special Storage Right. This paragraph provides for the curtailment of winter water diversions from the Snake River or its tributaries during the storage season from November 1 through April 30 and provides for the allocation to the plaintiffs of the water savings attributed to the curtailment of said winter diversions.

B. Paragraphs entitled Consent to American Falls - Jackson Lake Exchange and Redefinition of Jackson Lake Storage Rights. These paragraphs, as amended, provide for certain exchanges of American Falls Reservoir and Jackson Lake Reservoir storage rights by the parties hereto and authorizes the United States to operate the space in Jackson Lake Reservoir on an individual holdover basis.

C. Paragraph entitled Temporary Storage and Exchange of Water; Release of Jackson Lake and Palisades Water for Power Production - - This paragraph authorizes the Watermaster with the advice and consent of the advisory committee, as defined in said contract, to temporarily store water upstream and make certain exchanges between upstream reservoirs of storage water so as to accomplish the purpose of retaining water upstream and sets forth the conditions under which water may be released from Palisades Reservoir for power generation.

D. Paragraph entitled Priority of Certain Existing and Future Water Rights. -- This paragraph sets by agreement the priority of certain storage water rights held for Island Park Reservoir whereby all Palisades contractors agreed that the storage rights held by the United States in connection with Island Park Reservoir under Water License No. R-590 and Water License No. R-686 could be treated as having a priority date of March 14, 1935; pursuant to this paragraph, all Palisades contractors also agreed that the United States

may contract with American Falls Reservoir District No. 2 so that the rights of that district under Water License No. 15134, with a priority date of March 30, 1921, will be exercised in accordance with the following example paragraphs of said contracts:

"American Falls Reservoir District No. 2 to have the right to divert as natural flow during each irrigation season under water license No. 15134, having a March 30, 1921 priority, as follows: From May 1 of each irrigation season continuing during that season so long as there is natural flow available for that priority, the first 1,700 cubic feet per second of flow to be available one-half (1/2) to American Falls Reservoir District No. 2 and one-half (1/2) to American Falls Reservoir, except that in any year in which American Falls Reservoir is full to capacity on April 30 or fills after that date, taking into account any water that may be temporarily stored to its credit in upstream reservoirs, all water diverted by American Falls Reservoir District No. 2 within the maximum of 1,700 cubic feet per second during the year prior to the initial storage draft on American Falls Reservoir after the reservoir finally fills in that year shall be considered as natural flow under water license No. 15134. Nothing herein shall prevent American Falls Reservoir District No. 2 from diverting water under said license prior to May 1 of a given irrigation season but all such diversions shall be charged as storage in the event the reservoir isnot full on April 30 of that season or does not fill after April 30 of that season.

Water available at American Falls Reservoir for the March 30, 1921 priority under water license No. 15134, other than that to be available to American Falls Reservoir District No. 2 as above provided, to be available for storage in American Falls Reservoir."

This paragraph further provides that the United States shall make application to the State of Idaho for the amendment of Water Permit No. 15134, and the issuance thereunder, with a priority date of March 30, 1921, so that the remainder of the right under the permit, 6,300 cubic feet per second, to the extent that such right remains outstanding, be used for storage in American Falls Reservoir, but that such application shall not affect Water License No. R-269 having a priority date of March 30, 1921; the paragraph further provides that the development of the next 300,000 acre-feet of storage by the United States under the federal reclamation laws by the construction of any storage facilities on Snake

River or its tributaries above Milner Dam shall be operated as if it had a priority date equal to that of Palisades Reservoir.

III.

Plaintiffs allege that the contractual provisions set forth in paragraphs II, A, B, C, and D above, are binding upon the plaintiffs hereto and the plaintiffs accept and recognize that their respective rights in and to the waters of the Snake River and its tributaries are subject to the terms and conditions of said contractual provisions.

COUNT FIVE

I.

Since on or about the 3rd day of March, 1959, the defendant, Henry Eagle, has been, and now is, the duly elected, qualified and acting watermaster of District No. 36 for the State of Idaho.

II.

The plaintiff, American Falls Reservoir District No. 2, is duly created and now existing under the laws of the State of Idaho, for the purpose of owning and distributing irrigation waters to landowners within the district, and said plaintiff has for many years been distributing, and now distributes, irrigation waters to land within the following described sections in the counties of Jerome, Gooding and Lincoln, State of Idaho, and within the boundaries of Water District No. 36:

Township 2 South, Range 18 East, Boise Meridian:
Sections 28 through 33.

Township 3 South, Range 18 East, Boise Meridian:
Sections 14, 15, 22, 23, 25, and 36.

Township 3 South, Range 19 East, Boise Meridian:
Sections 14 through 27, 30, 31, 35, and 36.

Township 3 South, Range 20, East, Boise Meridian:
Sections 30 and 31.

Township 4 South, Range 14 East, Boise Meridian:
Sections 35 and 36.

Township 4 South, Range 15 East, Boise Meridian:
Sections 31 and 36.

as recognized in paragraph 6 of the stipulation included in the Woodville Decree, which was entered the 25th day of June, 1929, and recognized as binding by the parties hereto.

2. That the North Side Canal Company be adjudged and decreed the owner of a certain water right in the amount of 1,260 cubic feet per second acquired under Permit No. 15001 on which proof of beneficial use of water was made January 11, 1932, with a priority date of August 6, 1920.

3. For such other and further relief as to the Court is just and equitable.

ON COUNT THREE

1. That the Twin Falls Canal Company, an Idaho corporation, be adjudged and decreed the owners of one certain water right in the amount of 600 cubic feet per second with a priority date of December 22, 1915, as recognized in paragraph 6 of the stipulation included in the Woodville Decree, which was entered the 25th day of June, 1929, and recognized as binding by the parties hereto.

2. For such other and further relief as to the Court is just and equitable.

ON COUNT FOUR

1. That this Court ratify, confirm, and approve the following provisions of the Contracts as amended, which paragraphs are common to each amended Contract entered between each party hereto, and the United States of America Bureau of Reclamation, for the Minidoka and Palisades Projects - Idaho, to-wit:

(A) Entitled Saving of Winter Water; Special Storage Right;

(B) Entitled Consent to American Falls - Jackson Lake Exchange and Redefinition of Jackson Lake Storage Rigthts;

(C) Entitled Temporary Storage and Exchange of Water; Release of Jackson Lake and Palisades Water for Power Production;

(D) Entitled Priority of Certain Existing and Future Water Rights;

and that these provisions as set forth in Count Four of plaintiffs' Complaint be decreed binding upon the parties hereto.

2. For such other and further relief as to the Court is just and equitable.

ON COUNT FIVE

1. That the American Falls Reservoir District No. 2, an irrigation district duly created and existing under the laws of the State of Idaho, be adjudged and decreed as owning 23.53% of the active capacity of American Falls Reservoir and be it further adjudged and decreed the right to divert a maximum natural flow the waters of Snake River of 1,700 cubic feet per second under Water License No. 15134, with a priority date of March 30, 1921, in any year that American Falls Reservoir is full to capacity on April 30 or fills after that date, without said natural flow water being charged as storage.

2. That this Court ratify, confirm, and approve Article 20 of Contract No. 14-06-W-73 entered between the United States of America and American Falls Reservoir District No. 2 as set forth in Count Five, paragraph III of this Complaint.

3. For such other and further relief as to this Court is just and equitable.

PARRY, ROBERTSON & DALY

By _____
Attorneys for Plaintiffs, Twin Falls Canal Company, North Side Canal Company, A & B Irrigation District, Falls Irrigation District, American Falls Reservoir District, Clarence H. Tilley, William Kendell, and Otis Orten.

JAMES, HOBDEY & SHAW

By _____
Attorneys for Plaintiff, American Falls Reservoir District No. 2

NIELSON & NIELSON

By _____
Attorneys for Plaintiffs, Burley Irrigation District and Milner Low Lift Irrigation District

ROGER D. LING

_____
Attorney for Plaintiff, Minidoka Irrigation District

HOLDEN, HOLDEN & KIDWELL

By William S. Holden

Attorneys for Plaintiffs, Aberdeen-Springfield Canal Company, Blackfoot Irrigation Company, Butler Island Canal Company, Butte & Market Lake Canal Company, Clark & Edwards Canal or Irrigation Company, Corbett Slough Ditch Company, Danskin Ditch Company, Dilts Irrigation Company, Limited; Harrison Canal & Irrigation Company, Idaho Irrigation District, LaBelle Irrigation Company, Liberty Park Irrigation Company, New Sweden Irrigation District, Progressive Irrigation District, Reid Canal Company, Riverside Ditch Company, Shattuck Irrigation Company, Snake River Valley Irrigation District, Texas Slough Irrigating Canal Company, Rebecca Holden, Bramwell Ditch Company, James A. Croft, Dewey Fox, Marvon M. Newby, William S. Holden, Ted Blosch, Marvel Johnson & V. E. Hier; Long Island Irrigation Company, R. D. Mackay, John L. Nelson, Adrian Nelson, Ervin Scott, Velma Anderson & Laura Anderson; Utah-Idaho Sugar Company, Carl Johnson, Sam Sakaguchi, R. DuWayne Scott, West LaBelle Irrigation Company, Farmers Own Ditch Company, Enterprise Irrigation District, Ralph D. Miller, Fall River Irrigation Company, St. Anthony Union Canal Company, Farmers Friend Canal Company, Salem Union Canal Company, Egin Irrigation Company, Independent Canal Company, Limited; Consolidated Farmers Canal Company, Wilford Irrigation Company, Teton Irrigation Company, George Bauer, Benjamin Stewart, Andrew Stewart, Annie Wright, Boyd Hollist & Alice P. Birch; Pincock-Byington Canal Company, Pincock-Garner Ditch Company, LeRoy Suarey, D. F. Richards, D. V. Hagenbarth, Al Frazier, Marvin M. Johnson, Burgess Canal & Irrigating Co., Craig Mattson Canal Co., Enterprise Canal Co., Ltd., Food Machinery & Chemical Corp., Island Irrigation Company, J. R. Simplot Co., The Lenroot Canal Co., Lowder Slough Canal Co., Ltd., The Martin Canal Co., The New Lava Side Ditch Co., North Rigby Irrigation & Canal Co., Owners Mutual Irrigation Co., Parks & Lewisville Irrigation Co., Parsons Ditch Co., Peoples Canal & Irrigation Co. City of Pocatello, Poplar Irrigation District, The Rigby Canal & Irrigating Co., Rudy Irrigation Canal Co., Sunnydell Irrigation District, The Trego Ditch Co.,

Watson Slough Ditch & Irrigation Co., Ltd., Wearywick Ditch Co., West Side Mutual Canal Co., Woodville Canal Co., and Palisades Water Users, Inc.

Exhibit
22

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT FOR THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

BURLEY IRRIGATION DISTRICT, et al,

Plaintiffs,

-vs-

HENRY EAGLE, Watermaster, Water District No. 36, State of Idaho,

Defendant.

STIPULATION

The parties signatory hereto do hereby stipulate and agree that the following facts, and conclusions derived therefrom, are true and correct, and shall be the basis for the entry of judgment herein, to-wit:

I.

(a) That the priority of the right to use waters of the Snake River and its tributaries with points of diversion at or upstream from Milner Dam (and its tributaries) have been determined by decrees of Courts of competent jurisdiction (including but not limited to the decree in the case entitled Twin Falls Canal Company v. Charles N. Foster, et al, entered in the District Court of the Fourth Judicial District Court of the State of Idaho, in and for the County of Twin Falls on June 20, 1913, hereafter called "Foster Decree") and that thereafter, and after said decrees, numerous parties have acquired rights to the use of the waters of said Snake River and its tributaries with points of diversion at Milner Dam or above.

(b) That the parties Plaintiff herein are persons who have so acquired such water rights and that they have brought this action under and pursuant to provisions of Idaho Code Section 42-1405.

II.

That all the parties Plaintiff herein do hereby accept as binding upon them the provisions of all prior decrees which have been entered with respect to the waters of Snake River and its tributaries above Milner Dam, including, particularly, but not limited to (1) The Foster decree mentioned in

the preceding paragraph; (2) The decree entered in the District Court of the Sixth Judicial District of the State of Idaho in and for the County of Fremont in the case entitled Rexburg Irrigation Company, et al, vs. Teton Irrigation Canal Company, et al, filed December 16, 1910, (hereinafter "Rexburg Decree"); and (3) The decree entered in that certain case entitled Woodville Canal Company vs. Clark and Edwards Canal and Irrigation Company, et al, in the District Court of the United States for the District of Idaho, Eastern Division, on June 25, 1929, (hereinafter "Woodville Decree") and all other prior valid decrees of such water.

III.

(a) That the defendant, Henry Eagle, is now and has been at all times since March 3, 1959, the duly qualified and acting Watermaster of Water District No. 36 of the State of Idaho; said District being duly created and existing under the laws of the State of Idaho for the purpose of distributing the waters within its boundaries, including all of the waters referred to and affected by this action.

(b) That all of the lands of the parties Plaintiff hereinafter described are located within the boundaries of, and irrigated by the waters of Snake River and its tributaries within, said Water District No. 36.

IV.

That proper and sufficient notice of the pendency and purpose of the above-entitled action was published in newspapers having general circulation in the counties of Power, Cassia, Minidoka, Twin Falls, Jerome, Blaine, Gooding, Lincoln and Elmore, Idaho, and that all provisions of Idaho Code Section 42-1405 relating to notice and publication of notice have been complied with.

V.

That the parties Plaintiff herein comprise all persons diverting water from, and claiming or asserting rights to divert water from, the Snake River and its tributaries above Milner Dam and within the boundaries of said Water District No. 36, according to the records and filed of defendant Henry Eagle; and comprise, collectively, all presently known parties who are or will be affected by the entry of the Supplemental Decree to be entered herein.

VI.

(a) That the parties Plaintiff herein have over a period of many years, cooperated, planned and worked for a common fair, equitable and just plan designed to result in the most efficient, fair and complete beneficial use of all the waters of the Snake River and its tributaries.

(b) That such cooperative planning and adjustment of rights, then, present and future, became and was particularly necessary prior to, and in connection with the planning for the Palisades Reservoir, the securing of Congressional authorization and appropriation for said reservoir and the irrigation projects related thereto and authorized in connection therewith, including particularly, but not limited to, the irrigation project, known as the Minidoka North Side Extension, hereinafter particularly described as being owned and operated by the A & B Irrigation District.

(c) That in connection with the establishment of the water rights for said Palisades Reservoir, it was particularly necessary for the parties Plaintiff to agree among themselves, and avoid extensive, expensive and delaying litigation by so agreeing upon a common priority date for those persons who were using, or were making plans to construct projects and perfect rights to use, the so-called "Flood Water Rights," being those waters of the river which were only available during periods of high flow; and which the parties Plaintiff had been using to the best of their ability and to the extent of their irrigation works, or were planning to use as projects were constructed; and that the parties Plaintiff did at such time agree on a common priority date of April 1, 1939, for such rights, which said agreement has been acted upon by all of the parties Plaintiff hereto continuously, and deliveries have been made in accordance therewith by defendant Henry Eagle.

(d) It was also known and agreed that as a result of the construction of Palisades Reservoir, it would be to the best interests of all water users to enter into contracts for the exchange of certain rights between those holding rights in Jackson Lake Reservoir and those holding rights in American Falls in order to reduce river transmission losses and to permit more effective

river regulation by permitting the use of waters so far as possible by those having diversions closest to the respective reservoirs.

(e) It was also known and agreed that the parties Plaintiff would and they did, enter into specific contracts with the Bureau of Reclamation with respect to their storage rights in Palisades Reservoir, Jackson Lake Reservoir, Island Park Reservoir, Grassy Lake Reservoir, Lake Walcott Reservoir, and American Falls Reservoir and with respect to the acknowledgment and award of certain priorities as hereinafter more specifically set forth.

(f) That it was necessary to agree that additional projects authorized by the Congress of the United States as an integral part of the Palisades Reservoir legislation would have their proportionate rights in said so-called flood water rights with said priority date of April 1, 1939, and that said legislation was achieved, and said projects were authorized and constructed, and have been developed, on the basis of such understanding as to their water rights; and that such projects have used water from the Snake River under such claimed priority date as promptly as they were able to do so, dependent upon the construction of their facilities.

(g) That it was also known and agreed that it was necessary that the parties Plaintiff achieve a solution of the controversy as to the respective rights of American Falls Reservoir District No. 2 and the other owners of space in American Falls Reservoir which had been left unsettled by the Woodville Decree; and that such settlement has been achieved between the parties Plaintiff and the Bureau of Reclamation by provisions in the contracts as hereinafter more specifically set out.

(h) That as a necessary condition to the authorization, financing, and construction of the Palisades Reservoir, it was decided that there should be certain savings of winter water to be accomplished by cessation of winter deliveries and with accompanying added storage privileges for the users ceasing such diversion and that this would be needed to be accomplished by proper contracts with the Bureau of Reclamation, which contracts have been executed.

all other existing water rights appurtenant to said lands; and that the additional rights herein stipulated to be decreed hereby shall not in any way change, alter, vary, or diminish any and all other water rights possessed or owned by the parties hereto or appurtenant to the lands hereinafter described.

IX.

That all of the parties to this action to whom water rights are stipulated to be decreed have constructed, operated, and now control and maintain all necessary diversion dams, canals, laterals and distribution systems adequate to divert and distribute to the proper lands all of the waters herein stipulated to be decreed to them, in addition to all other water rights owned by the said parties.

X.

That all of the supplemental waters herein agreed to be decreed are required for and will be beneficially used for the production of agricultural crops and associated domestic uses upon the lands to which they are stipulated to be decreed and have been used and will be beneficially used in such manner and such supplemental waters shall not be transferrable to any lands other than those lands hereinafter described in Paragraph XVI.

XI.

That some of the rights hereinafter specifically agreed to be decreed herein have been acquired by or decreed to the parties Plaintiff in other proceedings or by other methods, and that it is the desire of the parties Plaintiff hereto that all of such rights be stipulated, enumerated and decreed in this action, in which all parties in interest in waters of Snake River above Milner Dam are parties.

That it will greatly aid and assist all responsible State officials, Watermasters and other officials in handling, managing and distributing the waters of the Snake River and its tributaries above Milner Dam to have those rights enumerated and listed in one decree as is intended to be accomplished by this action.

Township Nine (9) South, Range Twenty-two (22) East of Boise Meridian: Sections One (1) through Five (5) inclusive, Seven (7) through Fifteen (15) inclusive, Seventeen (17) through Twenty-three (23) inclusive, Twenty-seven (27) through Thirty-four (34) inclusive;

Township Eight (8) South, Range Twenty-two (22) East of Boise Meridian: Sections 24, 25, 30, 35;

Township Ten (10) South, Range Twenty-one (21) East of Boise Meridian: Sections One (1) through Four (4), Eight (8) through Sixteen (16), Twenty-one (21) through Twenty-four (24);

Township Nine (9) South, Range Twenty-one (21) East of Boise Meridian: Sections One (1) through Four (4), Seven (7) through Twelve (12), Fifteen (15) through Eighteen (18), 21, 22, 25, 26, Thirty-three (33) through Thirty-six (36) inclusive;

Township Eight (8) South, Range Twenty-one (21) East of Boise Meridian: Sections Twenty-two (22) through Twenty-seven (27), inclusive, Thirty-three (33) through Thirty-six (36) inclusive.

I. OTIS ORTON

Otis Orton shall have the right to divert and use 4.00 cubic feet of water per second at the following point of diversion and upon the following described lands:

Point of Diversion

Lots One (1) and Four (4), Section Twenty-one (21), Township Ten (10) South, Range Twenty-two (22), E.B.M.

Lands to Which Appurtenant

N 1/2 of Section 21 and Lots 1 and 3, E 1/4 of NE 1/4 of Section 20, Township 10 South, Range 22 East, Boise Meridian.

XVII.

(a) That the contracts entered between various of the parties Plaintiff and the United States of America, Bureau of Reclamation, in connection with the Palisades and other projects, as amended and modified, were intended to be, and should be, binding upon all persons claiming rights to the use of the waters of Snake River and its tributaries above Milner Dam; and although the provisions of said contracts provide the basis of a common plan for the administration of the waters of Snake River, certain paragraphs of said contracts, common to all types of contracts with the various parties Plaintiff, contain the major areas of agreement.

Typical examples of the common paragraphs setting forth the major areas of agreement are hereafter attached. A typical example of the common paragraph relating to "Saving of Winter Water; Special Storage Right" is hereto attached, marked Exhibit A. A typical example of the paragraph relating to "Permanent Exchange of the American Falls and Jackson Lake Storage Rights and Redefinition of Storage Rights" is hereto attached, marked Exhibit B. A typical paragraph relating to "Temporary Storage and Exchange of Water; Release of Jackson Lake and Palisades for Power Production" is hereto attached, marked Exhibit C. A typical paragraph relating to "Priority of Certain Existing and Future Water Rights" is hereto attached and marked Exhibit D.

(b) During the negotiation of the contracts entered between the various parties Plaintiff and the United States of America, Bureau of Reclamation, referred to in Paragraph XVII (a) immediately above, it was necessary to make special arrangements with the Minidoka Irrigation District for the purpose of effecting annual exchanges of water, as well as fixing the carry-over rights of said district in connection with Jackson Lake storage. Since the majority of the contracts referred to in Paragraph XVII (a) immediately above had already been executed, and because the contract finally executed by the United States of America, Bureau of Reclamation, and the Minidoka Irrigation District, setting forth these special arrangements required agreement and confirmation by all of the various parties Plaintiff, it was then necessary that each contract be amended and supplemented so as to confirm these appropriate provisions of the Minidoka Irrigation District's contract. The contracts as amended and supplemented provide the basis of a common plan for the orderly administration of the waters of the Snake River above Milner Dam. The pertinent paragraphs of the contract entered by the United States of America, Bureau of Reclamation, and the Minidoka Irrigation District, the contents of which paragraphs were confirmed by all other various parties Plaintiff in amendatory and supplemental contracts, are hereto attached and marked Exhibit E.

(c) In addition to the contracts entered between the various parties Plaintiff and the United States of America, Bureau of Reclamation, referred to in Paragraph XVII (a) and (b) of this Stipulation, a Memorandum of Agreement between the Bureau of Reclamation and the Bureau of Indian Affairs was executed, setting forth special provisions relating to the water supply for the Michaud Division of the Fort Hall Indian Reservation, Idaho, by which Memorandum of Agreement, the Bureau of Indian Affairs agreed to be bound by those common provisions of the contracts of the various parties Plaintiff so that the Snake River above Milner Dam could be successfully and efficiently administered. The most pertinent paragraphs of this Memorandum of Agreement are hereto attached and marked Exhibit F.

(d) That the Decree to be entered herein shall provide that the provisions of the said contracts and the specific exhibits attached hereto are and shall be binding upon all of the parties Plaintiff herein and that the provisions thereof shall be stated in and so provided in the Decree to be entered herein.

XVIII.

That the provisions of this Stipulation are deemed to be and shall be treated as the Findings of Fact and Conclusions of Law in this proceeding.

XIX.

That a Decree in conformity with this Stipulation, in form and content as set out in attached Exhibit G may be entered forthwith without additional notice to the parties hereto.

DATED this 14th day of May, 1968.

PARRY, ROBERTSON & DALY

By _____
Attorneys for Plaintiffs, Twin Falls Canal Company, North Side Canal Company, A & B Irrigation District, Falls Irrigation District, American Falls Irrigation District, Clarence H. Tilley, William Kendell, and Otis Orton.

JAMES, HOBDEY & SHAW

By _____
Attorneys for Plaintiff,
American Falls Reservoir
District No. 2.

NIELSON & NIELSON

By _____
Attorneys for Plaintiffs,
Burley Irrigation District and
Milner Low Lift Irrigation District.

ROGER D. LING

_____
Attorney for Plaintiff,
Minidoka Irrigation District.

HOLDEN, HOLDEN & KIDWELL

By _____
Attorneys for Plaintiffs,
Aberdeen-Springfield Canal Company, Blackfoot Irrigation Company, Butler Island Canal Company, Butte & Market Lake Canal Company, Clark & Edwards Canal or Irrigation Company, Corbett Slough Ditch Company, Danskin Ditch Company, Dilts Irrigation Company, Limited; Harrison Canal & Irrigation Company, Idaho Irrigation District, Labelle Irrigation Company, Liberty Park Irrigation Company, New Sweden Irrigation District, Progressive Irrigation District, Reid Canal Company, Riverside Ditch Company, Shattuck Irrigation Company, Snake River Valley Irrigation District, Texas Slough Irrigating Canal Company, Rebecca Holden, Bramwell Ditch Company, James A. Croft, Dewey Fox, Marvon M. Newby, William S. Holden, Ted Blosch, Marvel Johnson & V. E. Hier, Long Island Irrigation Company, R. D. Mackay, John L. Nelson, Adrian Nelson, Ervin Scott, Velma Anderson & Laura Anderson, Utah- Idaho Sugar Company, Carl Johnson, Sam Sakaguchi, R. DuWayne Scott, West Labelle Irrigation Company, Farmers Own Ditch Company, Enterprise Irrigation District, Ralph D. Miller, Fall River Irrigation Company, St. Anthony Union Canal Company,

Farmers Friend Canal Company, Salem Union Canal Company, Egin Irrigating Company, Independent Canal Company, Limited; Consolidated Farmers Canal Company, Wilford Irrigation Company, Teton Irrigation Company, George Bauer, Benjamin Stewart, Andrew Stewart, Annie Wright, Boyd Hollist & Alice P. Birch; Pincock-Byington Canal Company, Pincock-Garner Ditch Company, LeRoy Saurey, D. F. Richards, D. V. Hagenbarth, Al Frazier, Marvin M. Johnson, Burgess Canal & Irrigating Co., Craig Mattson Canal Co., Enterprise Canal Co., Ltd., Food Machinery & Chemical Corp., Island Irrigation Company, J. R. Simplot Co., The Lenroot Canal Co., Lowder Slough Canal Co., Ltd., The Martin Canal Co., The New Lava Side Ditch Co., North Rigby Irrigation & Canal Co., Owners Mutual Irrigation Co., Parks & Lewisville Irrigation Co., Parsons Ditch Co., Peoples Canal & Irrigation Co., City of Pocatello, Poplar Irrigation District, The Rigby Canal & Irrigating Co., Rudy Irrigation Canal Co., Sunnydell Irrigation District, The Trego Ditch Co., Watson Slough Ditch & Irrigation Co., Ltd., Wearywick Ditch Co., West Side Mutual Canal Co., Woodville Canal Co., and Palisades Water Users, Inc.

Exhibit 23

RECEIVED
JUL 23 1968
Department of Reclamation

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT FOR THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

BURLEY IRRIGATION DISTRICT, et al,

Plaintiffs,

vs.

HENRY EAGLE, Watermaster, Water District No. 36, State of Idaho,

Defendant.

DISTRICT COURT
Fifth Judicial District
County of Twin Falls State of Idaho
FILED JUL 10 1968
W. LANCASTER Clerk
Deputy Clerk

FINDINGS OF FACT AND CONCLUSIONS OF LAW

This matter having come on regularly before the Court and it appearing that the defendant has filed herein a disclaimer of any interest adverse to the plaintiffs and proof having been submitted in the form of a Stipulation by all of the plaintiffs and the Court, being fully advised in the premises, makes and enters the following:

FINDINGS OF FACT

I.

(a) The priority of the right to use waters of the Snake River and its tributaries with points of diversion at or upstream from Milner Dam have been determined by decrees of Courts of competent jurisdiction (including but not limited to the decree in the case entitled Twin Falls Canal Company v. Charles N. Foster, et al, entered in the District Court of the Fourth Judicial District Court of the State of Idaho, in and for the County of Twin Falls on June 20, 1913, hereafter called "Foster Decree") and thereafter numerous parties have acquired rights to the use of the waters of said Snake River and its tributaries with points of diversion at Milner Dam or above.

(b) The parties Plaintiff herein are persons who have so acquired such water rights and that they have brought this action under and pursuant to provisions of Idaho Code Section 42-1405.

II.

All the parties Plaintiff herein have accepted as binding upon them

APPROVED
MAY 13 1996

the provisions of all prior decrees which have been entered with respect to the waters of Snake River and its tributaries above Milner Dam, including, particularly, but not limited to (1) The Foster decree mentioned in the preceding paragraph ; (2) The decree entered in the District Court of the Sixth Judicial District of the State of Idaho in and for the County of Fremont in the case entitled Rexburg Irrigation Company, et al, vs. Teton Irrigation Canal Company, et al, filed December 16, 1910, (hereinafter "Rexburg Decree"); and (3) The decree entered in that certain case entitled Woodville Canal Company vs. Clark and Edwards Canal and Irrigation Company, et al, in the District Court of the United States for the District of Idaho, Eastern Division, on June 25, 1929, (hereinafter "Woodville Decree") and all other prior valid decrees of such water.

III.

(a) Defendant, Henry Eagle, is now and has been at all times since March 3, 1959, the duly qualified and acting Watermaster of Water District No. 36 of the State of Idaho; said District being duly created and existing under the laws of the State of Idaho for the purpose of distributing the waters within its boundaries, including all of the waters referred to and affected by this action.

(b) All of the lands of the parties Plaintiff hereinafter described are located within the boundaries of, and irrigated by the waters of Snake River and its tributaries within, said Water District No. 36.

IV.

Proper and sufficient notice of the pendency and purpose of the above-entitled action was published in newspapers having general circulation in the counties of Power, Cassia, Minidoka, Twin Falls, Jerome, Blaine, Gooding, Lincoln and Elmore, Idaho, and that all provisions of Idaho Code Section 42-1405 relating to notice and publication of notice have been complied with.

V.

The Plaintiffs herein comprise all persons diverting water from, and claiming or asserting rights to divert water from, the Snake River and its tributaries above Milner Dam and within the boundaries of said Water District

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No. 36, according to the records and files of defendant Henry Eagle; and comprise, collectively, all presently known parties who are or will be affected by the entry of the Decree entered herein.

VI.

(a) Plaintiffs herein have over a period of many years, cooperated, planned and worked for a common, fair, equitable and just plan designed to result in the most efficient, fair and complete beneficial use of all the waters of the Snake River and its tributaries.

(b) Such cooperative planning and adjustment of rights, then, present and future, became and was particularly necessary prior to, and in connection with the planning for the Palisades Reservoir, the securing of Congressional authorization and appropriation for said reservoir and the irrigation projects related thereto and authorized in connection therewith, including particularly, but not limited to, the irrigation project, known as the Minidoka North Side Extension, hereinafter particularly described as being owned and operated by the A & B Irrigation District.

(c) In connection with the establishment of the water rights for said Palisades Reservoir, it was particularly necessary for the parties Plaintiff to agree among themselves, and avoid extensive, expensive and delaying litigation by so agreeing upon a common priority date for those persons who were using, or were making plans to construct projects and perfect rights to use, the so-called "Flood Water Rights," being those waters of the river which were only available during periods of high flow; and which the parties Plaintiff had been using to the best of their ability and to the extent of their irrigation works, or were planning to use as projects were constructed; and that the parties Plaintiff did at such time agree on a common priority date of April 1, 1939, for such rights, which said agreement has been acted upon by all of the parties Plaintiff hereto continuously, and deliveries have been made in accordance therewith by defendant Henry Eagle.

(d) It was also known and agreed that as a result of the construction of Palisades Reservoir, it would be to the best interests of all water users to

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enter into contracts for the exchange of certain rights between those holding rights in Jackson Lake Reservoir and those holding rights in American Falls in order to reduce river transmission losses and to permit more effective river regulation by permitting the use of waters so far as possible by those having diversions closest to the respective reservoirs.

(e) It was also known and agreed that the parties Plaintiff would and they did, enter into specific contracts with the Bureau of Reclamation with respect to their storage rights in Palisades Reservoir, Jackson Lake Reservoir, Island Park Reservoir, Grassy Lake Reservoir, Lake Walcott Reservoir, and American Falls Reservoir and with respect to the acknowledgment and award of certain priorities as hereinafter more specifically set forth.

(f) It was necessary to agree that additional projects authorized by the Congress of the United States as an integral part of the Palisades Reservoir legislation would have their proportionate rights in said so-called flood water rights with said priority date of April 1, 1939, and that said legislation was achieved, and said projects were authorized and constructed, and have been developed, on the basis of such understanding as to their water rights, and that such projects have used water from the Snake River under such claimed priority date as promptly as they were able to do so, dependent upon the construction of their facilities.

(g) It was also known and agreed that it was necessary that the parties Plaintiff achieve a solution of the controversy as to the respective rights of American Falls Reservoir District No. 2 and the other owners of space in American Falls Reservoir which had been left unsettled by the Woodville Decree; and that such settlement has been achieved between the parties Plaintiff and the Bureau of Reclamation by provisions in the contracts as hereinafter more specifically set out.

(h) As a necessary condition to the authorization, financing, and construction of the Palisades Reservoir, it was decided that there should be certain savings of winter water to be accomplished by cessation of winter deliveries and with accompanying added storage privileges for the users ceasing such diversion and that this would be needed to be accomplished by

MAY 13 1996

proper contracts with the Bureau of Reclamation, which contracts have been executed.

(i) It was further known that it would be necessary to have proper contract provisions to afford the best and most economical use of the waters of the river for storage, both temporary and permanent in the various reservoirs and for mutually compatible, beneficial and non-conflicting uses for power and irrigation, and contract provisions designed to accomplish these purposes have been agreed upon and incorporated into contracts.

(j) All of the individual contracts entered into between parties Plaintiff and the Bureau of Reclamation, Department of the Interior, United States of America, were and are designed to be mutually binding upon all parties entering similar contracts, and to be construed together in effect as one overall contract with respect to the common paragraphs therein relating to savings of winter water and accompanying special storage rights; consent to exchanges of American Falls and Jackson Lake storage rights and to the redefinition of those storage rights; temporary storage and exchange of water and releases for power production; and consent to the priority of certain existing and future water rights at Island Park Reservoir and American Falls Reservoir and future reservoirs to be constructed.

(k) Since the execution of the Palisades contracts, the operation of the dams, diversion and distribution works of the parties Plaintiff and of the Bureau of Reclamation, Department of the Interior, United States of America has conformed to the general scheme or plan set out herein and has recognized the priorities set out herein.

VII.

All of the lands described in the Decree, and to which water is therein decreed to be appurtenant, are arid in character and will not produce ordinary agricultural crops without the application of irrigation water; and all of said lands require and need, in addition to all rights presently appurtenant to them, additional water in the amounts set out in the Conclusions of Law; and all of said water has been, can and will be applied to beneficial use in producing agricultural crops thereon.

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VIII.

All of the water rights decreed to the lands described in the Decree herein are and shall be in addition to and supplemental to all other existing water rights appurtenant to said lands; and such additional water rights shall not in any way change, alter, vary, or diminish any and all other water rights possessed or owned by the parties hereto or appurtenant to the said lands.

IX.

All of the parties to this action to whom water rights are decreed have constructed, operated, and now control and maintain all necessary diversion dams, canals, laterals and distribution systems adequate to divert and distribute to the proper lands all of the waters decreed to them, in addition to all other water rights owned by the said parties.

X.

All of the supplemental waters decreed are required for and will be beneficially used for the production of agricultural crops and associated domestic uses upon the lands to which they are decreed and have been used and will be beneficially used in such manner and such supplemental waters shall not be transferrable to any lands other than those lands described in the Decree.

XI.

Some of the rights decreed have been acquired by or decreed to the parties Plaintiff in other proceedings or by other methods, and it is the desire of the parties Plaintiff hereto that all of such rights be enumerated and decreed in this action, in which all parties in interest in waters of Snake River above Milner Dam are parties.

It will greatly aid and assist all responsible State officials, Watermasters and other officials in handling, managing and distributing the waters of the Snake River and its tributaries above Milner Dam to have those rights enumerated and listed in one decree as is intended to be accomplished by this action.

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XII.

The award of the so-called flood water rights to parties Plaintiff to this action claiming them with a uniform priority date of April 1, 1939, will not injure or impair the rights of any other parties and is intended to be a valid and binding settlement of all the claims of the right, title, and interest of the various parties Plaintiff herein and to the said waters.

XIII.

(a) The contracts entered between various of the parties Plaintiff and the United States of America, Bureau of Reclamation, in connection with the Palisades and other projects, as amended and modified, were intended to be, and should be, binding upon all persons claiming rights to the use of the waters of Snake River and its tributaries above Milner Dam; and although the provisions of said contracts provide the basis of a common plan for the administration of the waters of Snake River, certain paragraphs of said contracts, common to all types of contracts with the various parties Plaintiff, contain the major areas of agreement.

Typical examples of the common paragraphs setting forth the major areas of agreement are attached to the Decree herein. A typical example of the common paragragh relating to "Saving of Winter Water; Special Storage Right" is thereto attached as Exhibit A. A typical example of the paragraph relating to "Permanent Exchange of the American Falls and Jackson Lake Storage Rights and Redefinition of Storage Rights" is thereto attached as Exhibit B. A typical paragraph relating to "Temporary Storage and Exchange of Water; Release of Jackson Lake and Palisades for Power Production" is thereto attached as Exhibit C. A typical paragraph relating to "Priority of Certain Existing and Future Water Rights" is thereto attached as Exhibit D.

(b) During the negotiation of the contracts entered between the various parties Plaintiff and the United States of America, Bureau of Reclamation, referred to immediately above, it was necessary to make special arrangements with the Minidoka Irrigation District for the purpose of effecting annual exchanges of water, as well as fixing the carry-over rights of said

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district in connection with Jackson Lake storage. Since the majority of the contracts referred to immediately above had already been executed, and because the contract finally executed by the United States of America, Bureau of Reclamation, and the Minidoka Irrigation District, setting forth these special arrangements required agreement and confirmation by all of the various parties Plaintiff, it was then necessary that each contract be amended and supplemented so as to confirm these appropriate provisions of the Minidoka Irrigation District's contract. The contracts as amended and supplemented provide the basis of a common plan for the orderly administration of the waters of the Snake River above Milner Dam. The pertinent paragraphs of the contract entered by the United States of America, Bureau of Reclamation, and the Minidoka Irrigation District, the contents of which paragraphs were confirmed by all other various parties Plaintiff in amendatory and supplemental contracts, are attached to the Decree herein as Exhibit E.

(c) In addition to the contracts entered between the various parties Plaintiff and the United States of America, Bureau of Reclamation, referred to above, a Memorandum of Agreement between the Bureau of Reclamation and the Bureau of Indian Affairs was executed, setting forth special provisions relating to the water supply for the Michaud Division of the Fort Hall Indian Reservation, Idaho, by which Memorandum of Agreement, the Bureau of Indian Affairs agreed to be bound by those common provisions of the contracts of the various parties Plaintiff so that the Snake River above Milner Dam could be successfully and efficiently administered. The most pertinent paragraphs of this Memorandum of Agreement are attached to the Decree herein as Exhibit F.

Based on the foregoing Findings of Fact, the Court makes and enters the following:

CONCLUSIONS OF LAW

I.

The following parties are entitled to divert and use the waters of the Snake River in the amounts and with the priority dates listed, which water shall be diverted at the point and be appurtenant to the lands described in the Decree made and entered of even date herewith:

MAY 1 3 1996

A. TWIN FALLS CANAL COMPANY

Twin Falls Canal Company shall have the right to divert and use 600 cubic feet per second (being the right recognized in paragraph 6 of the Woodville Decree) with a priority date of December 22, 1915.

B. NORTH SIDE CANAL COMPANY

North Side Canal Company shall have the right to divert and use 300 cubic feet per second (being the right recognized in paragraph 6 of the Woodville Decree) with a priority date of December 23, 1915.

C. NORTH SIDE CANAL COMPANY

North Side Canal Company shall have the right to divert and use 1260 cubic feet per second (being the right recognized in paragraph 7 of the Woodville Decree) with a priority date of August 6, 1920.

D. AMERICAN FALLS RESERVOIR DISTRICT NO. 2

American Falls Reservoir District No. 2 is entitled to have the right to divert as natural flow during each irrigation season under water license No. 15134, having a March 30, 1921, priority, as follows: From May 1 of each irrigation season continuing during that season so long as there is natural flow available for that priority, the first 1,700 cubic feet per second of flow to be available one-half (1/2) to American Falls Reservoir District No. 2 and one-half (1/2) to American Falls Reservoir, except that in any year in which American Falls Reservoir is full to capacity on April 30 or fills after that date, taking into account any water that may be temporarily stored to its credit in upstream reservoirs, all water diverted by American Falls Reservoir District No. 2 within the maximum of 1,700 cubic feet per second during the year prior to the initial storage draft on American Falls Reservoir after the reservoir finally fills in that year shall be considered as natural flow under water license No. 15134. Nothing herein shall prevent American Falls Reservoir District No. 2 from diverting water under said license prior to May 1 of a given irrigation season but all such diversions shall be charged as storage in the event the reservoir is not full on April 30 of that season or does not fill after April 30 of that season.

MAY 1 3 1996

Water available at American Falls Reservoir for the March 30, 1921, priority under water license No. 15134, other than that to be available to American Falls Reservoir District No. 2 as above provided, to be available for storage in American Falls Reservoir.

II.

The following parties are entitled to divert and use, pro rata, the waters of the Snake River in the amounts listed, with the same priority date of April 1, 1939, which water shall be diverted at the point and be appurtenant to the lands described in the Decree made and entered of even date herewith:

A. BURLEY IRRIGATION DISTRICT

The Burley Irrigation District shall have the right to divert and use 163.4 cubic feet per second.

B. MINIDOKA IRRIGATION DISTRICT

The Minidoka Irrigation District shall have the right to divert and use 266.60 cubic feet per second.

C. MILNER LOW-LIFT IRRIGATION DISTRICT

The Milner Low-Lift Irrigation District shall have the right to divert and use 121.00 cubic feet per second.

D. TWIN FALLS CANAL COMPANY

The Twin Falls Canal Company shall have the right to divert and use 180 cubic feet per second.

E. CLARENCE TILLEY

Clarence Tilley shall have the right to divert and use 7.0 cubic feet per second.

F. WILLIAM KENDALL

William Kendall shall have the right to divert and use 4.00 cubic feet per second.

G. FALLS IRRIGATION DISTRICT

The Falls Irrigation District shall have the right to divert and use 125.00 cubic feet per second.

H. A & B IRRIGATION DISTRICT

The A & B Irrigation District shall have the right to divert and use 267.00 cubic feet per second.

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I. OTIS ORTON

Otis Orton shall have the right to divert and use 4.00 cubic feet per second.

III.

The contracts between the individual parties and the United States of America, Bureau of Reclamation, and the Memorandum of Agreement between the Bureau of Indian Affairs and the Bureau of Reclamation are valid and binding upon the parties thereto, and constitute a scheme or plan for the administration of the Snake River and as such, are binding upon all persons claiming rights to the use of the waters of the Snake River and its tributaries above Milner Dam.

IV.

Let Decree be entered accordingly.

Done this 10th day of July, 1968.

s/ Theron W Ward
District Judge

State of Idaho, County of Twin Falls } ss.

I hereby certify the foregoing to be a full, true and correct copy of the original on file in the above entitled action.

E. A. LANCASTER
Clerk of the District Court

Deputy

MAY 13 1996

Exhibit 24

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
Portland Region
Boise Field Office
P. O. Box 8008
Boise, Idaho 83707

PARRY, ROBERTSON & DALY
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A.M. 8 9 10 11 12 1 2 3 4 5 6
P.M.

July 25, 1966

Mr. John Rosholt
Parry, Robertson & Daly
P. O. Box 525
Twin Falls, Idaho

Dear John:

In response to your letter of July 15 concerning the Palisades contracts, I am enclosing a tabulation which shows the contracting entities, the contract numbers, and the contract dates by groupings.

This tabulation, I might add, relates to the original contracts, and as you know all the contracts were supplemented as a result of the rearranged plan in which the Minidoka Irrigation District did not participate in the permanent exchange of Jackson Lake space for American Falls space. Also, as I previously indicated, there were minor adjustments made in the contracts, although none of these adjustments relates to the basic agreements about the saving of winter water, the curtailment of power production at Minidoka Dam, and the adjustments of storage rights among reservoirs.

I agree that it would be a practical impossibility to involve each individual diverter on the river in a modification of the existing decrees. It was for the very reason of ease of administration of the river that it was decided not to contract for space in the Federal reservoirs with individual landowners, but rather they were required to form the Palisades Water Users, Inc. as their spokesman to acquire reservoir rights.

Mr. Holden has indicated to me that he plans to provide a copy of a proposed complaint when it is available but as yet he has not completed it. I would also appreciate having an opportunity to see the product of your efforts in advance of filing, if possible.

Best personal regards.

Sincerely yours,

William Burpee
Field Solicitor

Enclosure

MINIDOKA-PALISADES CONTRACTS

Contract No.	Organization	Contract Date
	A Group	
14-06-W-41	Burgess Canal and Irrigating Company, Rigby, Idaho	12/18/52
14-06-W-15	Enterprise Canal Company, Ltd., Rigby, Idaho	12/12/52
14-06-W-30	Harrison Canal and Irrigation Company, Rigby, Idaho	12/12/52
14-06-W-44	Peoples Canal and Irrigation Company, Moreland, Idaho	12/18/52
14-06-W-37	Rudy Irrigation Canal Company, Rigby, Idaho	12/12/52
14-06-W-22	The Lenroot Canal Company, Thornton, Idaho	12/12/52
14-06-W-14	New Sweden Irrigation District, Idaho Falls, Idaho	12/12/52
14-06-W-45	Poplar Irrigation District, Rigby, Idaho	12/18/52
14-06-W-35	Snake River Valley Irrigation District, Shelley, Idaho	12/12/52
	B Group	
14-06-W-12	Corbett Slough Ditch Company, Blackfoot, Idaho	12/12/52
14-06-W-32	Dilts Irrigation Company, Ltd., Rigby, Idaho	12/12/52
14-06-W-10	Reid Canal Company, Thornton, Idaho	12/12/52
14-06-W-39	The Blackfoot Irrigation Company, Blackfoot, Idaho	12/12/52
14-06-W-38	The Butte and Market Lake Canal Company, Roberts, Idaho	12/12/52
14-06-W-23	The Trego Ditch Company, Blackfoot, Idaho	12/12/52
14-06-W-33	Idaho Irrigation District, Idaho Falls, Idaho	12/12/52
14-06-W-47	Progressive Irrigation District, Idaho Falls, Idaho	12/18/52
	C Group	
14-06-W-34	Lowder Slough Canal Company, Ltd., Rigby, Idaho	12/12/52
14-06-W-11	The Farmers Friend Irrigation Company, Ltd., Ucon, Idaho	12/12/52
14-06-W-42	Sunnydell Irrigation District, Thornton, Idaho	12/18/52
	D Group	
14-06-W-20	Clark and Edwards Canal or Irrigating Company, Ltd., Rigby, Idaho	12/12/52
14-06-W-40	Danskin Ditch Company, Blackfoot, Idaho	12/12/52
14-06-W-29	Island Irrigation Company, Lorenzo, Idaho	12/12/52
14-06-W-16	Labelle Irrigating Company, Rigby, Idaho	12/12/52
14-06-W-43	North Rigby Irrigation and Canal Company, Inc., Rigby, Idaho	12/18/52
14-06-W-18	Parks and Lewisville Irrigation Company, Rigby, Idaho	12/12/52
14-06-W-31	Shattuck Irrigation Company, Idaho Falls, Idaho	12/12/52
14-06-W-27	Texas Slough Irrigating Canal Company, Rexburg, Idaho	12/12/52
14-06-W-21	The Butler Island Canal Company, Ltd., Rigby, Idaho	12/12/52
14-06-W-19	The Liberty Park Irrigation Company, Thornton, Idaho	12/12/52
14-06-W-17	The New Lava Side Ditch Company, Blackfoot, Idaho	12/12/52
14-06-W-26	The Rigby Canal and Irrigating Company, Rigby, Idaho	12/12/52
14-06-W-25	The Riverside Ditch Company, Blackfoot, Idaho	12/12/52

Contract No.	Organization	Contract Date
	D Group - continued	
14-06-W-46	Watson Slough Ditch Company, Ltd., and Watson Slough Irrigation Company, Blackfoot, Idaho	12/18/52
14-06-W-50	Wearyrick Ditch Company, Route 2, Blackfoot, Idaho	12/18/52
14-06-W-13	West Side Mutual Canal Company, Box 978, Idaho Falls, Idaho	12/12/52
	Miscellaneous	
14-06-W-36	The Martin Canal Company, Idaho Falls, Idaho	12/12/52
14-06-W-49	Woodville Canal Company, Idaho Falls, Idaho	12/18/52
14-06-W-24	Aberdeen-Springfield Canal Company, Aberdeen, Idaho	10/22/52
14-06-W-59	American Falls Reservoir District, Twin Falls, Idaho	5/13/54
14-06-W-48	Burley Irrigation District, Burley, Idaho	12/18/52
14-06-W-28	North Side Canal Company, Ltd., Jerome, Idaho	12/12/52
14-06-W-60	Twin Falls Canal Company, Twin Falls, Idaho	5/13/54
14-06-W-91	Fremont-Madison Irrigation District, St. Anthony, Idaho	1/9/55
14-06-W-73	American Falls Reservoir District No. 2, Gooding, Idaho	10/14/54
14-06-100-851	Falls Irrigation District, American Falls, Idaho	12/9/55

Exhibit
25

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR

Portland Region
Boise Field Office
P. O. Box 8008
Boise, Idaho 83707

November 28, 1966

PARRY, ROBERTSON & DALY
RECEIVED
NOV 29 1966
A.M. P.M.

Mr. John A. Rosholt
Parry, Robertson & Daly
P. O. Box 525
Twin Falls, Idaho

Dear John:

Mr. Eagle has provided me a copy of his letter of November 16 to you concerning the participation of American Falls Reservoir District No. 2 in the proposed proceeding for adjustment of the water right decrees on the Snake River. He indicates that the district is not proposing to be a party to the proceeding.

I have checked with the Bureau of Reclamation office here and they agree that the district would acquire no useful additional water rights by reason of a flood water right prior to the 1939 Palisades storage right. According to the information available to them, the full capacity of the existing Milner Gooding Canal is covered by already existing rights prior to 1939 so far as natural flow is concerned, and therefore the district could not in fact divert any additional water even if it did have an additional right.

I am concerned, however, about omitting this district from the proceeding entirely. One of the principal purposes of the Palisades contracts was to set to rest a long-standing disagreement as to the relationship between the district's natural flow rights and the rights to stored water in American Falls Reservoir. Since this dispute was settled in a manner that affects the storable water accruable to American Falls Reservoir, and since the Palisades contracts indicate there will be an adjustment officially made of this agreement, it appears to me to be in the interest of the district and the other water users to have that district a party to the proceeding. If it is a party, the Bureau will then be in a position to obtain from the State Engineer the adjustment in the priorities required by the contract. If the district does not participate, it could well be that the obtaining of this adjustment

would be more difficult. Contrary to the suggestion in Mr. Eagle's letter that American Falls Reservoir District No. 2 is being overlooked in the river adjudication, it appears to me that one of the principal purposes of the adjudication is to formalize in a final decree fashion the water rights protection agreed to in the Palisades contracts which, of course, are of major benefit to the district.

In view of the foregoing, I would appreciate having your views before any final decision is arrived at that would look towards the omission of American Falls Reservoir District No. 2 as a party to the adjusted decree.

As I have previously indicated to you, we are reviewing the draft of pleading provided to me by your letter of October 10 and hope to have our comments to you within the next few days.

Sincerely yours,

William Burpee
Field Solicitor

Exhibit
26

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR

Portland Region
Boise Field Office
P. O. Box 8008
Boise, Idaho 83707

DEC 14 1966

PARRY, ROBERTSON & DALY
RECEIVED
DEC 15 1966
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

Mr. John A. Rosholt
Parry, Robertson & Daly
P. O. Box 525
Twin Falls, Idaho

Dear John:

I indicated previously that we would provide you with our comments concerning the proposed draft of complaint forwarded to us by your letter of October 10 relating to a supplemental decree on the Snake River.

According to the information available in this office and that of the Bureau of Reclamation, we have no suggestions with respect to the designations of amounts of water or land descriptions. We think they are accurate and in accordance with the understandings had by all the water users organizations in Water District No. 36, and in accordance with a resolution adopted by the Committee of Nine under date of March 1, 1958.

There are only one or two minor matters that you might like to give consideration to. Some of the Lower Valley organizations do not own the ditches and canals, rather, title is held by the United States. Perhaps it would be appropriate in the interest of accuracy for those organizations to be alleged to be the operator rather than the owner of the system. This could be accomplished by a mere change of words at line 24, page 5, as relates to the Burley Irrigation District; line 1, page 7, as relates to the Minidoka Irrigation District; line 5, page 17, as relates to the Falls Irrigation District; and line 19, page 18, as relates to the A & B Irrigation District. On page 16, paragraph XI, at line 27, the irrigable acreage of the Falls Irrigation District is listed as 6,100 acres. We believe that the land description encompasses 11,240 acres. It is recognized that the Falls includes irrigation from wells, but these wells are on the basis of a water exchange arrangement and it would be appropriate to include the entire acreage in the complaint. On page 25, paragraph II D of Count Four, it is indicated that new storage "shall have a priority date equal to that of Palisades Reservoir." It might be desirable to change these words to "shall be operated as if it had a priority date equal to that of Palisades Reservoir." Such a change

in wording would, I think, be more in keeping with the State priority system in that the court would not be asked to change a priority date itself. Also, on page 26, line 21, the reference should be to Paragraph II instead of Paragraph III.

I have also read the proposed stipulation forwarded by your letter of November 29 and have no suggested modifications to it.

I hope that you have persuaded the attorney and board of directors of American Falls Reservoir District No. 2 to participate in the proceedings. I note that the Fremont-Madison Irrigation District has not been listed as a party. Since that district has an interest in Island Park Reservoir it occurs to me that consideration also ought to be given to including it as a party. I am writing to Mr. Holden concerning this.

In summary, I think the proposed pleadings and proposed stipulation accomplish the objectives of the water users and will serve a very useful purpose in protecting the validity of the water rights of the irrigated lands in the Upper Snake River Valley.

In connection with your preparation of the documents in final form, I would appreciate it if you would provide me with copies of the proposed exhibits A, B, and C, being the Rexburg, Foster, and Woodville decrees. I have never been sure that I have available truly authenticated copies of these documents. The copy of the Woodville decree that I have is a printed document put out by the Times-Register Press, Idaho Falls, which shows that it includes as exhibits to that decree copies of the Foster and the Rexburg decrees which were reaffirmed by the Woodville decree in the form attached as copies. Thus, your exhibits A and B would be duplicated in exhibit C, if I have the right information. Could you advise me?

Sincerely yours,

William Burpee
Field Solicitor

Exhibit 27

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
Portland Region
Boise Field Office
P. O. Box 8008
Boise, Idaho 83707

IN REPLY REFER TO:

SEP 6 1967

PARRY, ROBERTSON & DALY
RECEIVED
SEP 7 1967
A.M. 9 10 11 12 1 2 3 4 5 6 P.M.

Mr. John A. Rosholt
Parry, Robertson & Daly
P. O. Box 525
Twin Falls, Idaho 83301

Dear John:

In our discussions of the draft Stipulation in the currently pending supplemental adjudication action relating to the decrees on the Snake River, a copy of which Stipulation you provided to me by your letter of August 22, I indicated that I would provide copies of the documents that you might want to give consideration to in preparing the final form of the proposed Stipulation. Accordingly I am enclosing a copy of the 1960 contract with the Minidoka Irrigation District and a copy of the 1957 memorandum of agreement between the Bureau of Reclamation and the Bureau of Indian Affairs relating to the water supply of the Michaud Division of the Fort Hall Indian Reservation.

With respect to the Minidoka Irrigation District contract I call your attention to articles 21 and 22. These articles cover the special arrangements made with the Minidoka Irrigation District for effecting annual exchanges of water, as well as fixing the carryover rights of the district in connection with Jackson Lake storage. Perhaps it would be desirable also to make reference to article 27 which permits the interexchange of stored water in the reservoir system upon consultation with the watermaster and the advisory committee in order to effect the greatest practicable conservation of water. These are the provisions, in addition to the common provisions with all the water users referred to in paragraph XVII in the draft of Stipulation, to which I had reference in our telephone conversation.

With respect to the agreement pertaining to the Michaud Division of the Fort Hall Indian Reservation, attention is directed to article 8. This article sets out the special provisions under which the irrigated area is limited to 21,000 acres of land, and any amount of water in excess of 22,400 acre-feet averaged over a 10-year period pumped from the ground will be treated as stored water and its availability will be limited to the amount of stored water to which the project is

entitled. A reading of this article will indicate other limitations in connection with the water entitlements of the Michaud Division. Your attention is also directed to article 15, which article is the agreement required by the Act of August 31, 1954, and was a condition precedent to the authority to commence construction of the Michaud Division by the Indian Bureau.

Paragraph XVII could be expanded to include appropriate references to the above indicated articles of these two agreements. It also occurs to me that perhaps in line with the recitations in the draft of the proposed Stipulation indicating that the Palisades contracts were entered into on the basis of a common plan for the administration of the waters of the Snake River, it may be desirable to broaden paragraph XVII to make it applicable to all the provisions of those contracts. I have in mind here particularly the interrelationships between the definitions provisions of the Palisades contracts, the provisions setting up the Committee of Nine as the advisory committee, and the provisions relating to the ordering of water and the handling of complaints. All these arrangements are an integral part of the overall understanding among the water users on the river. By having the Stipulation refer to the entire contracts there would be avoided any future attempt to set up a strained interpretation out of the isolated language used in the provisions pointed up particularly in the decree. I have no strong feeling on this point. I merely raise it for your consideration.

It is hoped that the foregoing will be helpful to you. If we can provide any further information, please let us know.

Sincerely yours,

William Burpee
Field Solicitor

Enclosures 2

Exhibit 28

July 9, 1968

Mr. William Burpee
Office of the Solicitor
U. S. Department of Interior
P. O. Box 937
Boise, Idaho

Dear Bill:

Pursuant to our telephone conversation of yesterday, we have amended Exhibit "E'" to include all of paragraphs 21 through 24 plus 25, 26, and 27. Paragraphs 25 and 26 were included merely because it was easier than leaving them out.

I will clear this with Roger Ling, attorney for the Minidoka Irrigation District, before entry of the final Supplemental Decree on July 10th.

I have enclosed a copy of your letter of September 6, 1967, wherein you point out that you felt the only articles we need call attention to were Articles 21, 22, and 27 of the Minidoka Irrigation District contract. This was the guideline I used in attempting to prepare the exhibit in the first instance. Since you now think that Articles 23 and 24 should be included, we will include them.

In addition, we have amended page one of the Findings of Fact and Conclusions of Law, eliminating that portion in parenthesis which recites "and its tributaries" and have adjusted the language in what was formerly lines 23 and 24 in accordance with your suggestions. Find enclosed the new page 1 for Findings of Fact and Conclusions of Law as well as a new Exhibit "E."

In addition, I am enclosing a synopsis of a conference I had with Keith Higginson late last month. This came about at Mr. Higginson's request following the Idaho State Reclamation Association

meeting in Idaho Falls last December. At that time he asked Tim Hopkins and myself to work with him in regard to some ideas for changes which he had. We felt that it was probably better to work with him at the beginning than to have some changes proposed which we did not favor. How many of these proposed changes will be finally submitted to the legislature I do not know, but I do feel that the reclamation water users can better be protected by our cooperation than if we were to oppose all changes.

Sincerely,

JOHN A. ROSHOLT

JAR:dp

Enclosures

Exhibit
29

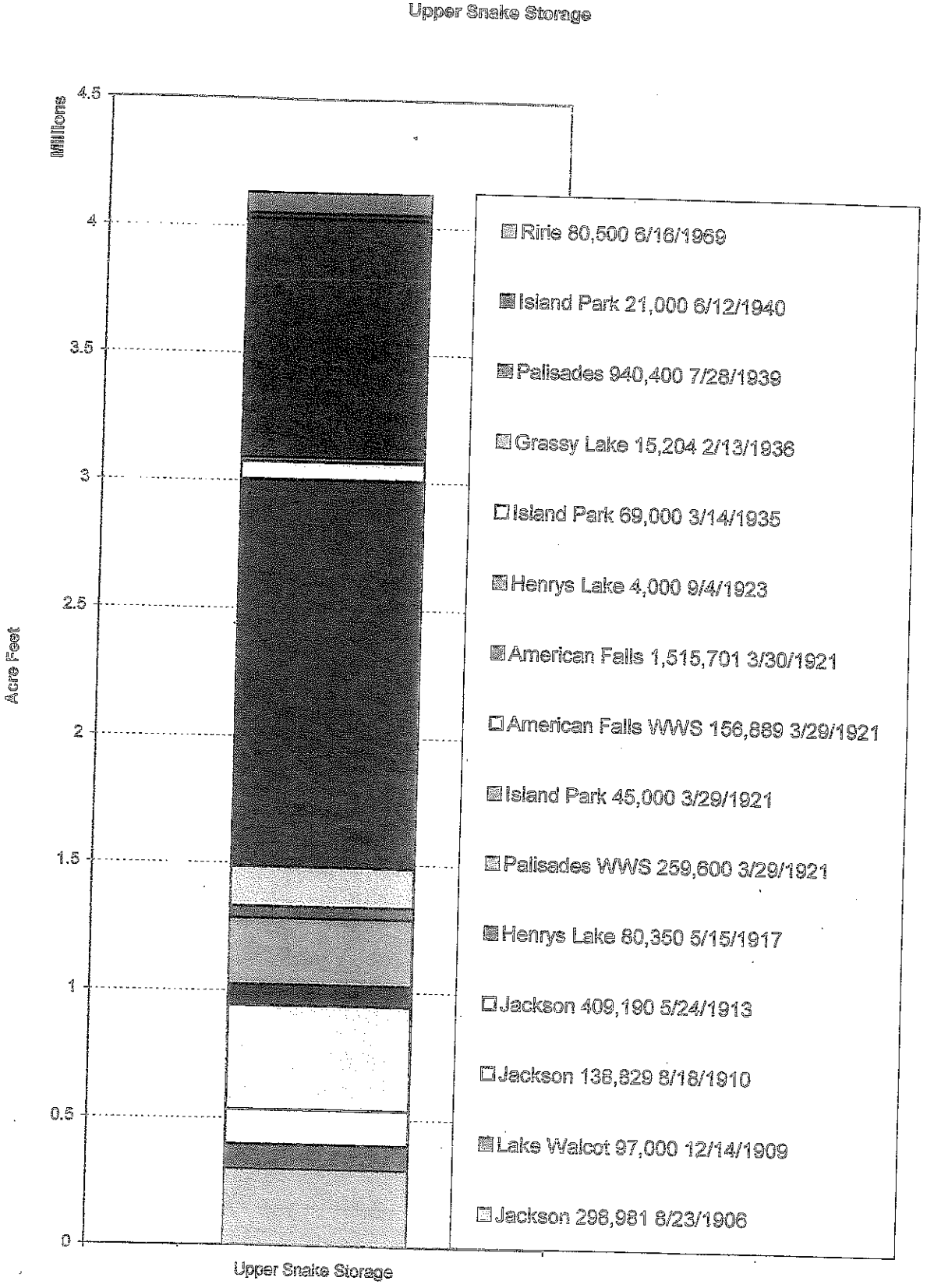
Upper Snake Storage
Millions
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Acre Feet
Upper Snake Storage
Ririe 80,500 6/16/1969
Island Park 21,000 6/12/1940
Palisades 940,400 7/28/1939
Grassy Lake 15,204 2/13/1936
Island Park 69,000 3/14/1935
Henrys Lake 4,000 9/4/1923
American Falls 1,515,701 3/30/1921
American Falls WWS 156,889 3/29/1921
Island Park 45,000 3/29/1921
Palisades WWS 259,600 3/29/1921
Henrys Lake 80,350 5/15/1917
Jackson 409,190 5/24/1913
Jackson 138,829 8/18/1910
Lake Walcot 97,000 12/14/1909
Jackson 298,981 8/23/1906

Exhibit 30

RIVER OPERATION ON SNAKE RIVER, IDAHO

By Lynn Crandall, District Engineer, U.S.G.S., and Snake River Watermaster.

According to the Idaho laws the state is divided by the State Reclamation Engineer into Water Districts for the purpose of distribution of the waters from the various reservoirs and streams to the several appropriators in accordance with their respective priority rights.

These districts are of various sizes ranging from districts on small streams serving only a couple thousand acres to District No. 36 on Snake River which includes 1,200,000 acres or about one-half of the irrigated area of the State. Each district comprises an area, regardless of size, having a common water supply, and where the use of water by one appropriator may have an effect on the supply for another.

A water right in Idaho is not completely perfected until it has been decreed by a court of competent jurisdiction which defines the date of priority, amount of water, stream from which diverted, what use to be made of the water, the specific lands to be irrigated, if an irrigation right, and points of diversion.

The owners of these decreed water rights gather on the first Monday of each March, at a point in their respective water districts designated by the State Reclamation Engineer, to hold what is known as the Annual Water Meeting. Canal companies owning rights are represented by someone designated by the company. These annual water meetings are grass root affairs, very similar to the old town hall meetings of New England. At these meetings a report is made of the operations, expenditures, etc., during the preceding year and a budget is adopted for the ensuing year. There is a general discussion of any problems of local interest. The meeting elects a watermaster to handle distribution of water in the District during the ensuing year, voting being according to size of water right. The watermaster so elected becomes thereby a state official operating under the general jurisdiction of the State Reclamation Department but also having certain individual powers and authority of his own.

He has to deliver the water according to the court decrees and state law, otherwise he would be haled into court on a contempt charge, and at the same time he has to get along with his water-user constituents. In actual practice this is not so difficult to accomplish as might be supposed; the watermaster becomes familiar with the details of water rights, stream administration, etc., and if he does a reasonably satisfactory job his water-users continue to elect him year after year rather than go to the trouble of breaking in a new man. Most Idaho watermasters spend many years in these positions until they die, retire or occasionally get a better job.

In the small districts the watermaster is usually hired only for the irrigation season and has to have some other means of livelihood during the balance of the year. In such instances a school teacher is sometimes hired as the work is mostly during his vacation period. In many cases a farmer having a small farm can handle the work as watermaster in addition to his

farming operations. In the larger districts where more water is used and particularly where reservoir water is run down the stream channels there are various technical problems involved that require the services of trained personnel who can only be retained on an annual basis for those in responsible positions.

In District No. 36 on Snake River the work of water distribution requires constant use of stream flow records. Discharges from the river and canal gaging stations are necessary daily during the water regulation period. On account of this intimate connection between the work of stream gaging and water distribution a cooperative agreement was entered into in 1919 and has since continued in effect between the U. S. Geological Survey, State of Idaho, and Water District No. 36 whereby the District Engineer of the U. S. Geological Survey is elected annually as watermaster by the Snake River water-users. An executive order authorizes him to hold both Federal and State positions as part of the Geological Survey's cooperative program with the states. The Geological Survey and the State of Idaho contribute towards the cost of the work from cooperative stream gaging funds an amount equal to what it would cost to operate and maintain the gaging stations in the District that are of general public interest. The balance of the cost of operations relating to water distribution is paid by the water-users of Water District No. 36. The cooperative feature of the work has made it possible to get the stream flow records computed and available for use much more speedily than is the case elsewhere. Final computations of stream flow records at all the gaging stations are completed within two months after the end of the water year on September 30. About 30 gaging stations are maintained on an annual basis and about 100 others, mostly canals, are operated during the irrigation season only.

During the past year, 1955, the total cost of these joint operations was $44,500, of which $26,000 was paid by Water District No. 36, $11,100 by the U. S. Geological Survey, $4,100 by U. S. Bureau of Reclamation, and $3,300 by the State of Idaho stream gaging funds.

The District Engineer, one engineering assistant, and a clerk constitute three Federal Civil Service employees who are employed thruout the year. During the irrigation season a number of hydrographers, river riders, deputies and gage readers are also employed. It has been found that high school teachers of mathematics and science can be trained to become satisfactory hydrographers for this seasonal work. Mimeographed bulletins are issued to interested parties daily during the irrigation season and weekly during the balance of the year showing reservoir storage, stream flow, precipitation, snowfall and related matters. During the winter months, in addition to operation of the year round gaging stations, the permanent employees prepare a detailed report of the past year's operations which is supplied to the state and the larger canal companies. Close scrutiny of the budget by the water-users contributes to economical operation of the District.

Total water deliveries in 1955, an average year, amounted to about 7½ million acre-feet to an area of 1,200,000 acres or about 6.2 acre-feet per acre. The irrigated lands are supplied with water from about 100 canals ranging in size from 1 to 3,700 second-feet. During the peak of the season these canals divert about 27,000 second-feet total flow. There are over 5,000 miles of canals and laterals exclusive of farm ditches. The watermaster delivers

the water to the heads of the canals from which point distribution to the farm is by the canal companies. The natural flow of the streams is usually sufficient to supply the demand until about July 1st, after which heavy draft is necessary on the reservoirs to meet the irrigation requirements. In dry years storage draft begins in May, and in one year, 1934, as early as April 6th. In wet years the natural flow may supply the demands until late in July.

About 20% of the diversions are supplied by return flow to the river within the valley from irrigation diversions and river losses. About 50% of the diverted flow sinks to the underlying ground-water and returns to the river some miles downstream below the canal diversions where at present it is being used for power production. Proposed projects now under study by the Bureau of Reclamation would use a part of this return flow for irrigation of new lands.

Six reservoirs have been constructed in the District: American Falls (1,700,000 acre-feet), Jackson Lake (847,000 acre-feet), Island Park (133,000 acre-feet), Lake Walcott (96,000 acre-feet), Henrys Lake (78,000 acre-feet), Grassy Lake (15,000 acre-feet), or a total capacity of 2,869,000 acre-feet. All of these reservoirs were built by the Bureau of Reclamation, beginning in 1905, except Henrys Lake which was built by a group of canal companies.

Another Bureau of Reclamation reservoir, Palisades, is now in the construction stage, with a proposed capacity of 1,400,000 acre-feet of which 200,000 acre-feet is reserved for a minimum power head and 1,200,000 acre-feet will be available for joint flood control and irrigation use. The Bureau of Reclamation and the Corps of Engineers have agreed upon a plan of operation for this reservoir, based upon snow surveys, which will permit the entire capacity to be used for flood control when needed and yet insure the filling of the reservoir within a small percent allowance by the close of the floodwater period. The floods here are all from melting snow.

From the upstream reservoir, Jackson Lake in Wyoming, it is 330 miles by river to the lowest canal diversion at Milner, Idaho. It takes $4\frac{1}{2}$ days for water to travel this distance. The lands below American Falls reservoir, located 70 miles upstream from Milner, however, are supplied from that reservoir as long as water is available therein. It requires from two to three days for the storage water to travel from Jackson Lake to the canal headings in the valley above American Falls reservoir where about half of the irrigated land is located. Curves showing time of transit between gaging stations for various discharges have been prepared, based on operating experience, and are used in ordering storage releases. During the past years much argument and contention arose between groups of the water-users relating to segregation of stored water and natural flow on account of construction of the reservoirs and running large volumes of stored water down the stream channels. These difficulties have involved such questions as reservoir evaporation losses, bank storage around the reservoirs which drains back into the reservoirs as the water level is lowered therein, transmission losses and bank storage along the river channels, amount of ground-water inflow to the reservoirs below points of possible direct measurement, etc.

The natural flow of the streams belongs to the owners of the decreed natural flow rights according to their respective priorities and under the Idaho laws the construction of reservoirs and release of stored water therefrom

cannot be allowed to diminish the natural flow that would otherwise be available for the natural flow rights. The stored water in Henrys Lake is owned by canal companies in proportion to their ownership of stock in the company that built the reservoir. In the Bureau of Reclamation reservoirs title to the reservoir and water rights is held permanently by the Government and the water is delivered to various canals in accordance with purchase contracts between them and the Government. During the storing period the reservoirs are operated by the owners thereof as desired. When storage draft begins the reservoir owner furnishes the watermaster a list of the parties entitled to the stored water and amount to which each is entitled and he thereafter delivers the stored water in accordance with the requests of such parties.

In Idaho the owners of water diverted from the stream can pick up and re-use their own waste and drainage waters as they see fit until they escape into a regular natural stream, after which any return flow water ordinarily loses its individual identity and is considered as part of the flow of the stream for delivery to the decreed rights according to their priorities.

During the years detailed studies of all these and similar questions have been made at each of the reservoirs and along the various sections of river channels, from which certain rules and operation schedules have been developed, designed to preserve an equitable distribution between the owners of natural flow and stored water.

One interesting result of these studies is that in all of the Snake River reservoirs, except Henrys Lake, the seasonal return flow from bank storage in the porous soils adjacent to the reservoirs just about offsets evaporation losses during the period of storage withdrawal, which is usually from about July 1 to about September 20. The evaporation losses are greatest, however, when the reservoirs are full and the bank storage returns later as the reservoirs are drawn down. This is handled by using some stored water as natural flow when reservoir draft first begins and later on an equal amount is credited to the reservoir as bank storage return, as different dates of priority rights are being filled at different times thruout the season due to decreasing natural flow.

The settlement of these different problems and reconciliation of varying viewpoints has been greatly facilitated by the creation of a Committee of Nine representing different sections of the Snake River Valley, the members of which are elected by the water-users each spring when they elect the watermaster. The Superintendent of the Minidoka Project of the Bureau of Reclamation is an advisory member of this Committee. This Committee has no legal authority but it has served effectively and as a group has usually been able to agree unanimously upon the disputed points. The recommendation of this Committee has always had much more public weight than if various decisions were announced as merely edicts of the watermaster. The fact that the Committee has no legal power has been an advantage, in reality, because it has compelled it to reach decisions based upon facts, and fair consideration of each others viewpoints.

The Committee has gradually grown in influence; it passes on the annual budget, determines policies and generally acts in the capacity of the Board of Directors of a corporation of which the watermaster acts as manager. It

acted as the Idaho Compact Commission in a recent agreement between Idaho and Wyoming for division of the waters of Snake River between the two states. This plan of river operation that has evolved on Snake River thru 37 years of operating experience, ranging from extreme drought to heavy floodwater years, is essentially a democratic plan controlled by the water-users in proportion to their respective interests. They have demonstrated their ability to resolve their differences among themselves. The Committee of Nine provides an organized well-informed group that can sit down with the Bureau of Reclamation, for example, and discuss any differences of ideas as to what ought to be done in the way of water development or operation. At times the Committee has strongly opposed plans of the Bureau of Reclamation for developments on the river but thru mutual discussion it has always so far been found possible to agree upon a plan that has been mutually acceptable and which has probably been more equitable than if one party had been able to impose its will upon the other.

Inasmuch as voting at the annual water meetings is by amount of decreed water rights all water-users are represented in proportion to their respective interests in the stream so that the majority sentiment prevails. Any Federal agency having title to a water right votes in proportion to the amount of its right. Any individual water-users who feel aggrieved by action of the watermaster can bring any question before the local courts in which the water rights were decreed for legal decision as to whether their rights were being adversely affected by such action.

In southern Idaho water is the basis of nearly all the life and business that exists in the area. The people there would never be content without some effective voice in the control of the use of this basic resource. They recognize that the vast new multipurpose projects must of necessity be built by the Federal Government but they feel that the most harmonious operation will be effected thru some plan in which the local, state and federal interests can all participate on a basis of equality of interest.

Exhibit
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Irrigated Eden

The Making of an Agricultural Landscape in the American West

MARK FIEGE

Foreword by William Cronon

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their ideals against nature. When their interaction with the land produced environmental consequences that denied their mastery, they searched for new constructs that more effectively explained their predicament. The irrigators' many visions thus revealed their reciprocal relationship with nature, the creation and re-creation of their landscape, the unfolding of their history.

3/ **Dividing Water**

Conflict, Cooperation, and Allocation on the Upper Snake River

Fundamental to the irrigated landscape's unfolding history were the laws and conventions that irrigators adopted to govern the allocation of water. Irrigators sought to divide the flow of rivers and canals among themselves; accomplishing this division in a just, cooperative, and, within limits, equitable fashion required rules and regulations. But in a landscape in which human systems had become inextricably entwined with complex and disruptive hydrological processes, the orderly distribution of water could easily break down. Such a breakdown took place on a July morning in 1919.

Early that morning, Joe Koury rose from his bed and went outside to tend his irrigation water. Farmers such as Koury were used to this task. They were accustomed to slipping on rubber boots, grabbing shovels, and tromping across the landscape to perform one of the most routine but important chores on the farm. If necessary, the farmer shifted the irrigating stream from one field to another. And he looked for malfunctions in the system. Debris might have plugged a ditch. Perhaps a gopher had been busy. Maybe the current had begun to erode a bank or furrow. Somewhere, no doubt, the crumbling earth would need a little work, some patching and filling, to keep the water flowing on its way.

Yet Koury also scrutinized the landscape for signs of a more serious problem. Koury went out not just to change the stream or check on the ditches but to make sure that none of his neighbors had taken water that he believed rightfully belonged to him. In Idaho and the American West during the late nineteenth and early twentieth centuries, such

a violation of an irrigator's rights almost always led to conflict, even violence. Drought usually precipitated these altercations. In the driest years, canals simply did not carry enough water to supply each farmer with a continuous stream, as they usually did. To compensate for the scarcity, water users took turns and irrigated their farms in rotating shifts; for a limited time, each irrigator on a canal or lateral would use the entire supply. But while drought led water users to cooperate, it also increased the potential for conflict. Misunderstandings and disagreements over water allocation easily developed. Whose turn was it? How long was the turn? As crops withered, tempers flared; an impatient, angry, or aggrieved farmer was likely to stomp out to a headgate and simply commandeer the stream. Desperate or dishonest irrigators even resorted to theft; under cover of darkness they opened their headgates and took water at someone else's expense. Thus when Joe Koury left his house, shovel in hand, he probably knew that his work might amount to more than just routine maintenance. The summer of 1919 was one of the driest on record in the upper Snake River valley, and farmers everywhere—Koury included—patrolled their ditches and monitored their water with extreme vigilance. Indeed, so anxious was Koury that he went out that morning before breakfast. It was his turn, and nobody was going to cut into it.

He realized his worst fears when he reached the ditches that crossed his farm. They were running dry. Furious, Koury went to the headgate that shunted water from the community lateral into his ditches. There stood William Grover, Jr., his neighbor. To Koury's dismay, Grover had closed Koury's headgate and opened his own. Koury accused Grover of taking the water; Grover countered that it was now his turn to have the stream. Ironically, local irrigators had recently given Grover responsibility for preventing just the sort of argument in which he had now become embroiled. They had chosen Grover to serve as lateral watermaster, the man responsible for overseeing peaceable water rotation during this droughty season. But this morning at the headgate, cooperation and amity broke down into verbal conflict, then violence.

The shovels that Koury and Grover carried, tools for directing life-giving water to crops and livestock, now became weapons, instruments of injury and death. Both men struck blows. Grover's blade hit Koury's temple; Koury collapsed into the water. Grover immediately pulled him

out, but Koury was dead. Later, prosecutors would argue that Koury, a battle-hardened Great War veteran trained in bayonet drill, could not have lost the fight had he actually brought his shovel into play. But no matter; Koury had survived the Meuse-Argonne and the horrors of trench warfare only to meet his fate in an Idaho irrigation canal.[1]

Joe Koury's death starkly illustrated the strange mixture of conflict and cooperation that surrounded—and still surrounds—water management in Idaho and other arid parts of the American West. In the arid West, conflict and cooperation existed together like two parts of a schizophrenic personality. In one way, irrigation was largely a cooperative enterprise. Some irrigators worked alone, but most did not; building diversion dams, excavating lengthy canals, and allocating water were tasks most efficiently accomplished collectively. Cooperative social behavior, motivated by religious ideals or the habits of mutual assistance common among rural Americans, also compelled irrigators to join forces. And to further their shared hydraulic objectives, irrigators often formed cooperative institutions: the irrigation district and the aptly named mutual company, for example, gave farmers the organizational means to finance and maintain their canal systems. In certain respects the Corbett Slough, the conduit that carried water to the farms of Koury and Grover, exemplified the cooperative ideal. To meet the technical challenges of moving water out of the Snake and onto land, farmers in the 1880s had come together to build, operate, and maintain an irrigation system. The drought-inspired rotation program that Grover administered, moreover, represented an extension of that neighborly cooperation.[2]

Yet the killing of Joe Koury demonstrated that conflict could destroy the harmony that the irrigators prized. Usually this conflict stemmed from efforts to divide a stream of water and distribute it among many irrigators. For most irrigators in the American West, dividing water ultimately meant privatizing it, turning the common property of a stream into private property on a farm. Although irrigators, those on Corbett Slough included, might share the burdens of procuring water, they still lived in a society and nation that idealized private gain and the economically independent man. Koury and Grover, after all, each wanted water for himself, for his own farm, for his own profit. And as their fight showed, reducing a stream to private property could easily lead to vio-

lent conflict. Disagreement, misunderstanding, or thievery could upset the process. Such problems often simply derived from the nature of water itself. Dividing this fluid, mobile, scarce substance into privately owned quantities—measuring and physically separating it—was difficult and created ample opportunities for error, misunderstanding, and disagreement. Dividing water, which almost always depended on the ability of irrigators to cooperate with one another, thus frequently spawned conflict. And it was no coincidence that, as in the Koury-Grover fight, the struggles frequently broke out at headgates, the devices with which irrigators physically apportioned water. Not merely an instrument of hydraulic technology, the headgate also stood as the locus and symbol of conflict.[3]

The ditch bank duel between Joe Koury and William Grover on that warm July morning in 1919 was not an isolated incident; rather, it represented but one small fight in a broader, ongoing struggle over Idaho's water. This struggle encompassed not just single canal systems but large portions of rivers and watersheds; it spanned not just lone years such as 1919 but entire decades. Beginning in the late nineteenth century, farmers, canal companies, irrigation districts, and various government entities across Idaho's irrigated landscape battled over the allocation of scarce water. The conflict usually played itself out on two interconnected levels. Within canal systems, farmers disputed water allocation, took water from each other, and, like Koury and Grover, fought with shovels. Concurrently, irrigation companies and districts fought over the division of the rivers themselves. On the rivers the struggle usually entailed lawsuits, but irrigators found intimidation and threats of violence useful tools as well. But conflict was not an end in itself for irrigators; throughout this period, water users on both levels sought to establish—or reestablish—the cooperation that made for stable irrigated agriculture.

Conditions on the upper Snake River between the 1880s and 1920s provide a case study of the interplay of cooperation and conflict that typified water allocation in Idaho and much of the American West. Water allocation on the Snake evolved in two periods, roughly before and after the completion of Jackson Lake dam and reservoir. In the first period, from the 1880s to the early 1910s, irrigators from the Blackfoot area to the vicinity of Rigby struggled to divide the scarce waters of this hydrologically complicated river. The earliest irrigators simply diverted water

into their canals with little regard for rules or laws. But drought and increased irrigation eventually so depleted the Snake that farmers resorted to the legal doctrine of prior appropriation to divide the shrinking river. Theoretically pragmatic and functional, and suited to the ideal of individual self-interest, the law in practice failed to provide for smooth distribution of water. To overcome the flaws of prior appropriation, ensure that needy irrigators received water during extreme drought, and forestall conflict, irrigators created extralegal, cooperative allocation methods.

In the second period, from about 1910 to the mid-1920s, irrigators around Minidoka and Twin Falls vied with upstream irrigators—primarily those between Blackfoot and Rigby—for control of the Snake. The downriver farmers drew much of their water supply from Jackson Lake dam and reservoir, completed in 1907 and expanded in 1910 and 1916. This stored water had to flow several hundred miles through the Snake's channel, past the people in the Rigby-Blackfoot vicinity, to get to the Minidoka–Twin Falls irrigators. But public officials responsible for allocating the Snake had trouble differentiating the stored water from the regular, or natural, flow of the hydrologically complicated river. Conflict broke out between the upstream irrigators and the Minidoka–Twin Falls water users. Once again, a social solution based on informal, cooperative allocation methods seemed the answer. This cooperation, which culminated in the creation of the Snake River Committee of Nine in 1923, combined all elements of water management—prior appropriation, dams, reservoirs, irrigation companies and districts, state and federal agencies, the river itself—into one loose, composite system. Snake River irrigators hoped that this ad hoc cooperative organization would prevent the sort of conflict that led to farmers bludgeoning each other with shovels.

The common thread in the history of water allocation on the upper Snake is the river itself. The story begins with the river and its tributaries in the late nineteenth century, when farmers first settled along the stream in substantial numbers. In Wyoming, the Snake trickled off the Continental Divide, ran west and south through mountainous terrain, and drained into Jackson Lake on the east side of the Teton mountains. From this alpine lake the Snake plunged south through rocky, pine-covered gorges. Then the river turned west and emerged from the mountains

onto the plain to which it lent its name. At the canyon mouth the Snake slowed somewhat and flowed over a huge alluvial fan that it had built up over millennia. After taking in Henrys Fork and other streams, the Snake curved south and west and passed over a series of falls: American, Cauldron Lyn, Twin, Shoshone.

Along its twisting course, the upper Snake fluctuated in volume. Each spring, snow in the headwaters melted and the river rose in its bed, spilled over its banks, and scoured new courses for itself in the underlying alluvium. As summer approached, the snow disappeared and the Snake's volume fell, until by eatly autumn the flow was but a fraction of what it had been during the late spring flood. Within these broad seasonal cycles the Snake's flow varied according to hydrological conditions. The amount of winter snowfall determined spring and summer flows; light snowfall meant less water in the spring. Groundwater tables along the Snake influenced its volume, too. Where the table was low, river water seeped into the gravel. Where the table was high, groundwater percolated through the gravel into the stream. Disturbance and change characterized the Snake; from this writhing, pulsing, complex river the first irrigators would divert water to their fields.[4]

Those early settlers began arriving in the upper valley in the 1880s and 1890s. During the 1880s, Mormon farmers left Utah's crowded farming areas and relocated in the Snake River forks country, around where several rivers (Falls, Teton, Henrys Fork) and creeks (Willow, Moody) flowed into the South Fork of the Snake. They arrived in small groups of friends or kin, carrying with them the sanction but not the organizational and financial support of their church. By 1890, the Mormons had covered the forks country with a complicated network of small canals, each drawing water from the Snake River or one of its tributaries. Through the 1890s and into the early 1900s, still more settlers, many of them non-Mormons, came to the upper valley. Between 1896 and 1900, the area of irrigated land in Fremont and Bingham counties rose 225 percent, from 65,000 to 211,111 acres. Large projects, such as the 16,000-acre New Sweden Irrigation District, accounted for much of the added farm acreage.[5]

Through the late nineteenth century, irrigators in the upper Snake River valley adjusted their agriculture to seasonal hydrological variations. The farmers often extended temporary rock, brush, and canvas

dams into the Snake and its tributaries, capturing the flow and drawing it into their canals; as summer approached and the streams fell, they extended the dams farther, until at last the water ran below the level of the canals, leaving them dry. The farmers also grew crops according to the availability of water. In 1890, engineer Frederick Haynes Newell observed that Cassia County irrigators cultivated greater or lesser amounts of land each year "depending somewhat upon the appearance of snow among the high peaks." Hay and grains, the predominant crops in Idaho before the early twentieth century, were suited to the fluctuating water regimen. Hay and grain required relatively little water compared to other plants, and then only in the spring and early summer when melting snow swelled the Snake and other streams. In 1900 state engineer W. D. Ross reported that because the upper Snake River valley "is very largely a grain country, the maximum use of water" took place "during the period of maximum supply," the months of May, June, and July. By August and September, when the river fell in volume, the harvest of hay and grain was already under way.[6]

The legal doctrine of prior appropriation ostensibly provided irrigators with a system for dividing the Snake and other streams. Prior appropriation was the basis for most western American water law by the late nineteenth century. Californians first implemented it in the gold rush camps. Gradually, water users in other territories and states adopted it. By 1890, it was firmly established in Idaho statutes, supreme court decisions, and the state constitution. Two essential features characterized the doctrine. First, irrigators claimed rights to distinct quantities of a stream's flow, the earliest, or "prior" rights taking precedence over later ones (thus the time-honored western phrase, "First in time is first in right"). Second, to retain water rights, an appropriator had to exercise them by actually diverting water from a stream and continually putting it to "beneficial use," most importantly, domestic consumption and agriculture (thus, "Use it or lose it").[7]

Deceptively simple in theory, prior appropriation embodied the individualist and capitalist values of a society intent on exploiting and developing the western public domain. Under the law, irrigators attempted to treat streams like "natural resources," raw materials that people could manipulate, possess, and transform into wealth. Prior appropriation and water rights ostensibly divided a stream into units that belonged to

farmers, who then turned the water into food and dollars. The doctrine allowed irrigators to negotiate between nature and the market, to translate a wild substance into private property. In a sense, the doctrine attempted to reconcile two entities—the real stream that actually flowed through the landscape and the abstract, legal river belonging to many individual irrigators. Water rights allowed irrigators to imagine a stream as the sum of many individual quantities, each soon to be privatized and consumed. In addition, the "first in time is first in right" maxim endeavored to make water ownership conform to the hydrological reality of creeks and rivers that fluctuated in volume. In theory, when a stream ran low, owners of prior rights received water before irrigators owning junior rights. A legal river, in short, had to swell or diminish in accord with the real one.[8]

Prior appropriation supposedly provided irrigators in the upper valley with an uncomplicated, utilitarian system for dividing the Snake River and other streams among many parties. Yet for all its theoretical virtues, the law in actuality did not work smoothly. In the beginning, prior appropriation and water rights had little practical meaning for upper valley irrigators: the Snake and its tributaries supplied all the water they needed, without regard to priority. Furthermore, this apparent abundance provided little incentive for farmers to register their rights accurately, if at all. "Many of the early settlers" in the upper Snake River valley "did not record their claims in priority," Byrd Trego later recalled, "because they did not believe that there would ever be a water shortage on [the] Snake River due to its great volume." Conversely, still other farmers—ignorant of how much water the rivers actually carried and the techniques of measuring it—claimed enormous amounts, far more than ever flowed there. In 1900, Ross, the state engineer, reported that farmers on Henrys (North) Fork of the Snake had appropriated 74,460 cubic feet per second (cfs) of water, thirty-five times the minimum flow of the river at St. Anthony.[9]

Nineteenth-century Idaho law also failed to provide irrigators with clear, compelling rules for precisely registering their claims. Not until 1881 did they have an official method for recording water rights with county officials. Even then, the instructions for noting the date, location, and amount of the claim were vague and imprecise. Because of these legal ambiguities, prior appropriation in Idaho first functioned, according to state engineer James Stephenson, as "an extension of the

right of 'squatter sovereignty.'" Irrigators simply took water as they needed it, seldom measuring it accurately and almost never keeping a clear, up-to-date account of their claims.[10]

Irrigators in the upper Snake River valley persisted in their "squatter sovereignty" as long as creeks and rivers, agricultural practices, and their own numbers accommodated them. In the absence of drought, with continued hay and grain cultivation and with few farms and ranches, irrigators blithely took all the water they wanted. So long as water remained relatively plentiful, they had little practical use for the law of prior appropriation. The amount of water available to upper Snake River valley farmers, however, eventually began to diminish. In August of 1901 and 1902, a reach of the Snake in the vicinity of Blackfoot ran dry for the first time in local memory. In part, decreased precipitation—drought—at the Snake's mountain headwaters caused the shortages. Additionally, irrigators in the upper valley diverted increasing amounts of water as the population grew and as they brought more land into production.[11]

Changes in agricultural practice in the upper valley also helped to shrink the Snake and other local streams. By the early 1900s, farmers in Fremont and Bingham counties were switching from hay and grain to sugar beets, which required water not just in spring and early summer but throughout the summer and early autumn. In 1905, one perceptive resident of the upper valley identified beet culture as the essential reason for the decreasing flow of the Snake each summer around the town of Blackfoot. Farmers, he wrote, irrigated "the cereals and hay" early, when the river carried enough water for all. By the time "extreme low water" conditions set in, they had finished most of their irrigating. Sugar beet cultivation altered this basic pattern of water use. To irrigate "the vast acreage of beets now planted," farmers needed water much longer, even after the river flow had fallen. Consequently, "the greater the amount of beets raised" upstream, "the shorter the water will be at the Blackfoot end of the valley."[12]

For farmers in the Blackfoot area, hydrological conditions in the Snake River exacerbated water scarcity. After emerging from the mountains on the eastern edge of Idaho, the Snake alternately gained and lost water in relation to surrounding water tables. To the dismay of irrigators, the Snake lost water about eight miles upstream from Blackfoot, before it reached their canals. The water then seeped through the river's alluvial

bed and finally rose about ten miles downstream from town, where it collided with an underground formation of volcanic rock. A local newspaper reported that "when Snake river gets at a low stage nearly all the water sinks [upstream from Blackfoot] and comes out again a short distance above American Falls."[13]

As drought, intensification of irrigation, and natural hydrological conditions made water increasingly scarce, many irrigators were no longer willing to tolerate unregulated use. When the Snake ran dry in the early 1900s, previously complacent irrigators suddenly became competitors for water. The Blackfoot irrigators felt the pinch of scarcity more than others, and they in particular desired order in water distribution. The prior appropriation doctrine should have provided that order; it should have stood ready to regulate all the claims, to fill rights in chronological sequence until no more water remained. The legal river suddenly had importance, and it had to conform to the fact of a real stream severely diminished in volume.

But in practice the system did not work; as the Snake flowed to a trickle, prior appropriation failed. In the absence of a clear, readily available record of water rights, nothing dissuaded farmers from believing that they, not their upstream or downstream neighbors, owned the prior rights. In 1906, a Blackfoot resident observed that all along the upper Snake, groups of farmers believed that "they had the oldest rights on the river and that it was the other localities that were late rights and should go short of water." He noted that many people had settled the valley almost at the same time, making "the rights of the various localities . . . practically identical from one end of the river to another." In practice, the irrigators had no system for allocating water.[14]

The failure of prior appropriation compelled irrigators in the upper Snake River valley to try to clarify the water rights record. A lawsuit involving large numbers of water rights seemed to offer them the best method of resolving the problem. In the summer of 1901, the Rexburg Irrigation Company filed suit against the Teton Irrigation Canal Company for the purpose of clarifying title to water rights on the Teton River, a tributary of Henrys (North) Fork of the Snake. As news of the lawsuit spread, dozens of irrigation companies and hundreds of individuals throughout the entire upper valley joined as plaintiffs and defendants.[15]

Like many water lawsuits throughout the American West, *Rexburg Irrigation Company et al. v. Teton Irrigation Canal Company et al.* served as a formal adjudication process to determine the status of all the water rights on a stream and its tributaries. The judicial decree that decided the lawsuit attempted to rectify the deficiencies in the record of claims and to provide for the enforcement of priority. A judge collected testimony and other evidence necessary to establish an accurate chronological list of appropriations. With the information at hand, he determined as precisely as possible the date, amount, and quantity of each appropriation. He then issued the decree, and a watermaster physically distributed the stream among the claimants.[16]

But *Rexburg v. Teton,* despite its promise and to the dismay of irrigators, provided no immediate relief for water conflicts in the upper Snake River valley. Adjudication was a complicated, laborious, time-consuming process; indeed, as one observer noted, the case had "as many twists and curves as the Snake river itself." Judge James M. Stevens, who oversaw the case, did not deliver his decision until December 1910; and not until August 1911, ten years after the case began, was the decree, with its prioritized list of water rights, published and made available to irrigators. During the interim, Judge Stevens and the referee he appointed, F. J. Cowen, heard testimony, the state engineer surveyed and mapped canals and farms, and Stevens and Cowen studied the evidence and prepared the final decree. Meanwhile, irrigators chafed at the slow progress.[17]

As the legal apparatus lumbered along, water distribution on the upper Snake continued in a haphazard fashion. Some irrigation companies, fearing the legal loss of water they did not divert, "would take out all [the water] their canals would carry and in many cases, turn it out upon arid plains to run to waste while crops worth millions of dollars farther down the valley were suffering for water to mature them." Small dams, built in response to water shortage, complicated water distribution. When the Snake fell in volume during the driest part of the summer, it often left canal headgates high and dry; to get water back into their canals, irrigators extended temporary dams of rock, wood, and canvas into the river's channel. With each dam, the Snake fell still farther; as it decreased, irrigators built more and tighter dams. "Dams and counter dams" eventually left parts of the Snake around Blackfoot totally dry and farmers in that area without enough water.[18]

One can imagine the scene around Blackfoot during the summer of

1905 as farmers in the area ran out of the water necessary to mature their precious sugar beets. They gazed at the dry riverbed and contemplated the exposed cobbles baking in the relentless sunlight. Anguished, they walked through their beet fields and inspected the limp, withered leaves. Their labor, the money spent on seed and hired hands, all of the things they had invested in this year's crop, they now stood to lose. Hope evaporated like leftover puddles in the Snake's dry bed. And to think that the farmers but a few miles upstream around Idaho Falls had full canals.

What, the Blackfoot farmers wondered, could they do to give their crops a reprieve? What could they do, in the absence of a court decree, that might ensure them at least a minimal amount of water? In this hot dry summer, they would try what farmers all over the American West would try when conventional, individualistic ways of securing water failed: cooperation. The Blackfoot irrigators came together as a group, as a community united by deprivation, to devise a collective solution to their plight. They gathered at a mass meeting in the town and there contrived a plan of accord: they would reach out to the upstream irrigators and, in a spirit of civic-mindedness and fair play, ask for "some kind of division of the waters by mutual consent." This would be the first attempt to divide the upper Snake cooperatively, outside the morass of prior appropriation. The Blackfoot group appointed a committee of three to travel upriver to make the appeal.

It almost succeeded. At Idaho Falls the committee met with canal managers who expressed sympathy for the Blackfoot farmers' situation. Two operations, the Idaho Canal and the Burgess Canal companies, agreed to close their gates and "turn out" some water so that it would flow downstream to the deprived beet growers. But at an Idaho Falls meeting, other local irrigators began to balk. Some canal managers said they would first have to secure permission from all of their farmers. Other water users fell back on self-interest and prior appropriation. They had the oldest water rights, they claimed; they had no obligation to forgo their water to help someone else. Quite probably these intractable irrigators feared that giving water to the Blackfoot farmers might jeopardize their own rights to it. Under the beneficial use mandate of prior appropriation, irrigators had to use it or lose it. With the decree still pending, stubborn Idaho Falls irrigators believed that they could not

risk temporarily giving up some water. Thus failed the Blackfoot irrigators' cooperative mission.

With time running out on their shriveling crops, the Blackfoot people now saw no other recourse but to consider the upriver irrigators adversaries. Accordingly, they asked a court to issue a legal injunction ordering the upstream irrigators to leave water in the Snake for the downstream canals. They got what they wanted; Judge Alfred Budge (filling in for an absent Judge Stevens) appointed D. P. Pratt, a Blackfoot man, to distribute Snake River water and regulate canal headgates in the Rigby–Idaho Falls vicinity. Pratt in turn selected two other Blackfoot irrigators to help him with this task. Pratt was supposed to distribute the water as best he could with regard to priority while making sure that the Blackfoot irrigators got enough water to save their crops. In practice, Pratt and his two assistants rotated water between farmers in the Idaho Falls–Rigby vicinity and those around Blackfoot on a weekly basis. But Pratt and his allocation methods did not sit well with upriver irrigators. They looked upon Pratt and his deputies as interloping agents of the Blackfoot farmers.

As usual, conflict flared at the headgates, at the places where Snake River water became the property of irrigation districts and canal companies. Apparently, no violence occurred, but the upstream farmers made it difficult for Pratt to perform his duties. One canal watermaster opened a headgate, locked it in place, then stood by and defied Pratt and his men to open it. At the Farmers' Progress Company headgates, a duel ensued. Pratt and his assistants lowered the gates; a Farmers' Progress crew promptly raised them. Back and forth they went, lowering and raising the apparatus. Finally Pratt ordered a retreat. He then had the three Farmers' Progress men charged with contempt of the court order.

In subsequent years, irrigators in the Idaho Falls–Rigby area continued to rail against what they saw as the illegal expropriation of water by the Blackfoot irrigators. After 1905, Judge Stevens tried to defuse the volatile situation by avoiding the mistake of appointing local men to the position of watermaster. Conflict between upstream and downstream users, however, continued, and Idaho Falls–Rigby irrigators kept up their complaints. "Of course it is understood," sneered an Idaho Falls newspaper, "that when the canal owners of the southern portion of the county want water they ask the court to give them an order to take it without any

reference to priority of rights, or notice to the canals in the north end of the county." The upstream irrigators, many of them original settlers in the upper valley, did have some reason to protest, because in general their rights were indeed older than those of the Blackfoot irrigators. In the absence of a decree or a firm record of priority, however, Judge Stevens awarded the Blackfoot farmers water because they needed it, not necessarily because they had any clear right to it. Only in relatively brief periods of ample precipitation, like those that occurred in late summer 1906, did tensions ease.[19]

Persistent conflict over water prompted upper Snake River valley residents to look to hydraulic technology to solve the problems of shortage and distribution. If the doctrine of prior appropriation and the legal system that supported it could not solve water problems, perhaps reservoirs could. With storage dams, some irrigators believed, they could garner additional water. Each spring, they watched the Snake flush massive volumes of water through the valley and on toward the sea. Large dams could interrupt the course of nature and hold this flood for later use. By storing water in reservoirs, irrigators could overcome the tricky hydrology of the Snake, surmount the problems of prior appropriation, forestall litigation, and ensure an abundant water supply for all.[20]

One Blackfoot resident, W. D. Trego, portrayed cooperative dams as a panacea for water conflicts. Even with the decree, he said, irrigators, encouraged by greedy lawyers, would continue legal action against one another, "but will that make any water for us to grow beets, potatoes, wheat, oats and hay, or any other crop?" Furthermore, said Trego, "the Snake never can be regulated so as to give every canal just the water that [it is] entitled to, on account of the supply continually changing." No matter how precisely officials distributed the water, even owners of "the oldest rights on the River" would not always receive their full complement. To Trego, the solution to water scarcity and conflict lay beyond the law, in jointly operated dams and reservoirs. "Let us all look at the matter in a business-like manner," he urged, "as well as in the light of what is right between man and man, and go together and get water and plenty of it, and not spend our wealth fighting over priority of rights." In Trego's view, cooperation should transcend individualism and the conflict that accompanied it.[21]

There was, however, the problem of marshaling the organizational and economic resources necessary to construct a large dam. Upstream residents, confident in their water right priorities and in their advantageous geographical position, did not necessarily agree that they should all join in common cause to build a dam. In addition, irrigators who wanted a dam lacked the expertise and financing necessary for such a work.[22]

Trego and like-minded people of the upper Snake River valley thus looked to the federal government for assistance. In particular, they desired to secure a water supply far upstream at Jackson Lake reservoir in Wyoming, in the Teton Range. Arthur Foote, an engineer with the United States Geological Survey, had identified Jackson Lake as an ideal storage site during the late 1880s. Under the 1902 National Reclamation Act, federal engineers initiated construction of a dam at the lake's outlet. Jackson Dam, completed in 1907 and rebuilt in 1910 and 1916, raised the lake's surface elevation, creating a store of water for large new irrigation projects at Twin Falls and Minidoka, which lay downstream from the farmers around Idaho Falls and Blackfoot. The Twin Falls developments included two projects established under the Carey Act, in which federal and state governments cooperated with private corporations to build irrigation systems and induce settlement. Opened in 1905 and 1908, the Twin Falls projects eventually encompassed about 330,000 acres. The Minidoka project, established under the National Reclamation Act and opened in 1907, totaled approximately 120,000 acres.[23]

In 1906, W. D. Trego arranged for engineer D. W. Ross, now of the U.S. Reclamation Service, to come to Idaho Falls and talk to irrigators who had "asked for the privilege of getting an interest in the [Jackson Lake] reservoir." Ross addressed a gathering, explaining the details of the new dam and reservoir and "waxing enthusiastic" about upper valley agriculture and its potential. He made clear, however, that Reclamation Service assistance for upper Snake River valley irrigators, in the form of reservoir water, lay in the future. He told the assembled farmers that "the government had no propositions to make" and that, for now, the best way for them to get more water was to reduce their wasteful use of it. At least in the near future, only the farmers at Minidoka and Twin Falls would have access to the water kept in Jackson Lake.[24]

Ad hoc allocation of water on the upper Snake River thus continued, although not without challenge from aggrieved upstream irrigators. These people still believed that the court-appointed watermasters, even if from outside the valley and therefore ostensibly neutral, overlooked their water rights when allocating the Snake. To strengthen their case, farmers around Rigby and Idaho Falls formally organized. In August 1910, representatives from canal companies on the South Fork of the Snake met in Rigby to form the Farmers Protective Irrigation Association (FPIA). Like the less formal Blackfoot group of five years before, the FPIA was a cooperative organization. Initially, however, it had no intention of working with the Blackfoot irrigators and dividing the waters of the Snake "by mutual consent." The FPIA was strictly defensive. The court-appointed watermasters were taking the upstream farmers' water; through their new organization the farmers aimed to get it back.[25]

But the upstream farmers' defensiveness lasted only a short time. Events soon made them more willing to cooperate and share water with the downstream users. In December 1910, a few months after the FPIA's birth, Judge Stevens finally issued the decree that settled *Rexburg v. Teton.* By August 1911 the decree appeared in print; now all the irrigators along the upper Snake could see just where their rights stood in the list of priority. No doubt to their delight, the farmers of Rigby and Idaho Falls saw that their rights indeed were the oldest in the upper valley. No one could take their water from them now; they could be as selfish with it as they wanted. Yet selfishness was not what the Rexburg decree induced in the upstream irrigators; on the contrary, it actually made them more generous. The decree apparently convinced them that they could release some of their water to Blackfoot without jeopardizing their rights to it. If their rightful control over the donated water were challenged because they had failed to use it themselves (use it or lose it), they could invoke the unassailable decree. Thus by confirming prior appropriation and its individualistic basis, by figuratively chiseling the system in stone, the Rexburg decree actually made upstream farmers feel secure enough in their rights to move beyond self-interest and send water to needy farmers with junior rights. As early as 1913, upper valley irrigators began to make this extralegal practice—which they called "temporary transfers"—a regular part of upper Snake River allocation. And the organization that coordinated the temporary transfers was none other than the FPIA. Born out of antagonism, the FPIA matured into an agency of community accord.[26]

Cooperative organization thus became essential to stable water allocation on the upper Snake. The Rexburg decree and prioritization of water rights alone would not have established peaceable or equitable water distribution. A watermaster still had to reconcile an idealized system with an erratic, complicated river. Prior appropriation recognized that a stream's total available water supply fluctuated, but beyond that, the list of prioritized rights represented water abstracted from nature, from its spatial context and from its hydrology. The Snake as a whole did not simply rise and fall in volume; because of groundwater levels, rainfall on various parts of the watershed, and "return flow" (surface or underground water that flowed into the river from canals and fields), the river fluctuated in particular reaches of its channel. Thus a watermaster still had to match the priority list with this dynamic stream, something that he could never accomplish perfectly. To the extent that real water did not correlate with water rights, there would be cause for quarrels. In particular, the most vulnerable irrigators—those with the latest rights, and those in the Blackfoot vicinity especially—would have reason to challenge the allocations. But on the upper Snake River, the FPIA and the extralegal system of temporary transfers forestalled such conflict. During crisis, irrigators did not necessarily have to resort to judges or lawsuits to get water.

Upper valley irrigators did not find themselves living completely without conflict, however. Even as they worked out differences among themselves they had to confront a more serious threat to amicable water distribution. This threat came from Jackson Lake dam, the waters of Jackson Lake reservoir, and the recipients of that stored water: the farmers of the Minidoka and Twin Falls projects.

Water managers intended the dam to regulate a dynamic river: the structure captured the Snake's spring flood and created a tremendous water reserve that, when finally released, counteracted the July or August drop in the river's volume. But *regulate* is not the best word to describe what Jackson Lake dam and reservoir did to the Snake, because the stored water actually complicated the river's hydrology and thus the irrigators' water allocation systems. In the Snake's channel, reservoir

water intended for Minidoka and Twin Falls mixed with water that normally flowed there. Water distribution now became even more difficult than before, because upper valley irrigators—those around Rigby, Idaho Falls, and Blackfoot—had to distinguish not only between chronological rights but between two kinds of water: stored water and natural flow. The problem of physically allocating the two intermixed categories of water led to conflict between irrigators around Rigby, Idaho Falls, and Blackfoot (natural flow users) and those in the vicinity of Minidoka and Twin Falls (stored water users).

Abstractly, the differences between stored water and natural flow were quite stark. Stored water—the reservoir—resembled a resource that people stockpiled; relatively motionless, it sat within a sort of container. Groups of downstream irrigators held prioritized rights to the stored water, but these rights did not function the same way that natural flow rights did. Irrigators exercised their natural flow rights at the specific places where they actually diverted water from a stream into ditches or canals. In contrast, users of stored water legally acquired that water at the reservoir, not at the headgates of their canals. But the strongest distinction between the two categories appeared in the different ways that irrigators measured them. Irrigators expressed their stored water rights in terms of a static measure, acre-feet; they represented natural flow rights as cubic feet per second (cfs) a figure that accounted for motion as well as volume.[27]

The problem for water managers—state, local, and federal officials—was keeping track of the two types of water as they flowed together in the Snake. The officials had to distinguish stored water from natural flow, both in the reservoir itself and in the river's channel; they had to distribute water to upper valley irrigators with natural flow rights and at the same time shunt water through the river for more than 300 miles to stored water users at Minidoka and Twin Falls. The engineer A. E. Robinson summed up the problem in a 1912 report. "On the face of it," he wrote,

> it would seem to be a simple problem to divert a certain amount from a reservoir into the head of a stream, and take it out down below undiminished except for losses due to natural causes, and at the same time allow persons holding rights to the natural flow to draw the water to which they were entitled. But actual solution of the problem depends upon so many unknown quantities that the equitable distribution of water becomes one demanding a great amount of hard work and clear thinking.

The challenge that Robinson and other water managers faced was nothing less than a variation on the basic problem of reconciling the ideal, schematic, legal river and the real, complicated stream.[28]

The difficulties began at Jackson Lake. Here reservoir water sat within a container, but the container was not exactly like a bottle or tank—it was not closed and impervious. Rather, the reservoir water was subject to uncontrollable, and to a certain extent unmeasurable, hydrological processes. Pooled in Jackson Lake, water both evaporated and seeped into the ground. When the Reclamation Service drew the reservoir down, the "bank storage" seeped back in. The precise quantities of evaporation and bank storage, moreover, varied according to hydrological conditions. Cloudy weather inhibited evaporation; clear skies boosted it. Drought and low water lessened bank storage; abundant precipitation and a full reservoir increased it. These conditions presented water managers with nearly irresolvable problems. Did evaporation and bank storage come from stored water or natural flow? If both, what percentage did each type of water contribute? What was the evaporation and bank storage in the natural Jackson Lake, the lake prior to the dam? How did the reservoir affect this natural evaporation and bank storage? Such questions were virtually impossible to answer because both stored water and natural flow mixed together in the reservoir.[29]

Transporting stored water through the Snake's channel magnified the problem of water allocation. One difficulty typically developed around July. At this time, the natural flow of the river began to decrease. Irrigators in the vicinity of Rigby, Idaho Falls, and Blackfoot now had to confront the fact of scarcity. Their Snake—the natural flow—was receding in its bed. Yet this diminution was not obvious. Hot July weather usually compelled the downstream Minidoka–Twin Falls irrigators to request formally their reservoir supply; just when the natural flow was decreasing, the Reclamation Service opened the gates at Jackson Lake dam, and stored water surged down the river. Consequently, around Rigby, Idaho Falls, or Blackfoot, the Snake's total volume might not be falling at all. Indeed, the stored water might actually cause the river to

rise. But the irrigators of Rigby, Idaho Falls, and Blackfoot did not understand the complex relationship between stored water and natural flow. They looked at the full Snake and refused to believe the water managers who told them that their portion of the river—the natural flow—was decreasing, that priority would have to be implemented and headgates closed. It simply did not make sense to these natural flow irrigators that they should be deprived of water when the river was so full.[30]

And the problems did not end here. Water managers had to account for fluctuations in stored water and natural flow as the two kinds of water ran through the Snake. Along its course, the river lost water to evaporation and seepage. The amount of loss depended on an array of factors, including quantity and speed. The greater the volume of water, for example, the greater the loss. These fluctuations baffled water managers and made allocation difficult. To which category—stored water or natural flow—did the loss apply? What percentage of loss could be attributed to each?[31]

Water managers had an equally difficult time assessing gains in the Snake's volume. Gains came not simply from springs or a high water table but from return flow, the source of which was unclear. Return flow consisted largely of irrigation water (originally natural flow) that seeped back into the Snake from canals, ditches, and fields in the area surrounding Rigby, Idaho Falls, and Blackfoot. But return flow also consisted of stored water that, after its release, was lost in transit and that eventually trickled back into the river's channel. Water managers faced enormous problems tracing return flow to its source and then crediting it to stored water or natural flow. But to make matters worse, geography and time further confused the task. For example, did return flow from stored water loss seep back into the river in time for the water managers to credit it to the stored water users, or did it finally make its way back into the river after the irrigation season had ended? Or did return flow from upstream canals enter the river too far downstream for the natural flow irrigators to make use of it? Water managers could not readily reconcile return flow in two columns on a ledger sheet. They could not easily match the legal river's abstract quantities with the mysteries of the real Snake.

Nevertheless, they had to make the attempt. Each year water managers compiled measurements from the limited number of gauging stations

on the Snake River and then made informed approximations of the losses and gains to stored water and natural flow. Their calculations generally favored the natural flow users. During the 1910s, water managers typically estimated an overall 5 to 10 percent loss of stored water between Moran gauging station, just below Jackson Lake dam, and Blackfoot station, downstream from the headgates of the last upper valley canals.[32]

Natural flow irrigators in the upper valley had no objections to the water managers' methods—as long as the river carried ample water. But with drought and water scarcity, they changed their minds and began to find fault with the system. In particular, natural flow irrigators with the latest rights, especially those in the Blackfoot area, offered the greatest objection to the official accounting of the Snake. When water grew scarce and the natural flow of the river fell, water managers began to close headgates of canals with late rights. Starting with the last water right, they cut off each successive older right, closing headgates as necessary to supply the canals with the earliest rights. Irrigators with late rights now had reason to question the calculations, and they argued that the Snake actually carried more natural flow than the managers had figured. Anger increased in proportion to the diminishing water, and once again headgates became points of contention.[33]

Controversy over stored water and natural flow involved numerous groups, organizations, and overlapping government agencies. The Reclamation Service (renamed the U.S. Bureau of Reclamation in 1923) operated Jackson Lake dam and reservoir for the Minidoka–Twin Falls irrigators. The U.S. Geological Survey maintained stream gauges along the Snake, which it used to collect data on the river's flow. Beginning in 1909, the Idaho state engineer appointed a special deputy to control and allocate stored water that flowed from Jackson Lake. Until 1910, a court-appointed watermaster regulated the natural flow of the Snake in the area covered by the Rexburg decree; starting in 1911, water users in this area (designated Water District 36 in 1915) elected their watermaster. Meanwhile, irrigators around Minidoka and Twin Falls had their own watermaster. In addition to the official water agencies and administrators, grass-roots organizations formed. The FPIA was one such group; there would be still others. These entities gradually worked toward the creation of an extralegal, cooperative management system—eventually embodied in the Snake River Committee of Nine—that attempted to

resolve the technical problems of dividing and distributing stored water and natural flow.[34]

The conflict that led to the formation of the Committee of Nine developed as early as 1911. In late July of that year, the Reclamation Service adjusted the gates at Jackson Lake dam to flush 10,000 cfs of water from the reservoir. As the reservoir level fell, the discharge gradually decreased to 1,800 cfs, until at last the delivery to the Twin Falls and Minidoka projects was complete. The dam tenders then partially closed the gates, allowing only the calculated natural flow—1,000 cfs—to pass over the dam. As the Snake drastically fell in volume from the peak stored water discharge, "reports . . . circulated the upper valley," said D. G. Martin, "to the effect that the Government had closed its gates at Jackson Lake entirely and was not allowing any water to escape into the stream." The upper valley farmers' perception, however mistaken, revealed their fear that Jackson Lake dam and its operators deprived them of their natural flow rights.[35]

A similar scenario unfolded in the summer of 1914. In July the river fell as it usually did, but this time it dropped lower and more suddenly than in other years. On July 19, the Reclamation Service opened the gates at Jackson Lake dam, allowing stored water to pass into the Snake. Shortly thereafter, the state engineer's special deputy and his assistants began to close upper valley canals holding late rights. Natural flow irrigators now observed, and rebelled against, the apparent paradox of headgate closures while the river still carried plenty of water overall. Special deputy W. O. Cotton reported that these irrigators "could not understand why they were cut so much more this year than ever before, and so sure were they that there was some error somewhere that they were protecting their rights with military force." Cotton did not explain what this military force entailed, but his statement probably referred to angry farmers guarding headgates along the Snake.[36]

As the crisis deepened, water managers appealed to the FPIA for help. Cotton reported that he arranged with the FPIA officers to "lay this matter before them and see if we could not secure their cooperation in holding some of the canals to the amount to which they were entitled." At the meeting, representatives of canals holding late water rights—the Farmers' Friend, Rudy, Snake River Valley, and others—voiced their belief that the natural flow was not falling as rapidly as Cotton had calculated.

The FPIA backed up their claim, protesting the Reclamation Service's "interference" with the decreed rights of upper valley irrigators. The FPIA asked the Reclamation Service to determine accurately the return flow and credit it to the users of natural flow.

Determining the return flow was virtually impossible, so the FPIA and the Reclamation Service worked out a temporary compromise. For ten days, canals in the upper valley received a greater amount of return flow than the Reclamation Service had credited them, enough to quiet the concerns of irrigators with late rights. Through cooperative means, the irrigators and the Reclamation Service had averted disastrous conflict, perhaps even violence.

And they had set a precedent for additional cooperation in Snake River allocation. Beginning in 1915, the Reclamation Service, working with the FPIA, made limited amounts of reservoir water available to upper valley irrigators. In August 1915, water shortage again threatened the natural flow users who owned late rights. John Empey, the FPIA president, in conjunction with the Reclamation Service, other government agencies, and prominent figures such as Senator Fred Dubois, arranged for upper valley irrigators to receive water from Jackson Lake reservoir. The FPIA acquired 1,000 cfs of stored water for ten days (a figure mathematically converted from acre-feet) and agreed to have upper valley canals with the oldest water rights transfer some of their natural flow to canals with junior rights. After ten days, the irrigators with the late rights returned the borrowed water (presumably by allowing natural flow either to collect in Jackson Lake reservoir or to pass on to Minidoka Dam and its reservoir, Lake Walcott). The arrangement thus allowed upper valley irrigators with late rights to avert disaster and mature their sugar beets. Upper valley irrigators again secured water from Jackson Lake reservoir several years later. In 1916, the Reclamation Service rebuilt Jackson Dam and expanded the reservoir by 400,000 acre-feet. The following year, thirteen upper valley irrigation companies and districts contracted with the Reclamation Service to receive 100,000 acre-feet of water from the expanded Jackson Lake. These upper valley irrigators still relied primarily on their natural flow water rights, but the dam now gave them a small reserve.[37]

New organizational innovations and planning processes contributed to cooperative water management on the upper Snake. In August 1914,

following the July water allocation crisis, all natural flow irrigators in the upper valley—including Blackfoot canal companies holding late rights—joined together under the leadership of the FPIA. The FPIA further consolidated its position in 1916, when irrigators elected its president, John Empey, to the position of watermaster for Water District 36. As watermaster, Empey had responsibility for allocating the Snake's natural flow between Milner Dam near Twin Falls and the Wyoming border. In his position, he strove to consolidate and streamline management of natural flow and stored water. He coordinated his duties with those of D. G. Martin, the state engineer's special deputy in charge of stored water, even working out of Martin's headquarters in Idaho Falls. Empey in 1917 further proposed that all irrigation organizations and government agencies hold a meeting each spring "for the purpose of having a clearer understanding of general matters" related to the Snake River and for "promoting friendly relations" among stored water and natural flow irrigators. In April 1918, following his suggestion, representatives of the state engineer, the Reclamation Service, the Twin Falls projects, and the FPIA met at Idaho Falls to lay out "tentative plans" for water management in the upcoming months.[38]

Water users and agencies soon took steps to institutionalize this cooperative management of the Snake. In April 1919, representatives of irrigators met with state engineer Warren Swendsen to prepare "a plan which would provide a more stable organization and one better able to cope with the difficulties [of water management] as presented from year to year." A committee of nine men, three each from Henrys Fork, the South (main) Fork, and the Minidoka–Twin Falls projects, worked out "the details of this plan." This was the genesis of what would become the Committee of Nine. Acting on the committee's recommendation, Swendsen appointed engineer G. Clyde Baldwin, a USGS official responsible for stream measurement in Idaho, to be special deputy in charge of stored water. Swendsen then selected three men, one from each of the three areas, to serve as an advisory committee to assist Baldwin and make recommendations for Snake River management.[39]

Thus by spring 1919, irrigators and government officials had erected a loose network of organizations, agencies, committees, and allocation practices intended to distribute stored water and natural flow smoothly and to contain conflict. As a whole, however, these arrangements had

yet to be tested by severe drought. Indeed, irrigators and government officials had worked out many of their cooperative programs in a wet period. The years 1916–18 were the time of Idaho's great dry farming boom, a brief moist era when the skies showered water on the usually arid Snake Plain and the river's spring flood rose to its highest level since 1894. With water so abundant, perhaps irrigators could afford to be more affable and cooperative. Yet this surfeit of water soon came to an end. When the irrigators met with Swendsen in April 1919, Jackson Lake reservoir had accumulated only about 70 percent of its capacity. Snake River valley irrigators did not know it yet, but the coming summer would be one of the driest on record.[40]

Farmers in the upper valley began to experience the effects of the drought by early June, the time in wetter years when the river attained its peak flow. On 11 June, working down the list of priority, the watermaster cut all water rights to 1903; by 1 July, he had shut off all post-1890 water rights; by 1 August he had worked his way down to the 1885 rights. As the headgate closures continued and crop failures appeared imminent, irrigators with the latest natural flow rights grew restive, and conflict developed. Most desperate irrigators refrained from fighting with one another or obstructing watermasters and government officials, but a few did not. In late June, the District 36 watermaster cut off the Corbett Slough's 1892 water right of 130 cfs, leaving irrigators with only an 1889 right of about 109 cfs; days later, on 7 July, Koury and Grover met in their fateful headgate battle. Some irrigators raised canal headgates on the Snake River after water managers had lowered them. Even chains and padlocks on the headgates failed to stop these water-hungry farmers. The USGS's Baldwin, who was special deputy for stored water, reported that he and Empey had posted guards at the headgates of three canals to prevent farmers from tampering with them. Throughout the upper valley, a few irrigators found themselves arrested and facing criminal charges for interfering with water distribution.[41]

As the situation worsened, upper valley irrigators together took steps to allocate water efficiently, provide water to those with late rights whose crops were in danger of failure, and prevent further conflict. They gathered in Blackfoot and Idaho Falls and devised plans for securing stored water from Jackson Lake. Upper valley canals with rights to the reservoir, however, had already exhausted their small supply. And the

drought had drastically reduced the stored water of the Minidoka–Twin Falls farmers, who felt unable to lend any of their reserve as they had done in 1915. Thus the only relief measure left for upper valley irrigators was the system of temporary transfers, first implemented in the early 1910s, in which farmers with senior rights and more ample water transferred their natural flow to canals with junior rights cut short by drought. According to Baldwin, "More than one hundred of these temporary transfers were made. So far as known the water delivered . . . was always donated." Irrigators in the upper valley could not avoid some crop losses, but the temporary transfers allowed these people to minimize the worst effects of the drought. Farmers at a disadvantage, such as those in the Blackfoot vicinity, received at least a minimal amount of relief during the crisis.[42]

On the whole, the cooperative water management arrangements had achieved the objective of efficient, amicable water allocation during the 1919 drought. Yet signs of tension and conflict had been evident. Some violence did occur. And clearly, incidents of headgate tampering on the Snake involved farmers who were not just desperate for water but who refused to believe that what they saw flowing in the river was mostly stored water, not natural flow. On 9 July the natural flow of the river had reached its lowest point a month earlier than usual, "but owing to the stored water passing down the channel it did not present the same appearance." To the fearful and angry irrigators, the Snake did not seem drought starved; their eyes told them otherwise. Other than the word of the river managers, these farmers had no proof that the Snake was predominantly stored water. They could not see, and therefore could not accept, the abstract divisions of water that made up the legal river. They suspected that the stored water users at Minidoka and Twin Falls were benefiting at their expense.[43]

Some of the farmers believed that the inequities originated in the measurement and control of water at Jackson Lake reservoir. Consequently, John Empey and a committee of irrigators from the FPIA traveled to Jackson Lake in early August 1919 to investigate. The committee found no evidence of mistakes or wrongdoing. "After inquiring into and examining the methods now being used to determine the natural flow and stored water," the group concluded, "we are satisfied that the water is being handled with justice to all as nearly as it is humanly possible."[44]

The FPIA's findings failed to satisfy the aggrieved upper valley irrigators, who in coming years continued to believe that they were not receiving all of the natural flow to which they were entitled. Water shortage, which continued through the 1920s, exacerbated their discontent. In August 1920, George Hill of Rigby perhaps summed up the feelings of many of his fellow irrigators in a letter to the *Idaho Falls Times*. Hill argued that the Snake carried plenty of natural flow even though the special deputy and the watermaster had begun to close upper valley headgates. His proof was that Minidoka–Twin Falls farmers had more than enough water, so much that it was flowing over Minidoka Dam and Shoshone Falls, downstream from their main headgates. In fact, the special deputy and watermaster occasionally did miscalculate losses and gains to the extent that the river at Minidoka or Twin Falls might have more water than farmers there could use. Hill, however, believed that "the people of the lower country" had "a well-laid plan" to "undermine our water rights." Eventually angry irrigators like Hill—especially ones with late water rights—reopened the issue of stored water and natural flow and challenged the FPIA, the Reclamation Service, and the Minidoka–Twin Falls farmers. Snake River irrigators would have a final conflict to overcome in their efforts to achieve stable, cooperative water allocation.[45]

In 1921, discontent among Hill and other upper valley irrigators coalesced into a political challenge to Empey, the FPIA, and Baldwin. In November of that year, representatives of twenty irrigation companies and districts met in Rigby to form the Upper Snake River Union of Water Users. Although open to all upper valley irrigators, the Union of Water Users clearly reflected the interests of those with late rights or a geographical or hydrological disadvantage. Blackfoot irrigators, including H. N. Smith of the Peoples' Canal Company, led the move to form the organization, which elected him its president. Other members of the Union of Water Users included the Idaho Irrigation District, the Enterprise Canal Company, the Farmers' Friend Irrigation Company, and others, all of which depended, at least in part, on vulnerable late water rights.[46]

The Union of Water Users signaled the fragmentation of the coalition of irrigators that had formed the FPIA. Leaders of the new group "stated that the . . . association is in no way antagonistic to the Farm-

ers Protective Irrigation [Association], but rather an additional assistance to the canals of the valley in securing a square deal on water." Although the FPIA had done much to advance the interests of upper valley irrigators as a whole, the Union of Water Users clearly believed that it had not fully lived up to its purpose, especially its role of defending the interests of irrigators with late natural flow water rights.[47]

The Union of Water Users thus attempted to change water allocation practices on the Snake. First it tried to unseat Empey in the election for District 36 watermaster. Failing at that, the group then decided that it must hire an engineer "to check up on the water ratings of the various canals, independently of the reclamation service or the Farmers Protective Irrigation association." The Union of Water Users hired William O. Cotton to perform the work and to represent the organization in its dealings with the state engineer, his special deputy, and the Reclamation Service. Cotton, a principal in the Idaho Falls engineering firm of Cotton and Wilson, had extensive experience in hydrology and irrigation. For years he had managed the Idaho Irrigation District, and at one time he had served as special deputy in charge of stored water.[48]

During 1922 and 1923, Cotton presented the Union of Water Users' case to government officials and the special deputy's advisory committee. Using a detailed analysis of the Snake River, he attempted to show the inadequacy and unfairness of water allocation practices, which he said slighted natural flow irrigators in the upper valley in favor of the stored water users downstream. First, Cotton addressed water management on the Snake below Jackson Lake dam. The special deputy should charge a greater loss to stored water in transit between the dam and Blackfoot gauging station; that official, moreover, should credit natural flow users with more return flow. Cotton then turned to accounting procedures at Jackson Lake reservoir. The Reclamation Service and the special deputy failed to credit upper valley irrigators with a natural lake storage that had accrued to them prior to the dam; furthermore, the natural flow users should receive an additional amount of water in exchange for increased evaporation on Jackson Lake caused by the reservoir's greater surface area. Thus, considering all factors (transmission loss on stored water, return flow, natural lake storage, and evaporation), natural flow irrigators should receive about 400,000 acre-feet more water each year than the special deputy had been allocating them. Cotton's claim

was substantial, given that the storage capacity of Jackson Lake itself amounted to about 850,000 acre-feet. A technically proficient, respected engineer, he had mounted a serious challenge to official water distribution practices on the Snake River.[49]

Yet the conflict threatened to become more intense when government officials—primarily state engineer Swendsen, special deputy Baldwin, and the Reclamation Service's Frank Banks (chief engineer in the design and construction of Jackson Lake dam)—denied the validity of virtually each claim that Cotton made and defended existing water distribution practices. In the matter of natural storage in Jackson Lake, for example, Baldwin asserted that he and the watermaster delayed cutting water to upper valley canals on the assumption that the benefit to natural flow users from natural storage usually came in the early part of the irrigating season. Furthermore, he said, the existing procedure assumed that additional bank storage caused by the reservoir offset natural lake storage and excess evaporation. Baldwin and the other government engineers also contended that Cotton based his calculations on insufficient data.[50]

Finally, Baldwin pointed out that distribution of the Snake's water would always be potentially flawed. Although more information on the river's hydrology could be gathered, the problem of determining "proper storage transmission losses is a very complicated one . . . which . . . can never be solved exactly." Too many factors—variations in river level, groundwater, climate, return flow—affected the exact determination of stored water and natural flow. This complexity had important consequences for water management: "While the present system is a workable one and is believed to be reasonably fair," he stated, "the fact that it is not final in any sense leaves opportunity for continual complaint and dissatisfaction." Baldwin approved of any additional investigation of the Snake that would lead to a more acceptable management program, but he stated that "any such schedule [of water allocation] will be more or less arbitrary in character." Baldwin's comments clearly addressed the virtual impossibility of making the Snake conform to an abstract system that legally divided the river into stored water and natural flow.[51]

The implications of Baldwin's observations were clear: an arbitrary answer to a technical problem must be decided through negotiation,

compromise, and cooperation. Only when irrigators suspended questions about exactly how the Snake functioned would they arrive at an allocation policy acceptable to all. Consequently, Swendsen set up a meeting in January 1923 at which irrigators would once again attempt to work out their differences. It was important, he told them, that they come up with a solution to the problem "without recourse to expensive and drawn out litigation." At the meeting, representatives of more than sixty canal companies appointed a special committee to prepare a cooperative plan for distributing water in 1923. R. E. Shepherd of the Twin Falls North Side Canal Company proposed that the committee consist of two men from the North Fork, four from the South Fork and the main river, and three from the Minidoka–Twin Falls area. Upper valley farmers accepted the plan, probably because it gave the South Fork irrigators, many of whom owned late rights, greater representation. In a subsequent meeting, irrigators voted to replace the old advisory committee with the new group, now formally called the Committee of Nine.[52]

For help resolving the dispute over stored water and natural flow, the Committee of Nine looked to an outside engineer. Following a suggestion from Shepherd, the committee members decided to hire an engineer of "disinterested expert judgment" to study the problems of water distribution on the Snake. As an Idaho Falls newspaper explained, the committee sought a technician with "broad experience in the control of 'intermittent' rivers—rivers that disappear and rise again; rivers that belong to different states or counties or different valleys [through] which they flow—through which they flow and sink and rise and sink again, serving perhaps in different settlements over and over as they travel on and rise as return flow into the parent stream." After perusing a directory titled *Who's Who in Engineering,* the group chose Ralph Meeker of Denver, an engineer who appeared able to comprehend the Snake.[53]

But Meeker's report did not solve the problem of water allocation as irrigators, particularly the Union of Water Users, had hoped. Delivered to the Committee of Nine in February 1924, his study basically approved prevailing practices. In Meeker's judgment, the controversy stemmed less from unfair allocation than from water shortage caused by drought and further expansion of farming in the Snake River valley. Echoing Baldwin's earlier comments, Meeker took pains to remind irrigators that they

could never exactly reconcile water rights and water, the legal and real rivers. Flowing water, he stated, "cannot be measured with the same precision" as "an acre of land . . . or a ton of wheat"; it could not be apportioned "with the same accuracy as a quart of milk." Meeker was pointing to the critical gap, the gray area, between an idealized system and water, between precise quantities and unbounded nature. Knowing that irrigators usually filled that hazy space with conflict and litigation, he called upon them instead to bridge it with toleration. "At times a 'give and take' must prevail among water users," he averred. "Above all, a spirit of tolerance will do much to arrive at a place of mutual understanding." Meeker reinforced what some irrigators and water technicians already knew: ad hoc water allocation, acceptable to all and reached through compromise and cooperation, must replace conflict.[54]

Cotton and the Union of Water Users had no choice but to negotiate. They might have continued the fight, perhaps through the litigation that Baldwin said they should avoid. But circumstances, especially nature, were against them. The Snake, as the watermasters and engineers had learned, was a capricious entity, mutable and irregular within the confines of its broad seasonal cycles, a living river that humans could neither measure exactly nor regulate fully. Because of its complex hydrology, the Union of Water Users would be unable to demonstrate precisely and unassailably the amount of natural flow of which they had been deprived. More important, the upcoming season promised a water dearth as great as in 1905, 1915, or 1919, and upper valley irrigators needed at least a minimal amount of water security. In the face of the drought, the cooperative side of western irrigated agriculture triumphed.[55]

The compromise agreement of 1924, and agreements worked out in subsequent years, represented an extralegal, somewhat arbitrary method of distribution that was technically imprecise but generally acceptable to all. The irrigators did not actually solve the technical problem of distributing water: they did not discover a means to divide the Snake into quantities that exactly corresponded to water rights. Instead, the arrangements they established reflected political compromises as much as expertise in hydrology. Each year, the Committee of Nine attempted to shape the "compromise schedule" to meet irrigators' shifting perceptions of what constituted a fair distribution of water. In a sense, quantities assigned for variables such as stored water loss and return flow

became bargaining chips in each year's negotiations. In 1924, for example, the natural flow users accepted a minimal percentage loss to stored flow and agreed that bank storage at Jackson Lake reservoir equaled the natural bank storage prior to the dam's construction. In return for these concessions, the Bureau of Reclamation (successor to the old Reclamation Service) allowed upper valley farmers to keep their natural flow in the reservoir for use later in the summer, when their most valuable crops—sugar beets and, increasingly, potatoes—needed it. It was a complicated, abstract arrangement: natural flow left in the Snake would be credited to stored water users; an equivalent amount of stored water would be counted as natural flow.[56]

Despite its complexity, the 1924 pact was a momentous event: it marked the institutionalization of the Committee of Nine and its yearly agreements, and it brought to a close a tumultuous phase in the development of irrigation in the upper valley. Snake River irrigators had at last devised a system of pragmatic, cooperative allocation practices. Now they had a method of curbing the tendency to become embroiled in irresolvable technical and legal arguments. The Committee of Nine's ability to resolve differences also encouraged upper valley irrigators to mend the FPIA–Union of Water Users split; in 1925, the two groups merged to form the Upper Snake River Valley Water Users Protective Union.[57]

In coming decades, these cooperative arrangements would give farmers the means to deal with still more changes and fluctuations in the river. There would be more dams (American Falls in 1927, Palisades in 1958, and others) and stored water to allocate. And as always there would be the droughts that mocked the reservoirs and threatened to disrupt the orderly distribution of water. In society as in nature, stability would be fleeting. But institutions like the Committee of Nine would allow the irrigators to respond flexibly to a world in motion.[58]

Cooperative allocation practices on the Snake were the outgrowth of the irrigators' long interaction with the river and the environment that surrounded it. The earliest irrigators adjusted their agricultural activities to meet the demands of making a living from this complex stream. They banded together to channel water to their farms. And the river's pulsations—spring rise, then a fall in volume as summer advanced—shaped their crop choices and planting habits. These farmers, in sum,

addressed their activities to the real river, much as they oriented their lives to diurnal rhythms and the changing seasons.

At the same time, irrigators were capitalists, members of a society that sought to divide nature—even rivers—into individual, privately owned parts. Prior appropriation provided them with a system for translating moving water into discrete, measured quantities that had economic value. The law functioned as an intellectual instrument for transforming the real river into its legal, quantified counterpart.

But prior appropriation was imprecise. The legal river, after all, was only a representation of a stream that was much more complicated and unpredictable than the mere cubic feet per second that it carried. The real river remained part of the earth, flowing over and through it, often irregularly and erratically. Engineers knew that the Snake held water, but they did not know *exactly* how much, when, and where the river carried it. Privatizing the stream, turning its flow into exact quantities at the headgates, was not an easy task. In practice, prior appropriation proved to be a poor method of transferring water across the shifting, ambiguous zone that separated nature and culture, environment and economic system.

In the upper Snake River valley, the problems of prior appropriation appeared most evident after the construction of Jackson Lake dam and reservoir. Here, engineers sought to wrest water from nature, from the hydrologic cycle. They captured the flood caused by solar heat melting the snow and ice of winter, and then they stilled it, dissipating the kinetic energy that it had gathered as it tumbled down the peaks and crashed through the rocky bed of the Snake. In the reservoir, engineers refined water, stored it, made a surplus of it. Thus contained, it was like capital, a necessary component in agricultural production.

But the engineers' attempt to separate water from the hydrologic cycle was both incomplete and temporary, and it complicated water distribution under the system of prior appropriation. In the reservoir, water was still subject to evaporation and seepage. Even greater instability arose in the delivery of the stored water. To send it to irrigators at Minidoka and Twin Falls, engineers had to reintroduce it to wildness, move it from its refined condition back to a state of nature. Before the farmers at Minidoka and Twin Falls could use it, the stored water had to travel 300 miles through the Snake River's channel. In the reservoir and then in

the Snake itself, the two abstract categories of water, stored and natural flow, mingled. Engineers could generally distinguish between them, but not perfectly. The disjuncture between actual water, the real river, and categories of water rights invited conflict among irrigators.

The introduction of stored water to the Snake had still more consequences for water management: it conflicted with the upper valley farmers' long-standing experience of the river. In dry years, as the Snake fell in late June or early July, they watched the seeming paradox of watermasters closing their headgates while the stream still flowed at a relatively high stage. They could not accept, or did not want to accept, that the rushing water actually represented a decrease of natural flow and an increase of stored water being released from Jackson Lake reservoir. Indeed, irrigators probably did not think of the Snake in terms of discrete categories; a farmer who dipped a bucket in the river could not identify which portion of water was stored and which was natural flow. The failure of water managers to distinguish precisely between the two only intensified the upper valley irrigators' fear that someone was cheating them. These farmers were capitalists, but their faith in that ultimate of capitalist abstractions—the legal river—proved limited.

To overcome the conflicts, especially legal conflicts, that often ensued from water distribution problems, irrigators turned to extralegal forms of cooperation. A basic instrument of cooperation was the temporary transfer, in which irrigators with early water rights lent water to farmers whose late rights left them vulnerable to scarcity. In a sense, a moral economy of water underlay the transfers: the practice rested on the basic belief that it was wrong to let a neighbor or nearby farmer fail for lack of water. Temporary transfers showed that irrigators could both uphold the individualist, competitive system of prior appropriation and periodically agree to set that system aside in the interest of helping each other.[59]

In the Farmers Protective Irrigation Association, the special deputy's advisory committee, and the Committee of Nine, extralegal cooperation took institutional form. When these organizations functioned most effectively, they bridged tremendous differences among irrigators and between irrigators and government officials. Like the temporary transfers, these organizations reflected not the abandonment of prior appropriation but rather the effort to work out compromises when the law failed to address the complexity of the Snake and its tributaries.

When assessing the Committee of Nine, it is perhaps tempting to look beyond its cooperative basis and see the outlines of an authoritarian agency, a kind of Hobbesian Leviathan that ended anarchy and established order in the allocation of a scarce natural resource. In certain respects, the gradual formation of the committee was part of a trend that indeed concentrated power in the hands of a few technical experts. G. Clyde Baldwin, the USGS engineer and special deputy in charge of stored water, once likened his position to that of the "general manager of a corporation" and the advisory committee—precursor to the Committee of Nine—to the "board of directors." But to conclude that the Committee of Nine and the lawyers and engineers associated with it constituted an authoritarian structure of water management is to overlook its fragility. Baldwin and the committee were only as strong as the support they received from Snake River irrigators. When some of them, like the Union of Water Users, threatened to withdraw their support, the entire system stood on the verge of collapse. The Committee of Nine thus is best understood not as a Hobbesian Leviathan but as an ad hoc, tenuous organization built upon compromise, consensus, and finally cooperation.[60]

That cooperation had deep roots in American civilization. Mormon farmers in the upper valley, with their communitarian ethos and cooperative irrigation methods, no doubt encouraged and reinforced the tendency of all farmers along the Snake to work together to allocate water. But non-Mormon irrigators—in the Blackfoot vicinity, for example—also implemented cooperative practices, by themselves and in conjunction with Mormon farmers. The FPIA and other organizations resembled claims associations and clubs common throughout the West and Midwest. Furthermore, the FPIA, temporary transfers, and the Committee of Nine developed during a time when farmers across the nation seized on the idea of cooperative organization as a means to survive in a complex industrial economy. Finally, the patriotism and government economic programs associated with World War I created a climate that encouraged citizens to work together for the common good.[61]

Most important to the formation of cooperative practices was the encounter between the irrigators and the river itself. The irrigators simply had no easy means to transform the Snake into precise quantities flowing onto the fields of individual farms. Hydrological conditions were

too complex and erratic, and the opportunities for disagreement, conflict, and violence too great. The irrigators could achieve their objective only by fashioning methods and organizations that allowed them collectively to negotiate the movement of water from its uncontrolled state to its final destination in their fields. In their efforts to use and alter the river, the irrigators had to confront conditions that in turn forced them to change. They had to build new social institutions through which they adapted to the complicated river that they, in part, had helped to create.

Thus the development of water management on the upper Snake River was part of the larger process of landscape formation, of human systems simultaneously transforming and adjusting to the earth. And this pattern manifested itself not just in water management but in an even more basic human activity: work. To work the irrigated landscape, to use mind and muscle to manipulate and respond to nature, required fundamental modifications in the irrigators' society.

4/ Labor and Landscape

Irrigated Agriculture and Work

In May 1877, journalist W. A. Goulder traveled through the Boise Valley to survey its agricultural development. His dispatches mostly depicted small family farms in a landscape of irrigation ditches, hay and wheat fields, verdant pastures, and groves of willows and Lombardy poplars. According to Goulder, cultivated acreages ran from 100 to 300 acres; individuals or families generally worked the small spreads alone. "Like most of the farmers in the valley," Goulder wrote of David Heron, "he does the greater portion of the work with his own hands." But these people were not just social isolates, for they also shared certain tasks: "Passing along down the road I saw Mr. J. B. Pierce, who, with several of his neighbors, was hard at work cleaning out and enlarging a water ditch." Indeed, Goulder observed that kinship, familiarity, and mutual agricultural burdens united the valley's settlers. He noted that many of the inhabitants were related and had lived among one another for years, and that a shared pioneer experience—including "common labors"—had "caused a fraternal feeling which makes them seem as members of one family."[1]

Yet, as Goulder's dispatches revealed, communities of small farmers were not the only people who tilled the valley's rich soil. About six miles from Boise, the journalist came to the W. L. Thurman farm—also called Thurman's Mill—and here he found a contrasting landscape and a different pattern of work. Thurman farmed on a large scale: 1,280 acres, 600 of them in wheat. The farmyard, actually the core of a mill village, included a wagon shop and a store filled with groceries and other merchandise. Nearby stood the Thurman family residence, "separately

Exhibit
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UNITED STATES

DEPARTMENT OF THE INTERIOR

BUREAU OF RECLAMATION

Burley, Idaho,
May 15, 1934.

Mr. Lynn Crandall,
Watermaster,
Idaho Falls, Idaho.

Dear Mr. Crandall:

We have received a copy of your proposed American Falls Reservoir allotment for 1934 which you have asked us to check. We have gone over your figures carefully, and there are some with which we cannot quite agree.

We figure that three American Falls storage owners, besides the Idaho Power Company, have their original rights filled in full, because of holdovers, and can therefore be excluded from the general distribution of storage applicable to other owners. The account with these three is as follows:

Name	Owned Space A.F.	1933 Holdover A.F.	Required to Fill Right A.F.
Poplar Irrigation District,	793	581	212
Utah-Idaho Sugar Company,	15,852	7,833	8,019
Corbett-Slough,	4,000	2,010	1,990
Total	20,645		10,221

The total space owned by Upper Valley Companies in American Falls is 265,853 acre-feet, while the total space leased for 1934 by these companies, as given in your list is 154,151 acre-feet, or a total of 420,004 acre-feet assigned to Upper Valley owners. Assuming this space is 51.5% filled this year, as stated in your figures, gives the following result:

420,004 x .515 = 216,302 a.f. of American Falls storage to exchange for Jackson Lake water.

Storage in Jackson Lake Reservoir owned by Lower Valley companies, and so available for exchange in the Upper Valley, as given in your list received May 10, is:

1933 Holdover	115,784 acre feet	
Minidoka Project,	171,321 " "	
North Side Canal Co.,	5,258 " "	
		292,363
Owned by Upper Valley (see above)		216,302
Remainder which must be brought down to American Falls Reservoir,		76,061
Transportation loss on this at 12.8%		9,736

A summation of the foregoing computations therefore, is as follows; based on the assumption that the reservoir reached its peak on April 7, 1934:

Maximum reservoir contents		1,143,680 a.f.
Holdover of American Falls water in Jackson Lake, 115,784 a.f., less transportation loss of 9,736 a.f., (See preceding page)		106,048
Total available for allotment		1,249,728
Deductions: Holdovers,	401,476	
Amount required to fill rights of 3 owners listed on preceding page,	10,221	
Total Deductions		411,697
Net available for general allotment,		838,031

Rights to which the above is applicable:
1,655,000 - 20,645 = 1,634,355

Percentage of full right, as thus computed, is 51.276, the use of which would cause slight changes in the table of allotments given by you, and also in some of assumptions used above.

We shall be glad to have you check over our computations and advise of any errors or inaccuracies you may find in them.

Very truly yours,

E. B. Darlington

E. B. Darlington,
Superintendent.

Exhibit
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May 16, 1934

Mr. E. B. Darlington, Supt.,
U. S. Bureau of Reclamation,
Burley, Idaho.

Dear Mr. Darlington:

Replying to yours of the 15th relative to American Falls allotment, I noticed after I sent you the preliminary figures that the three small ditches had holdovers slightly in excess of the amount necessary to fill their rights but was awaiting your reply before changing the figures.

At 51.5% fill the allowable holdovers of these three canals (48.5% of right) would be (slide rule figures):

Poplar	385	acre-feet
Osgood	7,690	"
Corbett	1,940	"

These added to other upper valley holdovers would make a total allowable upper valley holdover of 32,534 acre-feet and a total allowable holdover for all rights of 356,067, exclusive of Idaho Power Company's 45,000 acre-feet.

In addition to the 216,302 acre-feet of American Falls storage to be exchanged by upper valley canals mentioned in your letter, the above upper valley canals allowable holdover of 32,534 acre-feet must also be exchanged making a total of 248,836 acre-feet to be exchanged. There is available for exchange as stated by you, 292,363 acre-feet, leaving 43,527 acre-feet to be discharged from Jackson Lake for transmission to American Falls. 12.8% of this is 5,571 acre-feet less in transmission.

Summation

Maximum contents, Apr. 7,			1,143,680 acre-feet
American Falls Holdover in J. Lake,	115,784 ac.ft.	)	
Less 5,571 loss on 43,527 " to be transmitted.	43,527 "	(	110,213 "
		)	
Total for allotment,			1,253,893 "

2. Total for allotment (brot. for'd.) 1,253,893 acre-feet

Deductions:

Idaho Power Co.	45,000	
Allowable 1933 holdovers	356,067	
	401,067	401,067

Net for general allotment, 852,826

= 51.53%

I will await your reply and if you agree with the above I will prepare a new tabulation of individual rights which will vary slightly from the previous one to conform to the above percent fill.

Very truly yours,

Watermaster.

Exhibit
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June 25, 1935

Mr. R. E. Shepherd,
General Manager
North Side Canal Company,
Jerome, Idaho

Dear Mr. Shepherd:

Replying to yours of the 25th instant, I would say that the stored normal flow at Jackson Lake represents water used from American Falls reservoir to hold on the lower valley rights that are prior in time to the storage right at Jackson Lake. At various times this year the discharge passing Cloughs plus the inflow from Clough to Neeley was insufficient to fill the 8,726 sec.ft. of lower valley rights that are prior to Jackson Lake top right but, instead of opening the gates at Jackson Lake at such times, we temporarily filled these rights from American Falls storage and the water is now owed by Jackson Lake to American Falls reservoir.

The only alternative method to this would be to have opened the gates at Jackson Lake but this is undesirable on account of the impossibility of predicting inflow below Jackson Lake for 5 days ahead of time. If the gates were opened we might find 5 days later that we discharged too much water and would thus reduce the amount that might have been accumulated for storage rights at Jackson Lake. Keeping American Falls Reservoir as low as possible also reduces losses in that reservoir.

There has been no normal flow storage at Jackson Lake for individual rights, and the stored normal is all to be delivered to American Falls reservoir to replace water that has been temporarily drawn from that reservoir to fill lower valley natural flow rights that are prior to the Jackson Lake storage right of 1912 priority.

The river run-off is now on the final decline and all storage being accumulated at Jackson Lake is stored normal for later delivery to American Falls. The heavy deficiency in precipitation since June 1st has resulted in a substantial decrease in the final windup of the run-off and I expect we will have to open the Jackson Lake gates right away to keep the river from going dry at Blackfoot.

Approximate figures, subject to slight revision, on your storage supply are as follows:

Hillsdale	41,146 space @ 60%	=	24,688	acre-feet
"	19,215 lease @ 55.5%	"	10,650	" "
"	Holdover from 1934	"	8,552	" "
N. S. C. Co. Am. Falls space plus lease				
	418,978 @ 55.5%	"	232,000	" "

No. 2

N. S. C. Co.	Winter saving	=	41,400 ac.ft.
"	Holdover from 1934	"	14,379 "
"	J. L. bottom right	"	10,000 "
"	J. L. top right @ 43%	"	134,000 "
	Total Supply		470,869 "
	Used to date		9,500 "
	Balance		461,169 "

Upper valley American Falls rights this year are considerably less than the Minidoka bottom rights in Jackson Lake which have a contract for exchange, hence you will have to stand a loss of approximately 15% on your Jackson water or about 18,600 acre-feet to be subtracted from above figures to get supply at Milner. I don't know how the losses at American Falls this year will figure out but you ought to allow 2% for possible loss there on your American Falls rights.

Very truly yours,

Watermaster

Exhibit
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Idaho Falls, Idaho
July 12, 1961

Mr. Merle Tillery
U. S. Bureau of Reclamation
Burley, Idaho

Dear Mr. Tillery:

Below is my analysis of exchange of space between upper and lower valley for 1961:

Lower Valley storage in Jackson Lake	293,028 a.f.
Lower Valley storage in Palisades	128,187
	421,215 a.f.
Upper Valley storage in American Falls	240,403
Idaho Power in American Falls to go upstream	31,253
	271,656 a.f.

Percentage to exchange = $\frac{271,656}{421,215}$ = 65%

A final exchange should not be made until after the end of the season when we see how much has actually been used from upper reservoirs.

I have not studied the contract provisions with regard to exchange of space. Last year I prorated the exchange among various lower valley canals in proportion to amount of upper reservoir water used by them. I assume there is no distinction between Jackson and Palisades space in making the exchange.

Will you call my attention to anything in the above that appears out of line. If you concur let me know and I will advise canals concerned.

Very truly yours,

H. C. Eagle
Watermaster

cc: H. T. Nelson

Exhibit
36

WATER DISTRIBUTION

AND HYDROMETRIC WORK

DISTRICT NO. 36

SNAKE RIVER, IDAHO

1967

A P P E N D I X

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DEVELOPMENT OF SNAKE RIVER IRRIGATION

Henry C. Eagle
Watermaster, Idaho Water District No. 36

"The earliest water rights in the upper Snake River Valley were established in 1874 when the waters of Willow Creek northeast of Eagle Rock (now Idaho Falls) were first diverted for irrigation use. . . . . The first water right on the main Snake River dates from June 1, 1880, when water was diverted to serve lands now under the Long Island Canal near Menan. On August 1 of the same year work started on the diversion of 160 cfs by the Eagle Rock and Willow Creek Canal near Heise."[1] From this modest beginning irrigation development has continued until about 1,300,000 acres were being irrigated in 1967 from the surface waters of Snake River and its tributaries.

During the period 1884-1896 construction had commenced on practically all of the canals now diverting water above American Falls. The combined capacity of these canals was about 16,000 cfs. During these early years there was no indication that there would ever be a shortage of water on Snake River. The crops were mostly hay and grain with little demand for late season water.

"The filing for the first project below American Falls was made on October 11, 1900, for the Twin Falls Project designed to serve 200,000 acres. . . . . The National Reclamation Act was passed by Congress in 1902 and on March 26, 1903, the Government made a filing on 1,726 cfs of water for the Minidoka Project. . . . . The filing for the Jerome Project was made in 1905."[1]

"The year of 1905 was the first year that the Snake River canals experienced any water shortage of consequence. During the late summer of that year Snake River was dry for a distance of about 10 miles in the vicinity of Blackfoot. At that time the lower users in the vicinity of Blackfoot endeavored, without much success, to get the canals further upstream to turn down some water. A serious shortage was also experienced on Teton River in the same year. As a consequence a suit was started soon after to adjudicate the water rights on Snake River and tributaries above Blackfoot. This culminated in the so-called Rexburg decree in 1910 covering water rights in the upper valley. The Foster Decree adjudicating lower valley rights was handed down in 1913. In later years many of the canals increased their diverting capacity and in the so-called Woodville Decree of 1929 additional floodwater rights of 1916 priority were awarded by stipulation to these canals."[1]

Most of the Rexburg decrees appear to have been based on one inch of water per acre. Some in areas of heavy gravel or sub-irrigation were permitted 2 to 4 inches per acre. Several of the larger projects were planned on the basis of 5/8 inch per acre.

Prior to the construction of Palisades Reservoir, many canals had been diverting water in excess of their established decrees. These diversions had increased as brush areas were cleared and water applied to

a larger part of the land to which the decrees applied. Also, some ground after years of use has been found to require more water than was originally required. Further, the changes in crop practices have created a need for more water. As a consequence, most of these canals have diverted an additional 10 to 20% when water was available.

In accordance with the practice of not letting a new development interfere with established uses it was decided to permit these canals to make supplemental filings for the additional amounts that had been used above their decrees. This decision was made a part of the Palisades Contracts. Suits were commenced in 1967 in the District Courts in Idaho Falls and Twin Falls to have decrees of April 1, 1939, granted to the above canals. The Idaho State Reclamation Engineer has intervened in these suits raising a question as to whether these high diversions can be considered a beneficial use. He notes that this question is especially pertinent in the Rigby area where increased use of water in recent years has raised the ground water to damaging levels.

"To provide storage for the Minidoka Project the Government in 1906 constructed a log-crib dam at the outlet of Jackson Lake to store 300,000 acre-feet of water. This dam washed out in 1910 and was replaced by an earth dam storing 380,000 acre-feet. . . . . In 1915 the Government decided that the Minidoka Porject as then constructed did not need all its space in Jackson Lake, and sold 102,000 acre-feet to various canals in the upper valley above American Falls."[1]

The Milner diversion dam was completed in 1905 and Minidoka dam in 1906. The latter dam was built about nine feet higher than needed for the canal diversions and provides about 97,000 acre-feet of usable storage.

In 1915 the Jackson Lake dam was raised and the outlet channel dredged. This increased the reservoir capacity to 847,000 acre-feet with so-called bottom rights of about 409,000 and top rights of 438,000 acre-feet. The latter space is owned by the Twin Falls Canal Company and the North Side Canal Company.

"The year of 1919 was a severe shock to the Snake River waterusers. The river runoff was very low and large crop losses were sustained by users under the various canals, all the way from Ashton to King Hill."[1] A river operating organization was set up in the spring of 1919 to deal with growing problems in the distribution of the waters of Snake River. This resulted in the creation of the Committee of Nine and the setting up of Water District 36 on a year-round basis.

"In District No. 36 on Snake River the work of water distribution requires constant use of streamflow records. Discharges from the river and canal gaging stations are necessary daily during the water regulation period. On account of this intimate connection between the work of stream gaging and water distribution a cooperative agreement was entered into in 1919 and has since continued in effect between the U. S. Geological Survey, State of Idaho, and Water District No. 36 whereby the District Engineer of the U. S. Geological Survey is elected annually as watermaster by the Snake River waterusers. An

executive order authorizes him to hold both Federal and State positions as part of the Geological Survey's cooperative program with the states. The Geological Survey and the State of Idaho contribute towards the cost of the work from cooperative stream-gaging funds an amount equal to what it would cost to operate and maintain the gaging stations in the District that are of general public interest. The balance of the cost of operations relating to water distribution is paid by the waterusers of Water District No. 36. The cooperative feature of the work has made it possible to get the streamflow records computed and available for use much more speedily than is the case elsewhere."[2] This cooperative agreement eliminates duplication of work and personnel, The combined responsibilities provide a challenge and interest to those in charge that would be diminished if the work were divided among two or more organizations. It has been an effective and efficient arrangement which might well be copied in other areas of joint Federal-State-Municipal endeavors,

The Committee of Nine is the executive body acting for the waterusers. Members are elected from the various areas of the district to provide a wide representation. The Committee has no legal authority but its recommendations receive much public support. Its prestige has increased through the years as a result of calm, studied decisions on countless controversial matters. "The Committee has gradually grown in influence; it passes on the annual budget, determines policies and generally acts in the capacity of the Board of Directors of a corporation of which the watermaster acts as manager. It acted as the Idaho Compact Commission in the agreement between Idaho and Wyoming for division of the waters of Snake River between the two states. This plan of river operation that has evolved on Snake River through 40 years of operating experience, ranging from extreme drought to heavy floodwater years, is essentially a democratic plan controlled by the waterusers, in proportion to their respective interests. They have demonstrated their ability to resolve their differences among themselves. The Committee of Nine provides an organized well-informed group that can sit down with the Bureau of Reclamation, for example, and discuss any differences of ideas as to what ought to be done in the way of water development or operation. At times the Committee has strongly opposed plans of the Bureau of Reclamation for developments on the river but through mutual discussion it has always so far been found possible to agree upon a plan that has been mutually acceptable and which has probably been more equitable than if one party had been able to impose its will upon the other."[2]

The watermaster acts as an executive secretary for the Committee of Nine and supervises the many details of the district operations. Each year, after his election, he is appointed watermaster by the Idaho State Reclamation Engineer. He delivers the water in accordance with court decrees and state law and in this area is under the supervision of the Idaho Department of Reclamation. In other areas he acts under the supervision of the District Chief of the U. S. Geological Survey or the Committee of Nine.

As a result of the 1919 water shortage the government made a 1921 filing on the American Falls reservoir. This reservoir was completed

in late 1926, with a capacity of 1,700,000 acre-feet, and filled for the first time in 1927. Canal companies paid for the construction in advance and could be persuaded to buy only one-half of the available space. The government paid for the balance of the space. Shortly after the reservoir was built, 400,000 acre-feet of space was disposed of to the old Idaho Irrigation Project on Big Wood River. The Milner-Gooding canal was constructed for delivery of this water. The remaining 433,000 acre-feet was leased to the Idaho Power Company until January 1931. Thereafter, it was leased for irrigation to various canal companies in the district. It was finally disposed of to various canal companies under terms of the Palisades contracts.

During the years 1929-42 the Snake River water supply was much below any previous period of record. Only the 1936 and 1938 years were near average. Runoff at Moran was about 67% of average in 1930 and 53% in 1934. Heavy crop losses occurred in all the Snake River area and emphasized the need for additional storage reservoirs. In 1939 the Bureau of Reclamation completed Island Park and Grassy Lake reservoirs with a combined capacity of 146,000 acre-feet. These reservoirs, together with Henrys Lake reservoir which was constructed by the North Fork Reservoir Company in 1923, took care of the most pressing needs for storage in the Henrys Fork area. A filing was made by the Bureau of Reclamation in July 1939 for the Palisades Reservoir. Studies and negotiations continued until 1952 when construction was started. The reservoir was completed in 1956 with 1,200,000 acre-feet of usable storage.

The addition of reservoirs to the river system has introduced complications in its operation. Perhaps the first was the problem of running storage water down the river from Jackson Lake and past the upper valley canals to the lower valley. This required measurements of the transmission losses in the various sections of the river. Computations for the 1910 season showed a transmission loss of over 29% between Jackson Lake and Minidoka dam. Studies in following years showed variable losses of mostly a lesser amount. By 1925 the losses in the various sections of the river were fairly well defined. Since that date practically the same river losses have been approved each year by the waterusers at their annual meeting. The loss from Moran to Blackfoot is now accepted as 12.8%. There is a gain in the section from Blackfoot to Neeley and Neeley to Milner.

The schedule of transmission losses on stored water that has been approved by the waterusers on the main river during recent years is as follows: 1.7% Moran to Palisades; 0.8% Palisades to Heise; 4.4% Heise to Lorenzo; 0.5% Lorenzo to Woodville, 6% Woodville to Shelley. To compute separate losses to each of the canal diversions would be a cumbersome matter and one of endless contention among the various canals. Instead, a uniform charge is made against all of the canals from Heise to Blackfoot. Prior to the time of Palisades Reservoir a river loss of 7.25% was added to the storage diverted by each canal to compute the storage withdrawal at Jackson Lake. Since Palisades water has been available a loss of 6.5% has been added to storage diverted to get the reservoir equivalent. This reduction in river loss is possible since most of the storage water now used is from the lower reservoir.

There is enough inflow below Blackfoot so that part of the October 11, 1900, right remains in effect throughout the irrigation season. Prior to the construction of American Falls Reservoir this inflow was directly available to the lower canals. With the building of the reservoir this inflow was impounded. Studies by T. R. Newell related the inflow above the reservoir flow line to that below. All significant tributaries were measured where they entered the reservoir. These same points are now measured periodically during the irrigation season and their total is the measured inflow. The Newell formula (unmeasured inflow in cfs = 840 plus 1/3 measured inflow) is used to compute the inflow available to the 1900 right. Since 1964 pumping diversions from the Portneuf River by the Bureau of Indian Affairs have reduced the measured inflow. Theoretical inflow is now computed on Plate 11 of the annual hydrometric report of Water District No. 36. This theoretical inflow is credited to lower valley canals.

At the time the Government made filings for the Minidoka Project it also filed on any return flow that might return to the river as a result of use of water on the project land. This was a departure from previous practices on the river but was permitted by the waterusers. No attempt is made to compute this gain on a daily basis. The losses and gains in all sections of the river are computed on a monthly basis. The Minidoka Project is credited with the gain from Neeley to Milner during the period this project is using stored water. In the dry year of 1961 this amounted to 43,000 acre-feet; in 1966 it was 113,000 acre-feet.

From time to time other entities on the river have requested that they be given credit for waste water or return flow from their areas. This has always been denied. Pressure has come especially from the Henrys Fork area, from which a large amount of water returns to the river. Again, the practice has been to retain for the natural flow users the conditions that existed at the time of their decrees. In the case of the Henrys Fork users and others on the river their projects had been in use for a long period and were a part of the river system at the time of the river decrees. The Minidoka Project, however, was a later project and its return flow became an added source of supply to the river.

A division of the costs of administering the water district between users of stored water and normal flow is a matter of consequence. For many years prior to 1941 the costs were paid for, 60% by normal flow users and 40% by those using stored water. Since 1941 assessments have been made in proportion to the amount of water diverted, with no distinction being made between stored and normal flow diversions. Some special charges, such as the cost of the groundwater investigations around American Falls, are assessed against those having a direct interest in the projects involved.

With the raising of Jackson Lake a difference of opinion was created as to the nature of the upper and lower rights in that reservoir. The matter of holding over from one year to another in the bottom space storage not used by upper space owners was in dispute. Mr. Barry Dibble, Superintendent of the Minidoka Project ruled that there

were no holdover rights in Jackson Lake and top right owners could only get water after bottom rights were filled.[3]

This position was modified somewhat in the American Falls Reservoir purchase contracts. These provided that upper valley purchasers of American Falls space would have the water exchanged each year for an equal amount in Jackson Lake and would have the privilege of holding over until the next year any unused portion. The disagreement has been settled by the Palisades contracts, which provide for holdover rights on all water in Jackson Lake.

Idaho law permits transfers in the place of use of decreed water. This process requires the consent of the Idaho Department of Reclamation and can be accomplished unless someone can show that he will be injured. In early years such transfers were made with little objection. It later became apparent that some of these transfers were creating an additional demand on the river. For example, water was being transferred from the Long Island area where the ground water is tributary to the river above Idaho Falls to the New Sweden area. The ground water is at great depth in this latter area and does not get back to Snake River above Blackfoot. Return flow which could be used again above Blackfoot if water was applied on Long Island would be lost if used on New Sweden land. Such transfers are now permitted but only 50% of the water transferred may be used at the new diversion. No transfers are permitted from areas above Blackfoot to points below American Falls.

Users in headwater areas are permitted to divert natural flow in excess of their decrees in exchange for storage water. In areas where return flow comes back directly to the stream such users have been permitted to divert twice as much water as they are charged for storage. This attempts to charge them for the amount of water actually used.

As new developments have occurred, an attempt has been made to maintain the natural flow rights as they would have been without these changes. Early in the season the cuts in decrees are delayed a few days to compensate for heavy losses to bank storage and evaporation. Later in the season this stored water is recovered from return flow from bank storage. With the addition of reservoirs to the river system nearly all users now have reservoir storage to supplement their decreed rights. As a result the former division between the two groups has almost disappeared.

Additional reservoirs have increased the degree of control on the river. At the same time they have made more complicated the river computations. Water is credited to the various reservoirs in accordance with their several priorities. Reservoirs are operated to retain as much as possible in the upstream reservoirs. This sometimes results in differences of opinion on reservoir allotments. In 1961 American Falls Reservoir failed to fill. This was the first year since 1935 that this had occurred. In the intervening years Island Park and Grassy Lake reservoirs had been completed. These two reservoirs in 1961 stored 81,500 acre-feet of water that was creditable to the American Falls priority. Also 55,000 acre-feet of water had been stored in American Falls that was creditable to Palisades Reservoir

under terms of the Palisades contracts. These contracts allow Palisades to store ahead of American Falls up to 259,600 acre-feet which is available from winter water savings. These savings are effected by shutting canals off for 150 days during the winter. With the above adjustments the American Falls right was only 94% filled. Except for winter water savings, there was no water available for storage to Palisades reservoir rights.

There was about 190,000 acre-feet of storage in the three Henrys Fork reservoirs at the beginning of the 1961 irrigation season. However, much of this belonged to downstream reservoirs because of storage adverse to American Falls and overuse of natural flow without replacement from Henrys Fork reservoirs during the 1960 season. Only 81,000 acre-feet was creditable to these reservoirs. This was supplemented by rental of 31,253 acre-feet of American Falls storage from the Idaho Power Company and 13,000 acre-feet from other sources. It was not necessary to run any of the Henrys Fork storage down to lower valley users. At the end of the 1961 season there was 55,000 acre-feet of holdover water in the Henrys Fork reservoirs, all of which was creditable to Snake River reservoirs. Fortunately, 1962 was a good water year. All reservoirs filled and eliminated possible controversies over the 1961 allotments. In a series of dry years in the future it will again be hard to convince users on the Henrys Fork that water stored in their reservoirs may be called upon to supply the earlier American Falls rights.

At the time American Falls Reservoir was built there was comparatively little effect on the river flow by other storage reservoirs. The reservoir was operated to furnish irrigation water during the summer and complete filling during the period of flood runoff. This did not result in the reservoir being full during ice periods and the dam was not designed to withstand ice pressures.

With the addition of other reservoirs and particularly after Palisades became available it has been necessary to alter the former storage practices at American Falls. It can usually be fairly well filled during the winter period allowing upper reservoirs to be filled by the heavy spring runoff. American Falls reservoir has been full at several times while ice was on the reservoir. After the deterioration of the concrete in the American Falls dam was discovered it seemed unwise to permit the reservoir to be full while it was still covered with ice. Present practice calls for keeping the top 8 feet of space vacant until ice has left the reservoir. In some years this makes it impossible to fill the reservoir between the time the ice leaves and heavy canal diversions begin. As a result water is spilled down the river that could be stored if a properly designed dam were available. The wasted water is kept to a minimum by keeping as much water as possible in upstream reservoirs.

In operating the reservoir system to keep water upstream it is usually possible to store more water than would be the case if reservoirs were physically filled in the order of their priorities. In many years water is retained during the storage season in Palisades Reservoir that is creditable to the American Falls storage right. When American Falls later fills physically this water is credited to Palisades.

Questions arise regarding the right of American Falls to store water after it has once filled. One point of view is that after the reservoir once fills it should not be permitted to store further water during that season. However, the reservoir storage rights are operated in the same order as decreed rights for canal diversions. During many years there is a period in the early spring when users in the lower valley are diverting more water than is entering American Falls reservoir. This occurs before the heavy snowmelt begins and at a time when storage is likely taking place in upper reservoirs. At these times American Falls is drawn down below its capacity. At such times water is being stored in Palisades or other reservoirs that is creditable to the American Falls right. Later in the season there is more than enough normal flow in the river to fill all rights earlier than the American Falls 1921 storage right. This reservoir is then either refilled physically or credited with the adverse storage in Palisades or other reservoirs. Here, again, the attempt is to preserve for American Falls reservoir the storage rights it was entitled to prior to the time of later reservoirs. While this reduces the amount of water available to Palisades users in many years it is in accordance with a proper administration of the decreed rights. During many of these same years, Palisades Reservoir has already been credited with American Falls water held over or adversely stored.

Further complications may be faced if an enlarged American Falls Reservoir becames a reality. With additional space available in the downstream reservoir, some of the established storage practices may be questioned. Should Palisades or other upstream reservoirs be permitted to adversely store American Falls water which would otherwise be available for storage in the enlarged space? Should these same reservoirs be allowed to hold over American Falls water and have it credited to their space when the present American Falls reservoir space fills? It appears to the writer that the above practices have established a right by use that should not be interfered with by an enlarged American Falls reservoir. A straightforward approach (and one that would be simple to administer) would be to allow an American Falls enlarged reservoir to be credited with only the water actually physically stored above the present 1,700,000 acre-foot capacity. However, this would not prevent the top rights from holding water over in the bottom space as long as it caused no loss of water to the earlier rights.

An enlarged American Falls Reservoir will require surveys to determine the new contents. This will make it possible to compute the amount of silting that has taken place during the life of the reservoir. Crandall[3] estimated that this might amount to as much as 2.5% of the original reservoir space.

Others[4] have noted that with an enlarged American Falls Reservoir there will likely be new land developed in the downstream area. This will result in a larger withdrawal of water each year from that reservoir. Under these new conditions it will be necessary to arrive at operating rules that will not permit upstream reservoirs to hold over and acquire title to storage that should go to the American Falls rights.

There is wide difference of opinion as to the merits of an enlarged American Falls Reservoir. Possibly the most serious objections arise from the loss of grazing land to the Fort Hall Indians. Possibly other low ground in nearby areas could be purchased and exchanged with the Indians for the ground that would be lost to an enlarged reservoir. With an American Falls Reservoir of the present size and even after the development of Lynn Crandall or another upstream reservoir, there will be years when water will spill to waste that could be stored if a larger reservoir were available. A dam built at this time should be usable for up to 100 years. It is likely that at that time there will be demand for all possible storage on the Snake River above Milner.

Footnotes

[1]History of Irrigation Development in the Snake River Valley - Lynn Crandall

[2]Snake River - Lynn Crandall

[3]Open letter in 1954 from Lynn Crandall to Minidoka Irrigation District

[4]Martin K. Fulcher, U. S. Bureau of Reclamation, Boise, Idaho

Exhibit
37

WATER DISTRIBUTION AND HYDROMETRIC WORK

DISTRICT NO. 01

SNAKE RIVER, IDAHO

1978

INTRODUCTION

In 1880, when the first water was diverted from the Snake River for the lands now under the Long Island Canal near Menan, it seemed that the Snake River could provide an inexhaustible supply of water for the Snake River Valley.

However, as further development of the Snake River and its tributaries took place it became apparent that the Snake River would not always supply every demand, as was witnessed in 1905 when the Snake River was dry for a distance of ten miles in the vicinity of Blackfoot. As a consequence of this first major shortage, a lawsuit was initiated to adjudicate the water rights on the Snake River above Blackfoot. This culminated in 1910 with what is commonly known as the Rexburg Decree. Three years later the Foster Decree adjudicating the lower valley rights was handed down.

In 1919, a water shortage resulted in serious crop losses from Ashton to King Hill. In an attempt to cope with this drought, a committee of nine men representing the irrigation systems throughout the basin jointly requested the Commissioner of Reclamation to restructure the water district into a more permanent arrangement. As a result of this request and the impending water shortage, the water district office was joined through a cooperative arrangement to a new office of the United States Geological Survey with the engineer in charge also serving as watermaster. The shortage of 1919 also spurred the United States Government to make a filing in 1921 to construct the American Falls Reservoir.

The next major shortages on the Upper Snake occurred between the years of 1929 and 1942. This period of shortage saw the construction of Island Park and Grassy Reservoirs by the Bureau of Reclamation, in addition to the additional space made available in Henrys Lake through work done by the North Fork Reservoir Company. This period also resulted in a filing by the USBR in 1939 for the construction of Palisades Reservoir.

Drought has been one of the big forces that has not only brought about water development on the Snake River system but has had a large influence upon the evolution of state water law and the water district that has been charged with the responsibility of administering Snake River water rights.

The drought of 1977 marked the end of an era in Water District 1. It became apparent that the development of the Upper Snake had reached the point where the past methods of water allocation could no longer assure the delivery of each water user's legal water entitlement. In 1977, the USGS also decided to terminate its fifty-nine year cooperative agreement with Water District 1. The end of the cooperative program between the water district and the USGS also coincided with the retirement of Arthur L. Larson who had served as Snake River watermaster since June of 1969.

In response to a request from the American Falls Reservoir District, Twin Falls Canal Company, and the North Side Canal Company, staff from the Idaho Department of Water Resources with the assistance of the USBR

and Water District 1 personnel commenced an inventory of all headgates and measuring devices within Water District 1. The Director of the IDWR agreed to allocate a portion of available drought relief funds to provide gage houses and stage recorders for a continuous record of the flows diverted by canal companies who normally divert in excess of 100 cfs of water. As a result of the diversion inventory 46 gaging stations constructed to USGS specifications were installed within Water District 1. During the inventory, many headgates and measuring devices were found to be unsatisfactory and most of the owners have made the necessary improvements. Pump diversion inventoried were required to have adequate measuring devices. This diversion inventory also included a review of all water rights associated with each diversion. Many questions have been raised regarding specific water rights which will take additional time and effort to resolve.

During the fall of 1977, the Committee of Nine reviewed the possible methods available to provide continuity in the water district and assure that necessary improvements were effected. In December of 1977, the committee decided to enter into a cooperative agreement with the IDWR through which the regional supervisor of the Eastern Regional Office would act as watermaster.

The IDWR installed computer equipment in the Idaho Falls regional office and the USBR office in Burley which would aid in the computerization of Water District 1 operation. Work started in 1976 by Alan Robertson and Bob Sutter of the IDWR Hydrology Section in Boise to computerize water distribution was stepped up to develop a computer allocation system that would allow water rights in Water District 1 to be delivered by a method that would provide prompt daily information and more accurately follow actual hydraulic conditions on the river. The system became operational on August 1, 1978, although the system was tested during the preceeding months.

The program used in 1978 accounted for 296 diversions on the Snake River and tributaries, including Willow and Sand Creeks, which became part of Water District 1 on February 1, 1976. While these diversions normally account for about 95% of the water used in the district, it is anticipated that the total number of diversions may exceed 500 in the coming years as the data for further program development become available.

WATER DISTRICT ANNUAL MEETING

The annual meeting of Water District No. 1 was held on March 6, 1978, in Idaho Falls, Idaho. Ronald D. Carlson was elected watermaster for the ensuing year.

The following were elected as members of the Committee of Nine:

Lester Saunders, chairman; Reed Murdock, secretary; William Watt, Homer Jones, Reed Oldham, Kenneth Anderson, Clyde Beck, Leo Robison, and Burdell Curtis.

Alternate: George Stromire.
Advisory members: Wendell Johnson, Merle Kunz, and Carlos Randolph.

The principal resolutions adopted at the annual meeting were as follows:

1. That the watermaster be requested to make such changes in the established water distribution practices as will result in more accurate deliveries of natural flow and stored water, improved regulation procedures to assure deliveries of all water rights by priority, to improve the availability of water supply and diversion records to the water users, and to assure that all water users are charged for water deliveries on an accurate and equitable basis.

2. Since the Director of the Department of Water Resources is charged by Section 42-602, Idaho Code, with the distribution of all water from streams and rivers in the state and since all watermasters in the state must be appointed and supervised by the Director of Water Resources pursuant to Section 42-608, Idaho Code, it is hereby recommended that the water users of Water District No. 1 enter into a cooperative program with the Idaho Department of Water Resources to provide watermaster services as outlined in a Memorandum of Understanding signed by the Chairman of the Committee of Nine and the Director of the Department of Water Resources on March 5, 1978.

3. We recommend that Ronald D. Carlson be elected watermaster for the ensuing year, including a staff of a deputy, assistant, and a clerk, with an aggregate salary of $40,953.00. This amount represents 67% of the salary of the watermaster and the salaries of the watermaster and clerk shall be paid from the non-water district funding provided by the Idaho Department of Water Resources.

4. Resolved that the duties of watermaster shall begin on this date and continue for a full period of one year.

5. Proposed budget for Water District No. 1 for the year beginning April 1, 1978:

Hydrographers:

Teton Basin	4 1/2 mos. @ $750 (+ mileage)	$ 3,375.	
Idaho Falls Area	4 1/2 mos. @ $800 (+ mileage)	3,600.	
Lower Valley	4 mos. @ $800 (+ mileage)	3,200.	
Henrys Fork	5 mos. @ $825 (+ mileage)	4,125.	
Falls River	150 days @ $ 35 (incl mileage)	5,250.	
Teton River	130 days @ $ 35 (incl mileage)	4,550.	$24,100.

WATER DISTRIBUTION METHODS

Water District No. 1 Boundaries

Water District No. 1 includes all of the Snake River and its tributaries in Idaho above Milner Dam, except the Blackfoot River and other southside tributaries below Blackfoot.

Stored water deliveries to Idaho users from Jackson Lake and Grassy Lake in Wyoming are also managed by District 1 watermaster in his capacity of special storage deputy. Other reservoirs in District 1 are Palisades, Henrys Lake, Island Park, Ririe, American Falls, and Lake Walcott.

Water District No. 1 Responsibilities

The watermaster is elected by the water users at the annual meeting in March pursuant to Section 42-605 of the Idaho Code. The statutes further require that this appointment be certified by the Director of the Department of Water Resources. It is the duty of the watermaster to distribute the natural stream flow to the various users according to their decreed and licensed priorities, and to regulate the use of water when stream flows are insufficient to supply water to all competing users. The watermaster also acts as a special deputy to the Director of the Water Resources to convey and distribute stored water to the various canals which are entitled to its use.

Seven of the eight reservoirs in Water District 1 are federally owned and operated. Most of the major canal systems have contracted for the use of storage from as many as three of these reservoirs. Release of water from the reservoir system for irrigation is made by the USBR at the request of canal managers through the watermaster. Selection of which reservoirs are to be drafted is the sole responsibility of the USBR which must consider other reservoir uses such as power generation and recreation. The watermaster determines the amount of stored water being diverted by the respective canals but does not identify from which reservoir(s) it was released.

Water District No. 1 Accounting Requirements

The watermaster has several accounting responsibilities. His primary responsibilities are to (1) determine the amount of natural flow available and (2) distribute this natural flow to the various water rights according to their priorities. His first requirement is then to collect data to determine the amount of natural flow and storage water delivered to each diversion and to assure proper division of water district charges.

The watermaster's accounting responsibility is complicated by the fact that the flow data, from which natural flow is calculated in determining which rights are in effect each day, only allows cuts to be made after the fact unless flow projections are made. Fortunately, in the past, all of the major diversions have had sizeable storage accounts in addition to their natural flow rights which made the lack of precision

in identifying which rights were being filled each day less critical. Because the watermaster had the ability to charge diverted water to either natural flow or storage accounts, if he later determined that natural flow entitlements of a certain canal expired on some previous day, subsequent diversions were simply charged against their storage accounts. This procedure works reasonably well as long as the supply of natural flow is average or above, since there is little opportunity for canal companies to divert over the amount of storage they have in their accounts. However, as the number of diversions increase, many of which do not have storage, the impact on natural flows becomes much more serious. When this additional demand is coupled with a below average supply of natural flow, the traditional lags in the accounting process become of serious consequence to many of the older water rights and to those holding space in various reservoirs.

In a district as large and variable as Water District 1, runoff time varies with basin characteristics, elevation, snow accumulation, exposure and numerous geologic factors. It is a frequent occurrence that one or more tributaries are receding to low flow rates when others still have flow in excess of that needed to meet demand. This variability requires that natural flows be computed and allocated at many locations. Because of the complexity and variability of the system, in addition to the large amount of data that is needed to accurately segregate natural flow and storage in all portions of the system, it is difficult to reasonably make the necessary calculations by hand in a timely manner.

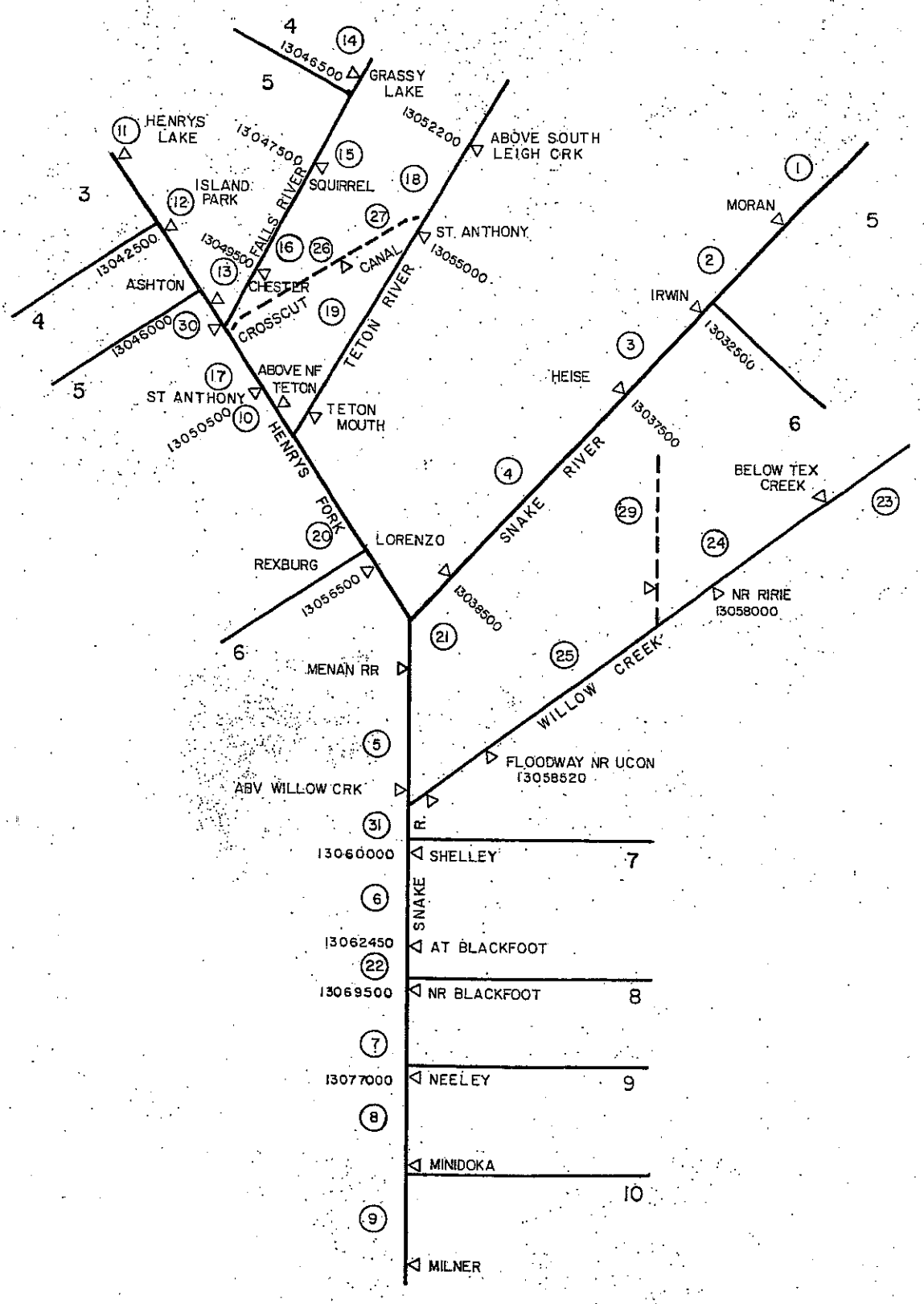
By using a computer procedure to allocate water during the 1978 season, Water District 1 was able to administer delivery of water to nearly 300 diversions. Figure 1 shows the locations where natural flows were computed and allocated. It is expected that the number of diversions administered will increase as the accounting process is expanded into more of the tributaries.

The Accounting Year

The watermaster and the USBR have separate but mutually dependent responsibilities in accounting for storage deliveries. Because the USBR is the water right holder for the various storage facilities within the district, they must keep the watermaster informed of the reservoir operating plan.

At the end of the irrigation season, the various canal storage accounts generally have storage remaining (carry-over) in one or more reservoirs. When water users have storage in more than one reservoir the watermaster has no method of determining the location of this carry-over unless the USBR specifies to which reservoir the carry-over is credited. This is necessary because the degree to which the reservoir rights can be filled in the ensuing accrual period is dependent upon the amount they are already filled. Once the watermaster knows the carry-over in each of the reservoirs he can then compute accrual to each reservoir account through the winter and spring months. At the end of the accrual period the canal storage accounts are set to the amount that each has filled physically and by provisions of the USBR canal company

FIGURE 1. UPPER SNAKE SYSTEM FOR WATERMASTER ACCOUNTING



contracts. Using the watermaster's computations of reservoir fill, it is the responsibility of the USBR to compute each canal company's storage allocation prior to the start of the irrigation season. After the initial canal storage accounts have been set the watermaster can then compute the daily storage withdrawals and remaining balances throughout the irrigation season.

Accounting Procedure

The process now used by Water District 1 to allocate water to the various water rights involves three steps. These are:

1. Determine the natural flow at several points throughout the river system.

2. Allocate the natural flow to the various water rights in order of their priority.

3. Charge diversions with storage water for the amount their diversions exceed their natural flow entitlement.

The computer program developed in 1978 allows the watermaster to efficiently handle the large amount of data necessary for proper allocation of water rights.

The following sections describe the details of the process used by the accounting program.

Natural Flow Determination

The Upper Snake and its tributaries are divided into about 30 reaches for the purpose of natural flow computation and subsequent flow allocation. Figure 1 is a diagram of the Upper Snake showing the reaches and Table 1 lists them in downstream order.

The natural flow available at the lower end of each reach is computed by summing the natural gain of individual reaches above that point. The individual reach gains are computed as in the following equation:

$$\begin{aligned}\text{Reach gain} = {} & \text{reach outflow} - \text{reach inflow} \\ & + \text{sum of reach diversions} \\ & + \text{reservoir change in storage} \\ & + \text{reservoir evaporation}\end{aligned}$$

This reach gain is not a true natural gain because of the influence of irrigation return flows. However, irrigation return flows contribute to the water available to be diverted in succeeding reaches. Therefore, these gains are considered to be part of the natural flow supply.

Before reach gains are computed, adjustments are made in the data to account for travel time. Table 1 lists the appropriate travel time in days from each reach to Milner. These travel times are similar to those used by District 1 in prior years. Travel time for both diversions within the reach and the outflow point are given.

TABLE 1

REACHES USED IN WATER DISTRICT 1 WATER RIGHT ACCOUNTING

No.	Name	Travel Time in Days from Downstream Point to Milner	Travel Time in Days from Diversion Points to Milner Dam
1	To Moran	5	5
2	Moran to Irwin	4	4
3	Irwin to Heise	4	4
4	Heise to Lorenzo	4	4
11	To Henrys Lake	7	7
12	Henrys Lake to Island Park	6	7
13	Island Park to Ashton	5	6
30	Ashton to above Falls River	5	5
14	To Grassy Lake	6	6
15	Grassy Lake to Squirrel	5	5
16	Squirrel to Chester	5	5
26	Crosscut Canal below diversions	-	-
27	Crosscut Canal at end	-	-
17	Above Falls River to St. Anthony	5	5
10	St. Anthony to above NF Teton	5	5
18	Above S. Leigh to St. Anthony	5	5
19	St. Anthony to Teton mouth	5	5
20	Above NF Teton to Rexburg	4	5
21	Lorenzo to Menan	4	4
5	Menan to Willow Creek	4	4
23	Willow Creek below Texas Creek	4	4
24	Below Texas Creek to near Ririe	4	4
29	Eagle Rock Dump near Willow Creek	-	-
25	Near Ririe to fdwy near Ucon	4	4
28	Fdwy near Ucon to End	4	4
31	Willow Creek to Shelley	3	4
6	Shelley to Blackfoot	3	3
22	At Blackfoot to Blackfoot	2	3
7	Near Blackfoot to Neeley	1	1
8	Neeley to Minidoka	1	1
9	Minidoka to Milner	0	0

Because Milner is used as the reference point for travel times, all dates for calculated data and allocations refer to Milner time. For example, when rights are being allocated for the 10th of the month, data are being used from the 3rd at Henrys Lake, the 4th at Grassy Lake, the 5th at Moran, the 7th at Blackfoot, and so forth.

Adjustments are made in the computed reach gain of reaches containing reservoirs to smooth the effects of observed daily variations in stage caused by wind or other measurement problems. Such minor errors in stage can cause unrealistic estimates of gain. To minimize these variations, a running average of the reach gains for several days is used for all reservoir reaches. Presently, a four day average is used in all of the reaches except the near Blackfoot to Neeley reach, for which a fifteen day average is used. American Falls Reservoir, located in this reach, has a large surface area and is subject to relatively greater fluctuations than the other reservoirs. A four day average is also used on other reaches located downstream from reservoirs for computational consistency from reach to reach.

Evaporation is included in the reach gain calculation for the reaches which include Palisades, Island Park, Ririe, American Falls, and Walcott Reservoirs. These reservoirs are entirely man-made and cause loss to the natural flow through evaporation. Daily evaporation is computed by multiplying the surface area by 0.7 of the pan evaporation. Daily pan evaporation is measured at the Aberdeen Agricultural Experiment Station. The following equations are used to estimate the total evaporation from the pan evaporation at Aberdeen.

Reservoir	Equation
Palisades	$E = 0.7(SA)(0.94A - 0.04)$
Island Park	$E = 0.63(SA)A$
Ririe	$E = 0.7(SA)(0.94A - 0.04)$
American Falls[1]	$E = 0.7(SA)A$
Walcott	$E = 0.7(SA)A$

[1] Surface area limited to 8,000 acres

where

E = evaporation in acre-inches per day
SA = reservoir surface area in acres
A = pan evaporation at Aberdeen in inches per day

The evaporation at American Falls is computed based on a maximum of 8,000 acres since there is evidence that prior to the construction of the reservoir, the remainder of the area was swampland in which the evapotranspiration would probably have approximated the present water surface evaporation. Jackson Lake and Henrys Lake evaporation is not included because prior to the addition of dams, natural lakes existed at the sites. Any additional evaporation occurring because of the artificial raising of the lake surface is considered insignificant. Grassy Lake evaporation is also not significant because of its small size and high altitude.

Right Allocation

After the reach gains are accumulated in downstream order, the natural flow has in effect been determined at each reach outflow point. The rights are then filled in order of priority based on these flows until either the water supply has been exhausted at all flow points or all rights are satisfied. Beginning with the earliest priority, water rights are allocated flow one by one unless limited by either the water supply or the magnitude of the demand. As each right is satisfied, it is subtracted from the natural flow in its own reach, and from all of the reaches downstream from it. In this manner, the flow is removed from the system so that it cannot be used a second time. The flow remaining after a subtraction is called the "remaining natural flow" or RNF. Should the RNF at any reach become zero, all subsequent rights above that reach cannot be satisfied.

Often several rights having the same priority must share a limited water supply. In these cases, the remaining flow is distributed to each right in proportion to its percentage of the total of the rights involved but is subject to the flow being available at the location of the right.

Some rights are limited by the volume that can be diverted during the year. When a right is limited by volume, a check is made to insure that the cumulative total of diversions does not exceed the volume(s) specified in the water right(s). This condition applies to all reservoir rights and certain natural flow rights which include a volume limitation.

Power rights are deducted from the reach's natural flow but not from all downstream reaches, since this flow is not removed from the river. In this manner a power right may limit the distribution of natural flow at and above the point of diversion of flow through a power plant. Only that portion of a power right which is being beneficially used for power production can affect the distribution.

Reservoir Storage

A reservoir when storing or releasing water modifies the flow within the reach in which it is located, and requires special accounting procedures. However reservoirs, like all other diversions, can accumulate water only when their rights are in effect. The amount stored on a given day does not necessarily relate to the actual change in storage of the reservoir. Flow credited to one reservoir may actually have been stored in a different reservoir located upstream or downstream from it.

The amount stored by a reservoir may be limited by a flow rate or a seasonal volume. This volume may be the physical capacity of the reservoir, or the total of the storage rights in the reservoir, whichever is smaller. In the Upper Snake River system some reservoirs have more than one storage priority, each with a different volume. Table 2 lists the major storage rights in District 1 in order of priority.

TABLE 2

STORAGE RIGHTS DISTRICT 1

Reservoirs	Flow (cfs)	Volume (ac-ft)	Priority
	1 Jan - 31 Dec		
1. Jackson Lake	2,500	298,981	23 Aug 06
2. Lake Walcott		97,000	14 Dec 09
3. Jackson Lake		138,829	8 Aug 10
4. Jackson Lake		409,190	24 May 13
5. Henrys Lake	1,000	79,350	15 May 17
	1 Nov - 30 Apr		
6. Palisades		259,600	29 Mar 21
7. Island Park		45,000	29 Mar 21
8. American Falls		159,400	29 Mar 21
9. American Falls		1,540,600	30 Mar 21
10. Island Park		90,000	14 Mar 35
11. Grassy Lake		15,204	13 Feb 26
12. Palisades		940,400	28 Jul 39
13. Henrys Lake		10,650	29 Jul 65
14. Ririe		*	16 Jun 69
	1 May - 31 Oct		
6. American Falls		1,700,000	30 Mar 21
7. Island Park		135,000	14 Mar 35
8. Grassy Lake		15,204	13 Feb 36
9. Palisades		1,200,000	28 Jul 39
10. Henrys Lake		10,650	29 Jul 65
11. Ririe		*	16 Jun 69

*Ririe water right has not been obtained.

The total of the storage rights in the reservoirs are as follows:

Jackson Lake	-	847,000 acre-feet*
Palisades	-	1,200,000 acre-feet
Henrys Lake	-	90,000 acre-feet
Island Park	-	135,000 acre-feet
Ririe	-	0 acre-feet
American Falls	-	1,700,000 acre-feet
Walcott	-	97,000 acre-feet

* Restricted to 624,360 acre-feet as of 1978. The respective Jackson Lake rights in Table 2 have been reduced proportionally.

Certain of the Palisades, Island Park, and American Falls water rights are subject to seasonal variations as noted in Table 2. These variations result from contracts made by the USBR with various canal companies and the Idaho Power Company. These contracts allow for a portion of the storage in each of these reservoirs to be filled at an earlier priority date than American Falls Reservoir (30 March, 1921) by reason of curtailment by Idaho Power Company. These provisions became administrable under state water law when the contracts were included as part of district court decrees in 1968 and 1969.

Each of the reservoir rights can be filled only to the maximum volume specified in the right. When stored water is released from a reservoir, thus making room for additional storage, the amount accumulated in that space is not adjusted downward until the end of the irrigation season. This prevents a second fill at the expense of later rights.

Because the United States Department of Interior, through the USBR, holds all of the major reservoir storage rights on the Upper Snake (except Henrys Lake), it is not possible for the watermaster to determine the amount of water that has been released from the storage space of each right. It is, therefore, the responsibility of the USBR to provide the watermaster with carried-over calculations at the end of the water year.

Stored water releases are accounted for at each reach outflow point. The stored water available in each reach is calculated by subtracting the remaining natural flow (RNF) from the actual flow. If a negative stored flow results, the flow belonging to a downstream right has been stored or diverted upstream.

Special Computations

Crosscut Canal - Stored water can be delivered to canals on Teton River below the near St. Anthony gage via the Crosscut Canal which diverts from the Henrys Fork below Falls River. The Crosscut also carries water to the North and Middle branches of the Falls River Canal to supply Falls River natural flow rights.

The Crosscut requires special computation because this flow does not occur in normal downstream order, but instead transfers flow to an adjoining basin.

The ability to store water, when it is not needed, for use during periods of scarce supplies is vital to agricultural and power needs of the Snake River Valley. Reservoirs also provide for flood control and flows for fish wildlife and recreation.

While there are many benefits associated with reservoirs, their right to divert water for storage is defined by the beneficial uses identified in the water right license. Storage rights are subject to the same general water laws as other water rights. This "sameness" in legal standing dictates special administrative procedures. To illustrate this point, consider a system on which the earliest right is a storage right equal to one-half the mean annual runoff of the basin. Further suppose that one-half of the runoff occurs between November 1 and April 1, and the remaining one-half comes off between April 1 and October 31. If the decision is made to store water between November 1 and April 1, the remaining water is available to fill the later natural flow rights during the period April 1 to November 1.

If, on the other hand, a decision is made to allow water to flow past the reservoir and exercise the right during a different period, the water supply for the junior water rights will be diminished. Since it is clearly the intent of the Idaho Code that any interference between water rights be prevented, the Water District 1 accounting process credits all available natural flow to the reservoirs according to priority of right, until each storage right is filled. This procedure is complicated by BOR flood control obligations. This dilemma is handled by allowing the reservoir to refill as long as there is water in excess of all other rights. This second fill is defined as "unaccounted for storage" and is credited back to the reservoirs pursuant to instructions of the storage right holder, i.e. the Bureau of Reclamation. By taking this approach during 1978, the major reservoirs in the system were allocated water as shown in Table 10.

TABLE 10
RESERVOIR ALLOCATIONS

Reservoir	Sum of Rights (acre-feet)	Accrued Storage (acre-feet)	Proportion of Rights Filled (Percent)
Jackson Lake	624,360[1]	624,360	100.0
Palisades	1,200,000	1,125,600	93.8
Henrys Lake	90,000	87,047	96.7
Island Park	135,000	135,000	100.0
Grassy Lake	15,204	14,030	92.3
Ririe	90,000[2]	0	0
American Falls	1,700,000	1,700,000	100.0
Lake Walcott	97,000	97,000	100.0
Total	3,951,564	3,783,037	98.0

1/ Represents restricted capacity.
2/ Ririe water right has not been obtained.

Disposal of Stored Water

Each year after reservior accounts have achieved the maximum annual fill, the supply is divided among the various space holders. Table 11 shows the space allocations, storage used and carry-over by account for Jackson, Palisades and American Falls Reservoirs. If these data were to be used in crediting carry-over for 1979, additional adjustments would have to be made to correct for rentals, adverse storage use, evaporation and stored flows spilled past Milner. This amounts to 120,800 acre-feet or an average reduction of about 4.8% on each account.

TABLE 11

SPACE ALLOCATIONS, STORAGE USED & CARRY-OVER

Canal	Total Allocation	Storage Used	Water Used in Excess of Allocation	Carry-over
A & B Irrigation	133,363	20,747		112,616
Aberdeen-Springfield	253,927	1,625		252,302
American Falls Res. District #2	400,938	148,742		252,196
Bear Island	272	685	413	0
Blackfoot Irrigation	21,995	2,345		19,650
Burgess Canal	46,765	16,901		29,867
Burley Irrigation	194,712	42,580		152,132
Butler Island	234	584	350	0
Butte & Market Lake	47,925	216		47,709
Clark & Edwards	750	2,950	2,200	0
Clement Brothers (Kennedy)	634	252		382
Corbett Slough	10,750	147		10,603
Craig-Mattson	1,351	348		993
Danskin Ditch	2,204	1,693		511
Dilts Irrigation	2,389	474		1,915
Enterprise Canal	35,602	6,779		28,832
Enterprise Irrigation	14,525	5,535		8,990
Falls Irrigation District	61,664	12,989		48,675
Farmers Friend Irrigation	10,291	8,393		1,898
Harrison Canal	42,872	24,077		18,795
Idaho Irrigation	87,817	17,510		70,307
Idaho Power	45,000	45,000		0
Island Irrigation	4,409	1,881		2,528
LaBelle Irrigating	750	260		490
Lenroot Canal	15,089	2,803		12,286
Lowder Slough	2,268	1,570		698
Martin Canal (Great Western)	9,219	2,545		6,674
Milner Low Lift	87,428	22,032		65,396
Minidoka Irrigation	253,524	69,471		184,053
New Lavaside	11,022	73		10,949
New Sweden	72,026	15,182		56,844

TABLE 12 - Acquisition and Disposal of Rental Water (continued)

Disposal (continued)			
Date Requested	Renter	Diversion	Amount (acre-feet)
5/10/78	Everett Harriell	Oakland Valley Canal	20
5/15	Daniel Albertson	New Sweden	100
5/17	Lyle Robison	Lenroot	150
5/24	Ross Burns	Bannock Feeder	50
6/01	Ray E. Miller	Butte & Market	80
6/02	Theron Cheney	Lenroot	50
6/13	N. L. Olsen	Snake River	200
6/12	Marion S. Cheney		50
6/09	Richard McCardell	Snake River	200
6/09	Sterling Swanner	Great Feeder	10
6/30	Steven Kudla	New Sweden	5
6/30	Robert Lundblade	Snake River	100
7/05	Taylor Lott		20
7/10	Paul Byrd		100
7/11	Jerry Blosch		300
7/14	Circle Two Bar Ranch		250
7/18	George Hickman	Feeder Canal	25
7/21	Larry Ferguson	Farmers Friend	100
7/21	Clyde Burtenshaw	Farmers Friend	120
7/20	Claude Ferguson	Farmers Friend	150
8/03	Maxmillion Farms		125
8/18	Philip Hoehn		10
8/28	Burgess Canal	Burgess Canal	150
9/14	Brent Covington	Snake River	650

REGULATION SCHEDULE

The computer allocations program allows much greater refinement in making priority cuts. Because the computer calculates both the amount of natural flow available in a given reach and the downstream demand, it is possible to have many different priorities in effect on any given day.

Table 13 shows the complete regulation schedule used in 1978. The earliest priority cut on the main Snake River occurred on September 2, when the water supply could only provide water for priorities equal to or earlier than February 6, 1895. The rights on Willow Creek, on the other hand, were cut back to the May 1, 1888, on June 17. By August 23, the April 1, 1884 priority was the last right filled on Willow Creek.

All of the water rights recognized by the computer in distributing natural flow are listed in order of priority in Table 48 of the Appendix.

Exhibit
38

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

RECEIVED
DEC 01 2006
DEPARTMENT OF
WATER RESOURCES

Ident. Number: A01-02064
Date Received:
Receipt No:
Received By: _____

AMENDED NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name: UNITED STATES AMERICA, ACTING THROUGH 208-378-5306
Address: REGIONAL DIRECTOR, P.N. REGION ATTN: PN-3100
BUREAU OF RECLAMATION
1150 NORTH CURTIS
BOISE, ID 83706-1234

2. Date of Priority: MAR 30, 1921

156,830 AFY of this right shall be administered under a priority date of 03/29/1921.

3. Source: SNAKE RIVER Trib. to: COLUMBIA RIVER

4. Point of Diversion:

Township	Range	Section	1/4 of 1/4 of 1/4		Lot	County
07S	31E	30	SW	SE		POWER

5. Description of diverting works:

AMERICAN FALLS DAM

6. Water is used for the following purposes:

Purpose	From	To	C.F.S	(or) A.F.A.
IRRIGATION STORAGE	01/01	12/31		1,700,000.00
IRRIGATION FROM STORAGE	03/15	11/15		1,700,000.00
POWER STORAGE	01/01	12/31		1,700,000.00
POWER FROM STORAGE	01/01	12/31		1,700,000.00

7. Total Quantity Appropriated is:
C.F.S. (and/or) 1,700,000.00 A.F.A.

This water right includes the right to refill under the priority date of this water right to satisfy United States' storage contracts.

8. Total consumptive use is 1,700,000.0 Acre Feet Per Annum.

9. Non-irrigation uses:

DOMESTIC AND POWER

10. Place of Use:

Place of use for irrigation storage is American Falls Reservoir; provided, however, that water under this right may be temporarily held in the unoccupied space of any of the reservoirs upstream of Milner Dam when determined by the watermaster, Committee of Nine, and the Bureau of Reclamation that such temporary storage will promote the conservation of storage water upstream of Milner Dam.

Place of use for irrigation from storage is within the following counties: Fremont, Madison, Jefferson, Bonneville, Bingham, Bannock, Power, Minidoka, Cassia, Lincoln, Jerome, Twin Falls, Gooding, and Elmore.

11. Place of use in counties: Fremont, Madison, Jefferson, Bonneville, Bingham, Bannock, Power, Minidoka, Cassia, Lincoln, Jerome, Twin Falls, Gooding, and Elmore.

12. Do you own the property listed above as place of use? NO

13. Other Water Rights Used:

01-04052, 01-02040, 01-10042, 01-10053, 01-00284

14. Remarks:

15. Basis of Claim: LICENSE

16. Signature (s)
(a.) By signing below, I/We acknowledge that I/We have received, read, and understand the form entitled How you will receive notice in the Snake River Basin Adjudication. (b.) I/We do wish to receive and pay a small annual fee for monthly copies of the docket sheet.

For Organizations: I do solemnly swear or affirm that I am Area Manager of
Title

Snake River Area Office Bureau of Reclamation, that I have signed the foregoing
Organization

document in the space below as Area Manager of Snake River Area Office Bureau of Reclamation
Title Organization

and that the statements contained in the foregoing document are true and correct.

Signature of Authorized Agent _____

Title and Organization Area Manager, Snake River Area Office Bureau of Reclamation

Date 12/1/2006

State of Idaho)
)
County of Ada)

Subscribed and sworn (or affirmed) before me this 1st day of December 2006.

SEAL
Notary Public Katy Loomis

KATY LOOMIS NOTARY PUBLIC STATE OF IDAHO

Residing at Boise, Idaho

My Commission Expires 10/17/2009

Katy Loomis Please Print Name

17. Notice of Appearance:
Notice is hereby given that I, _____ am acting as attorney at law on behalf of the claimant signing above, and that all notices required by law to be mailed by the director to the claimant signing above should be mailed to me at the address listed blow.

Signature _____

Address _____

_____

Date _____

Last Name _____ Ident. Number _____

Exhibit
39

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION OF RIGHTS TO THE USE OF WATER FROM THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

Ident. Number: A01-02068
Date Received:
Receipt No:
Received By: _____

DEC 1 1 2006
DEPARTMENT OF WATER RESOURCES

AMENDED NOTICE OF CLAIM TO A WATER RIGHT ACQUIRED UNDER STATE LAW

1. Name: UNITED STATES AMERICA, ACTING THROUGH 208-378-5306
Address: REGIONAL DIRECTOR, P.N. REGION ATTN: PN-3100
BUREAU OF RECLAMATION
1150 NORTH CURTIS
BOISE, ID 83706-1234

2. Date of Priority: JULY 28, 1939

259,600 AFY of this right shall be administered under a priority date of 03/29/1921.

3. Source: SNAKE RIVER Trib. to: COLUMBIA RIVER

4. Point of Diversion:

Township	Range	Section	1/4 of 1/4 of 1/4	Lot	County
01S	45E	17	NE NE		BONNEVILLE
01S	45E	17	NW NE		BONNEVILLE
01S	45E	17	SE NE		BONNEVILLE
01S	45E	17	SW NE		BONNEVILLE

5. Description of diverting works: PALISADES DAM

6. Water is used for the following purposes:

Purpose	From	To	C.F.S	(or) A.F.A.
IRRIGATION STORAGE	01/01	12/31		1,200,000.00
IRRIGATION FROM STORAGE	03/15	11/15		1,200,000.00
POWER STORAGE	01/01	12/31		1,200,000.00
POWER FROM STORAGE	01/01	12/31		1,200,000.00

7. Total Quantity Appropriated is:
C.F.S. (and/or) 1,200,000.00 A.F.A.

This water right includes the right to refill under the priority date of this water right to satisfy United States' storage contracts.

8. Total consumptive use is 1,200,000.0 Acre Feet Per Annum.

9. Non-irrigation uses:

DOMESTIC AND POWER

10. Place of Use:

Place of use for irrigation storage is Palisades Reservoir; provided, however, that water under this right may be temporarily held in the unoccupied space of any of the reservoirs upstream of Milner Dam when determined by the watermaster, Committee of Nine, and the Bureau of Reclamation that such temporary storage will promote the conservation of storage water upstream of Milner Dam.

Place of use for irrigation from storage is within the following counties: Fremont, Madison, Jefferson, Bonneville, Bingham, Bannock, Power, Minidoka, Cassia, Lincoln, Jerome, Twin Falls, Gooding, and Elmore.

11. Place of use in counties: Fremont, Madison, Jefferson, Bonneville, Bingham, Bannock, Power, Minidoka, Cassia, Lincoln, Jerome, Twin Falls, Gooding, and Elmore.

12. Do you own the property listed above as place of use? NO

13. Other Water Rights Used: 01-10043

14. Remarks:

15. Basis of Claim: LICENSE

16. Signature (s)
(a.) By signing below, I/We acknowledge that I/We have received, read, and understand the form entitled How you will receive notice in the Snake River Basin Adjudication. (b.) I/We do wish to receive and pay a small annual fee for monthly copies of the docket sheet.

For Organizations: I do solemnly swear or affirm that I am Area Manager of
Title

Snake River Area Office Bureau of Reclamation, that I have signed the foregoing
Organization

document in the space below as Area Manager of Snake River Area Office Bureau of Reclamation
Title Organization

and that the statements contained in the foregoing document are true and correct.

Signature of Authorized Agent _____

Title and Organization Area Manager, Snake River Area Office Bureau of Reclamation

Date 12/1/2006

State of Idaho)
)
County of Ada)

Subscribed and sworn (or affirmed) before me this 1st day of December 2006.

SEAL
Notary Public Katy Loomis

KATY LOOMIS NOTARY PUBLIC STATE OF IDAHO

Residing at Boise, Idaho

My Commission Expires 10/17/2009

Katy Loomis Please Print Name

17. Notice of Appearance:
Notice is hereby given that I, _____ will be acting as attorney at law on behalf of the claimant signing above, and that all notices required by law to be mailed by the director to the claimant signing above should be mailed to me at the address listed blow.

Signature _____

Address _____

_____

Date _____

Last Name _____ Ident. Number _____

Exhibit
40

COPY

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE

STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

A. Subcase Number: 01-02064
(Insert water right number)

STANDARD FORM 1
OBJECTION

Please fill in the following information:

B. NAME AND ADDRESS OF PERSON OBJECTING

Name: State of Idaho
Address: 700 W. Jefferson, Statehouse Room 207
P.O. Box 83720
Boise, Idaho 83720-0010
Phone: (208) 334-2400

Name and Address of Attorney, if any:

Attorney Name: LAWRENCE G. WASDEN
Attorney General
CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division
DAVID I. STANISH (ISB # 7310)
Deputy Attorney General
Attorney Address: Office of the Attorney General
700 W. Jefferson, Room 210
P.O. Box 83720
Boise, Idaho 83720-0010
Attorney Phone No. (208) 334-2400

C. CLAIMANT OF WATER RIGHT AS LISTED IN DIRECTOR'S REPORT

Name: United States of America
Address: Bureau of Reclamation PN-3100
1150 N Curtis Rd Ste 100
Boise, ID 83706-1234

D. I object to the following elements as recommended in the Director's Report. (Please check the appropriate box(es)).

1. ☐ **Name and Address**
   Should be: _____

2. ☐ **Source**
   Should be: _____

3. ☐ **Quantity**
   Should be: _____

4. ☑ **Priority Date**
   Should be: Subordination language based on historic practice needs clarification

5. ☐ **Point of Diversion**
   Should be: _____

6. ☐ **Instream Flow Beginning and Ending Point**
   Should be: _____

7. ☑ **Purpose(s) of Use**
   Should be: Reference to contracts between United States and Idaho Power Company needs clarification

8. ☐ **Period of Year**
   Should be: _____

9. ☐ **Place of Use**
   Should be: _____

10. ☑ **Other Provisions Necessary**
    Should be: Ownership language needs clarification in light of the Idaho Supreme Court's decision in United States v. Pioneer Irrigation District, SRBA subcase no. 91-00063

11. **I object because:**

☐ This water right Should not exist.
☐ This water right was not recommended, but Should be recommended with the elements described above.

E. REASONS SUPPORTING OBJECTION(S):

4. Priority Date

The scope of subordination based upon historic practice needs clarification.

7. Purpose of Use

The "purpose and period of use" portion of the recommended water right references two specific contracts entered into between the United States and the Idaho Power Company (Ilr-733 and Ilr-801). Additional contracts exist that may also affect the use of this water as well. Language should be inserted indicating that the two contracts specifically mentioned are not the limit of the contractual relationships that may exist affecting this water right.

10. Other Provisions Necessary

The title ownership language should be amended consistent with the holding set forth in the Idaho Supreme Court's decision in United States v. Pioneer Irrigation District, Subcase no. 91-00063 (Mar. 9, 2007).

F. VERIFICATION (Must be Completed)

State of Idaho)
) ss.
County of Ada)

DAVID I. STANISH, Deputy Attorney General, duly sworn, upon oath, deposes and says:

That the State of Idaho in its proprietary capacity is filing this objection and that I am a Deputy Attorney General authorized to represent the State of Idaho, which is a party/claimant in this proceeding, as defined by I.C. § 42-1401A(1) and (7), and I have read this objection, know its contents and believe that the statements are true to the best of my knowledge.

LAWRENCE G. WASDEN
Attorney General
CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division
DAVID I. STANISH
Deputy Attorney General

By Attorney signing in representative capacity

Subscribed and sworn to before me on: 4-19-07
(Insert Date)

OLGA L. VALDIVIA NOTARY PUBLIC STATE OF IDAHO

Notary Public for IDAHO
Residing at: BOISE, ID
My commission expires: 2/8/2012

INSTRUCTIONS FOR MAILING

You must mail the objection to the Clerk of the Court. **FAX filings will not be accepted.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

G. CERTIFICATE OF MAILING

I certify that on April 19, 2007, I caused the original and the copies of this objection, including all attachments, to be served on the following persons by the method designated:

1. Original to:

Clerk of the District Court Snake River Basin Adjudication 253 Third Avenue North P.O. Box 2707 Twin Falls, Idaho 83303-2707	FEDERAL EXPRESS

2. One copy to the owner of the water right at the following address:

United States of America Bureau of Reclamation, PN-3100 1150 N Curtis Rd Ste 100 Boise, ID 83706-1234	U.S. MAIL

3. Copies to:

IDWR Document Depository PO Box 83720 Boise, ID 83720-0098	STATEHOUSE MAIL
Chief of Natural Resource Division Office of the Attorney General State of Idaho P.O. Box 44449 Boise, Idaho 83711-4449	(not applicable)
United States Department of Justice Environment & Natural Resource Division 550 West Fort Street, MSC 033 Boise, ID 83724	U.S. MAIL

Signature of Objector or attorney
Mailing on Objector's behalf

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE

STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	**A.** Subcase Number: 01-02064 (Insert water right number)
Case No. 39576	)	**STANDARD FORM 1 OBJECTION**

Please fill in the following information:

B. NAME AND ADDRESS OF PERSON OBJECTING

Name: State of Idaho
Address: 700 W. Jefferson, Statehouse Room 207
P.O. Box 83720
Boise, Idaho 83720-0010
Phone: (208) 334-2400

Name and Address of Attorney, if any:

Attorney Name: LAWRENCE G. WASDEN
Attorney General
CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division
DAVID I. STANISH (ISB # 7310)
Deputy Attorney General
Attorney Address: Office of the Attorney General
700 W. Jefferson, Room 210
P.O. Box 83720
Boise, Idaho 83720-0010
Attorney Phone No. (208) 334-2400

C. CLAIMANT OF WATER RIGHT AS LISTED IN DIRECTOR'S REPORT

Name: United States of America
Address: Bureau of Reclamation PN-3100
1150 N Curtis Rd Ste 100
Boise, ID 83706-1234

D. I object to the following elements as recommended in the Director's Report. (Please check the appropriate box(es)).

1. ☐ **Name and Address**
   Should be: _____

2. ☐ **Source**
   Should be: _____

3. ☑ **Quantity**
   Should be: Total quantity of a reservoir's storage right(s) is limited to reservoir capacity. Quantity of storage in American Falls Reservoir that may be scheduled for release for hydropower production is limited by Pub. L. 93-206, 87 Stat. 904 (Dec. 28, 1973) and Pub. L. 94-164, 89 Stat. 970 (Dec. 23, 1975), and has otherwise been further limited, waived, or abandoned by federal and state law, federal contracts, federal licenses, and equitable doctrines including but not limited to the following: adverse possession, estoppel, waiver, laches, etc.

4. ☑ **Priority Date**
   Should be: Subordination language based on historic practice needs clarification

5. ☐ **Point of Diversion**
   Should be: _____

6. ☐ **Instream Flow Beginning and Ending Point**
   Should be: _____

7. ☑ **Purpose(s) of Use**
   Should be: Reference to contracts between United States and Idaho Power Company needs clarification

8. ☐ **Period of Year**
   Should be: _____

9. ☐ **Place of Use**
Should be: _____

10. ☑ **Other Provisions Necessary**
Should be: Ownership language needs clarification in light of the Idaho Supreme Court's decision in United States v. Pioneer Irrigation District, SRBA subcase no. 91-00063 and as expressly provided in federal spaceholder contracts.

11. **I object because:**

☐ This water right Should not exist.
☐ This water right was not recommended, but Should be recommended with the elements described above.

E. REASONS SUPPORTING OBJECTION(S):

3. Quantity

Total quantity of a reservoir's storage right(s) is limited to reservoir capacity. Quantity of storage in American Falls Reservoir that may be scheduled for release for hydropower production is limited by Pub. L. 93-206, 87 Stat. 904 (Dec. 28, 1973) and Pub. L. 94-164, 89 Stat. 970 (Dec. 23, 1975), and has otherwise been further limited, waived, or abandoned by federal and state law, federal contracts, federal licenses, and equitable doctrines including but not limited to the following: adverse possession, estoppel, waiver, laches, etc.

4. Priority Date

The scope of subordination based upon historic practice needs clarification. Use of storage in American Falls Reservoir for hydropower production, except for the 2.6471% of capacity provided for in federal contract no. Ilr-733S, is subordinated by Pub. L. 93-206, 87 Stat. 904 (Dec. 28, 1973) and Pub. L. 94-164, 89 Stat. 970 (Dec. 23, 1975), and has otherwise been further limited, waived, or abandoned by federal and state law, federal contracts, federal licenses, and equitable doctrines including but not limited to the following: adverse possession, estoppel, waiver, laches, etc.

7. Purpose of Use

The "purpose and period of use" portion of the recommended water right references two specific contracts entered into between the United States and the Idaho Power Company (Ilr-733

and Ilr-801). Additional contracts exist that may also affect the use of this water as well. Language should be inserted indicating that the two contracts specifically mentioned are not the limit of the contractual relationships that may exist affecting this water right.

10. Other Provisions Necessary

The title ownership language should be amended consistent with the holding set forth in the Idaho Supreme Court's decision in United States v. Pioneer Irrigation District, Subcase no. 91-00063 (Mar. 9, 2007) and as expressly provided in federal spaceholder contracts.

F. VERIFICATION (Must be Completed)

State of Idaho)
) ss.
County of Ada)

DAVID I. STANISH, Deputy Attorney General, duly sworn, upon oath, deposes and says:

That the State of Idaho in its proprietary capacity is filing this objection and that I am a Deputy Attorney General authorized to represent the State of Idaho, which is a party/claimant in this proceeding, as defined by I.C. § 42-1401A(1) and (7), and I have read this objection, know its contents and believe that the statements are true to the best of my knowledge.

LAWRENCE G. WASDEN
Attorney General
CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division
DAVID I. STANISH
Deputy Attorney General

By Attorney signing in representative capacity

Subscribed and sworn to before me on: _____
(Insert Date)

OLGA L. VALDIVIA NOTARY PUBLIC STATE OF IDAHO

Notary Public for IDAHO
Residing at: BOISE, ID
My commission expires: 2/6/2012

COPY

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE

STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

A. Subcase Number: 01-02068
(Insert water right number)

STANDARD FORM 1
OBJECTION

Please fill in the following information:

B. NAME AND ADDRESS OF PERSON OBJECTING

Name: State of Idaho
Address: 700 W. Jefferson, Statehouse Room 207
P.O. Box 83720
Boise, Idaho 83720-0010
Phone: (208) 334-2400

Name and Address of Attorney, if any:

Attorney Name: LAWRENCE G. WASDEN
Attorney General
CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division
DAVID I. STANISH (ISB # 7310)
Deputy Attorney General
Attorney Address: Office of the Attorney General
700 W. Jefferson, Room 210
P.O. Box 83720
Boise, Idaho 83720-0010
Attorney Phone No. (208) 334-2400

C. CLAIMANT OF WATER RIGHT AS LISTED IN DIRECTOR'S REPORT

Name: United States of America
Address: Bureau of Reclamation PN-3100
1150 N Curtis Rd Ste 100
Boise, ID 83706-1234

D. I object to the following elements as recommended in the Director's Report. (Please check the appropriate box(es)).

1. ☐ **Name and Address**
   Should be: _____

2. ☐ **Source**
   Should be: _____

3. ☐ **Quantity**
   Should be: _____

4. ☑ **Priority Date**
   Should be: Subordination language based on historic practice needs clarification

5. ☐ **Point of Diversion**
   Should be: _____

6. ☐ **Instream Flow Beginning and Ending Point**
   Should be: _____

7. ☐ **Purpose(s) of Use**
   Should be: _____

8. ☐ **Period of Year**
   Should be: _____

9. ☐ **Place of Use**
   Should be: _____

10. ☑ **Other Provisions Necessary**
    Should be: Ownership language needs clarification in light of the Idaho Supreme Court's decision in United States v. Pioneer Irrigation District, SRBA subcase no. 91-00063

11. **I object because:**

☐ This water right Should not exist.
☐ This water right was not recommended, but Should be recommended with the elements described above.

E. REASONS SUPPORTING OBJECTION(S):

4. Priority Date

The scope of subordination based upon historic practice needs clarification.

10. Other Provisions Necessary

The title ownership language should be amended consistent with the holding set forth in the Idaho Supreme Court's decision in United States v. Pioneer Irrigation District, Subcase no. 91-00063 (Mar. 9, 2007).

F. VERIFICATION (Must be Completed)

State of Idaho)
) ss.
County of Ada)

DAVID I. STANISH, Deputy Attorney General, duly sworn, upon oath, deposes and says:

That the State of Idaho in its proprietary capacity is filing this objection and that I am a Deputy Attorney General authorized to represent the State of Idaho, which is a party/claimant in this proceeding, as defined by I.C. § 42-1401A(1) and (7), and I have read this objection, know its contents and believe that the statements are true to the best of my knowledge.

LAWRENCE G. WASDEN
Attorney General
CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division
DAVID I. STANISH
Deputy Attorney General

By Attorney signing in representative capacity

Subscribed and sworn to before me on: 4-19-07
(Insert Date)

OLGA L. VALDIVIA NOTARY PUBLIC STATE OF IDAHO

Notary Public for IDAHO
Residing at: BOISE, ID
My commission expires: 2/5/2012

INSTRUCTIONS FOR MAILING

You must mail the objection to the Clerk of the Court. **FAX filings will not be accepted.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

G. CERTIFICATE OF MAILING

I certify that on April 19, 2007, I caused the original and the copies of this objection, including all attachments, to be served on the following persons by the method designated:

1. Original to:

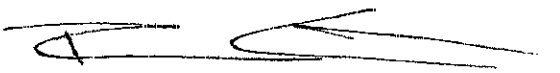
Clerk of the District Court Snake River Basin Adjudication 253 Third Avenue North P.O. Box 2707 Twin Falls, Idaho 83303-2707	FEDERAL EXPRESS

2. One copy to the owner of the water right at the following address:

United States of America Bureau of Reclamation, PN-3100 1150 N Curtis Rd Ste 100 Boise, ID 83706-1234	U.S. MAIL

3. Copies to:

IDWR Document Depository PO Box 83720 Boise, ID 83720-0098	STATEHOUSE MAIL
Chief of Natural Resource Division Office of the Attorney General State of Idaho P.O. Box 44449 Boise, Idaho 83711-4449	(not applicable)
United States Department of Justice Environment & Natural Resource Division 550 West Fort Street, MSC 033 Boise, ID 83724	U.S. MAIL



Signature of Objector or attorney
Mailing on Objector's behalf

Exhibit
41

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL

DISTRICT OF THE STATE OF IDAHO,

IN AND FOR THE COUNTY OF TWIN FALLS

In Re: SRBA	)	Subcase Nos.
	)	1-2064, et al.
Case No. 39576	)	(American Falls subcases)
	)	Subcase Nos.
	)	1-2068, et al.
	)	(Palisades subcases)
_____	)	VOLUME II

CONTINUED DEPOSITION OF ANTHONY OLENICHAK

MARCH 21, 2012

REPORTED BY:

JANET FRENCH, CSR NO. 946

Notary Public

THE CONTINUED DEPOSITION OF ANTHONY OLENICHAK was taken on behalf of the Ground Water Districts, North Side Canal Company, and Twin Falls Canal Company at the offices of Idaho Department of Water Resources Idaho Falls Regional Office, 900 N. Skyline Drive, Suite A, Idaho Falls, Idaho, commencing at the hour of 9:00 a.m. on March 21st, 2012, before Janet French, Certified Shorthand Reporter and Notary Public within and for the State of Idaho, in the above-entitled matter.

APPEARANCES:

For the Surface Water Coalition:
BARKER, ROSHOLT & SIMPSON LLP
BY: TRAVIS L. THOMPSON & JOHN K. SIMPSON
113 Main Avenue West, Ste. 303
Twin Falls, Idaho 83301-6167

For Minidoka Irrigation District:
FLETCHER LAW OFFICE
BY: KENT FLETCHER
1200 Overland Avenue
P.O. Box 248
Burley, Idaho 83318-0248

APPEARANCES (Continued):

For American Falls Reservoir District No. 2:
CAPITOL LAW GROUP, PLLC
BY: TOM ARKOOSH
205 N. 10th Street, 4th Floor
P.O. Box 2598
Boise, Idaho 83701-2598

For the State of Idaho:
OFFICE OF ATTORNEY GENERAL
BY: MICHAEL C. ORR
700 W. Jefferson, Statehouse Room 207
P.O. Box 83720
Boise, Idaho 83720-0010

For Idaho Department of Water Resources:
OFFICE OF ATTORNEY GENERAL
BY: CHRIS M. BROMLEY
322 East Front Street
P.O. Box 83720
Boise, Idaho 83720-0098

APPEARANCES (Continued):

For Upper Valley Spaceholders:
RIGBY, ANDRUS & RIGBY, CHARTERED
BY: JERRY R. RIGBY
25 North Second East
P.O. Box 250
Rexburg, Idaho 83440

Also Present: Ray Williams

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PROCEEDINGS

ANTHONY OLENICHAK,
first duly sworn to tell the truth relating to said cause, testified as follows:

EXAMINATION

QUESTIONS BY MR. THOMPSON:

Q. Good morning, Mr. Olenichak. Do you mind if I call you "Tony"?

A. That's fine.

Q. My name is Travis Thompson. For the record, I represent A&B Irrigation District, Burley Irrigation District, Milner Irrigation District, North Side Canal Company, and Twin Falls Canal Company.

And I guess before we get started today, this is one thing I'd like to clear up: The documents I'm handing you were previously marked in your deposition back in February as Exhibits 2 and 3. And do you recognize those documents? Were those Exhibits 2 and 3 from your February 9th deposition?

A. Yes.

THE COURT REPORTER: Can you all identify yourselves on the record, please, before you begin.

MR. FLETCHER: I'm Kent Fletcher. I represent

Minidoka Irrigation District.

MR. ARKOOSH: Tom Arkoosh, American Falls Reservoir District No. 2.

MR. SIMPSON: John Simpson, representing the same individuals as Mr. Thompson.

MR. ORR: Michael Orr, State of Idaho.

MR. WILLIAMS: Ray Williams with the Department of Water Resources.

MR. BROMLEY: Chris Bromley, Deputy Attorney General, Department of Water Resources.

MR. RIGBY: Jerry Rigby, Upper Valley Spaceholders.

THE COURT REPORTER: Thank you.

Q. (BY MR. THOMPSON) I guess just some quick ground rules, Tony. You've been deposed before; correct?

A. Yes.

Q. You understand the procedure to give an audible answer to any of my questions?

A. Yes.

Q. And if you need any clarification on questions, please ask me to clarify.

A. Okay.

Q. And if you need a break any time today, please let me know, or any of the other attorneys.

I guess, you understand that the testimony you provide today can be used in a court of law?
A. Yes.
Q. And are you taking any medications or under the influence of anything that would impair your ability to answer the questions truthfully?
A. No.
Q. I guess going back to our February deposition, John Simpson had asked for certain manuals and memos related to the accounting program.
Do you recall that?
A. Yes.
Q. Have you brought those with you today?
A. Yes, I have.
MR. THOMPSON: And can we get those?
MR. BROMLEY: We already gave those to John, and we also have additional documentS that were requested in the Notice of Deposition. I don't know when you want to get to that. Travis, we could do it all at once, or we could do it piece by piece, however you want to do it.
MR. THOMPSON: Well, let's go with that.
Can I have this marked, please.
(Deposition Exhibit No. 5 marked.)
Q. (BY MR. THOMPSON) Tony, have you reviewed

Exhibit 5 before today?
A. Yes.
Q. And did you understand the information requested in the notice; have you produced anything today?
A. Yes.
Q. And can you please explain what you have produced in response to that notice.
A. It's probably easiest to explain the documents in chronological order as they were developed. The first two are the licenses, 2064 for American Falls Reservoir, and 2068 for Palisades Reservoir. Those are the two water rights that Water District 1 relies on to distribute to those storage rights.
The other document is a copy of pages 77 through 79 of the August 1976 watermaster's listing of water rights. And in that listing, on the page 77, it lists the canals with the various amounts of storage that they have as spaceholders. It also lists the Wyoming water rights for Jackson Lake. It refers, again, to the license of Palisades Reservoir, the Henry's Fork Reservoir, and American Falls Reservoir, Lake Walcott, Island Park, Teton Reservoir. That was the list the watermaster was using just before the

computerized accounting was compiled.
I also have a memorandum that was in my files. It was from Alan Robertson who is one of the authors for the computerized water right accounting. It was to Bobby Fleenor. I believe he worked for the IDWR. His title on the memo was Coordinator for District 1, Management Changes. The subject was "Proposed changes in the water right accounting procedures." And there are a couple items in here that refer to the accounting for the storage rights.
MR. ARKOOSH: Excuse me. What year?
THE WITNESS: It was dated December 30, 1977.
MR. ARKOOSH: Thank you.
THE WITNESS: Then in October of 1980. Bob Sutter and Alan Robertson put together a manual for the newly compiled water right accounting. It was titled "Water Right Accounting and Flow Distribution for Water District 1, Upper Snake River, Idaho." It says "draft copy." I don't believe there was ever a final copy. I think this was the last copy that was made.
I probably skipped over one thing. In 1978, when the Water District 1 first started using the computerized accounting, there was a pretty good summary or history and summary of the new water right

accounting. I copied pages 1 through 15 of the 1978 watermaster's report, or black book, as some people refer to it, with the explanation of the accounting.
Q. (BY MR. THOMPSON) And sorry, Tony. Backing up to that memo from -- you say it was from Bob Sutter?
A. The 1977 memo?
Q. Well, the big packet you have.
A. Oh, the big packet, yes.
Q. That manual, what is that?
A. That was written in October of 1980.
Q. And that is a draft, or that's the final manual that you are aware that the Water District uses?
A. This was the last version that I'm aware. I don't believe there was a version written after this one.
And then July of 1992, Bruce Sandoval was working on his master's thesis for the University of Idaho, and he wrote a manual similar to the one that was written in 1980, but I think it actually has a little bit more detail to it, and it describes all of our water right accounting practices, and how the computerized accounting works, and all the corresponding files that it uses.

I also included a PowerPoint presentation that I put together to explain how -- the basics of water right accounting and how water accrues to the reservoirs. And I presented this to some of the parties, some of the water users. Sometimes I present portions. I'm not sure when this was put together, but it is several years old.

And then I have a large stack of correspondence that I've reviewed over the past couple of weeks that pertain to the distribution and refill of the storage rights.

And that was all that I had to satisfy those seven requested items in the deposition.

MR. BROMLEY: We have CDs for everybody to have with two additional copies of this stack -- paper copies.

MR. THOMPSON: Okay.

MR. BROMLEY: You can see it's rather voluminous. Rather than burning a whole lot of paper, we figured that CDs would work for people. I recognize that not everybody has got a computer, so that's why we do have two extra paper copies for people to pass around if they want to.

MR. FLETCHER: So the CDs have that stuff on them?

MR. BROMLEY: Yes, the CDs have everything --

MR. FLETCHER: Does that include this stuff John got?

MR. BROMLEY: Yeah. That's the same stuff that -- John got ahead of the game a little bit.

MR. SIMPSON: I just got the two -- Sandoval, I think, is the --

MR. BROMLEY: Sandoval and Sutter.

MR. FLETCHER: Oh, John's stuff is a duplicate of this stuff?

MR. SIMPSON: Yeah.

MR. BROMLEY: Partially.

MR. FLETCHER: So that is not in addition to this?

MR. BROMLEY: No. No. That's the same -- John has the Sutter and the Sandoval document. We can pass out the CDs. And then we have got the full paper copy.

John has got the manuals, Travis -- the Sandoval and the Sutter.

Q. (BY MR. THOMPSON) And tell me, as far as the historical accounting, the actual data year by year, is that all contained in the watermaster's annual report for distribution to the storage rights?

A. Yes -- well, not all of it. The actual

calculations, not all of them are included in those annual reports.

Q. Which calculation are you referring to?

A. When we started using the computer, the computer prints out the output, and it's several pages -- three or four pages per day or for the entire irrigation season, of course all of that is summarized in the watermaster's report. It is not actually in the watermaster's report.

Q. So all the input data produced on a daily basis is kept by the District and then summarized as part of the annual report?

A. Correct.

Q. And prior to the accounting program, other than the annual report, is there any other documents that would show storage distribution or accounting or storage rights?

A. There may be, but I wasn't able to find them.

Q. Okay. So as far as the Water District is concerned, the annual reports would reflect storage distributions to those water rights in a given year?

A. Yes.

Q. Okay.

MR. BROMLEY: Travis, I don't know if this is the

time to take it up. I don't want to, you know, break up your questions. Tony reviewed his prior deposition, and he did discover a few inaccuracies that he wanted to read into the record.

If now is a good time to do it, that's great. If you would rather wait for a break --

MR. THOMPSON: Yeah, maybe we can wait for a break.

Q. (BY MR. THOMPSON) Tony, what did you do to prepare for your deposition today? Did you review any documents?

A. Yes. I went through -- from the request for items and documents in the deposition notice, I reviewed all the manuals, all the correspondence that had taken place, and memorandums concerning the accounting for the storage rights.

Q. And have you had any conversations with any counsel for the parties in this case?

A. Yes. I've talked to Jerry Rigby concerning the refill issue. I've talked to -- I don't know if the IDWR is a party. The State of Idaho I've talked to on the telephone concerning the water right accounting.

Q. Who from the State of Idaho have you spoken with?

A. Michael Orr.
Q. Can you describe those conversations.
A. Michael Orr generally calls me concerning the practices -- historical practices, current practices of how water is accounted for in Water District No. 1.
Q. What were his questions?
A. I don't remember the precise questions.
Q. He asked you about the history of Water District accounting or administration?
A. Yes.
Q. And did he discuss the State of Idaho's summary judgment motion with you?
A. He sent me a copy to review to see if there was any discrepancies or anything that I saw that stood out that I thought was incorrect.
Q. And did you have any comments for that?
A. No. It looked fine to me.
Q. Was this after they filed it with the court?
A. I believe it was immediately before.
Q. So was the State of Idaho asking for the Water District's position prior to filing that motion; is that your understanding?
A. Not necessarily our position, but how the accounting was actually done.

(Deposition Exhibit No. 6 marked.)
Q. (BY MR. THOMPSON) Tony, can you just generally describe the Upper Snake Reservoir System as you understand it.
A. The Upper Snake Reservoir System in Water District 1 is comprised of nine different reservoirs.
Do you want me to read the name of each of the reservoirs?
Q. Well, I guess on Exhibit 6, do you recognize this document?
A. Yes.
Q. And can you just generally describe it.
A. It's referred to as the Bureau of Reclamation's Teacup Diagram. It shows the physical contents of reservoirs in Water District 1. It also shows the Little Wood Reservoir, which is not part of Water District 1.
Q. And the nine reservoirs you referenced, are they depicted on this diagram?
A. Yes.
Q. And can you just walk through those, I guess general location.
A. The furthest downstream is Lake Milner. Proceeding upstream is to Lake Walcott, then to American Falls. Willow Creek is a tributary of the

Snake River that has Ririe Reservoir. Proceeding up the Henry's Fork and Falls River. We have Grassy Lake. And then back to the Henry's Fork. We have Island Park, Henry's lake. And proceeding up the main stem of the Snake River, Palisades and Jackson Lake.
Q. And, Tony, I guess, in your understanding can you generally describe the responsibilities of the Bureau of Reclamation regarding operations of the reservoir system.
A. My understanding of the Bureau's responsibilities is to provide for flood control from some of those reservoirs and to store water under the storage water rights for their contracted spaceholders.
Q. And do they physically operate the dams?
A. Certainly they operate the dams in flood control conditions. During the irrigation season, it is a cooperative effort with Water District 1 and the Bureau to release storage water for water right users.
Q. And maybe I'll take it reservoir by reservoir. That was too general of a question. We start down at the bottom again. You understand there is private dams and reservoirs within this system?
A. Yes.
Q. And would Milner Dam be one of those?

A. Lake Milner does not have a water right. It is not a federal reservoir, yes.
Q. And it is operated privately; is that correct?
A. I don't know the answer to that.
Q. Lake Walcott, is that a federal dam?
A. I believe so.
Q. And your understanding is that Bureau of Reclamation operates that facility?
A. I think so, but I'm not sure.
Q. American Falls?
A. Yes. That's a federal reservoir.
Q. Okay. Ririe?
A. Ririe is also a federal reservoir. I believe the dam is operated by the Bureau of Reclamation.
Q. And Palisades?
A. The same, federal reservoir operated by the Bureau.
Q. And what about Jackson Lake?
A. Same thing.
Q. Federal?
A. Federal, yes.
Q. Moving up to Henry's Fork drainage, Grassy Lake; who operates that?

A. I believe -- certainly the federal Bureau of Reclamation operated that reservoir. Recently, I think there was some negotiation with Fremont and Madison. Fremont and Madison has a contract for them to continue to regulate it.

Q. And Island Park, is that federal?

A. Oh, excuse me. What was the reservoir you asked about?

Q. I was talking about Grassy Lake.

A. Grassy and Island Park are both -- they hold water for Fremont and Madison, and I'm not sure who holds the title for them, but the Bureau has been physically operating those.

Q. And what about Henry's Lake?

A. Henry's Lake is a private reservoir operated by North Fork Reservoir Company.

Q. So it is your understanding with the Bureau of Reclamation that for those reservoirs they have responsibility for, they physically operate the dam, flood control releases, anything with having to do to store water in those facilities?

A. Yes.

Q. And can you generally describe the responsibilities of Water District 1.

A. Water District 1 accounts for the water

accruing to the water rights for those reservoirs.

Q. Anything else?

A. Pertaining to the reservoirs or to Water District's 1 entire responsibilities?

Q. Yeah, I think just in general. I was thinking more broad than just the reservoirs.

A. Water District 1's responsibility is to determine the natural flow available in the river each day. And it distributes that natural flow that it calculates to the water rights, which can include both storage reservoirs and other water users.

We also keep track of the storage allocations at the beginning of the irrigation season and the amounts allocated to each individual diversion on the Snake River and its tributaries, and they are regulated accordingly to the amounts of water that are provided from their natural flow rights and their storage water.

Q. And does the Water District have any water measurement responsibilities, or they oversee any on the ground measurement of reach gains, of deliveries?

A. Yes. That's the way the natural flow is calculated each day, by the measurements in all of the canals, pumps and reservoirs.

Q. And how does the Water District interact

with the Bureau of Reclamation? Maybe if it is by different times of year or on a day-to-day basis, however best you think you can describe that interaction.

A. Well, certainly, whenever we need to communicate with them, when we think more or less water should be released from reservoirs, we call them on the telephone.

We also have communication with them when we are determining our final carry over, and according -- and for them to review our spaceholder allocations.

And also when they spill water past Milner, we need them to designate where that storage water is coming from when it is spilled.

Q. So in your interactions with Reclamation, who do you usually talk to?

A. Mike Buse is the primary contact.

Q. Anybody else?

A. It's mostly just Mike Buse. And then if he feels somebody else needs to get involved in the conversation, that happens sometimes.

Q. So maybe we can take these three examples. You testified that when you want more or less water to come down the river -- can you explain that

circumstance.

A. In the summertime, canals -- we'll call Water District 1 -- requesting additional water. And if at that time, we see that the flows aren't sufficient enough to supply that additional water, we'll call the Bureau of Reclamation and ask them to release more water out of Palisades or Island Park, depending on where the diversion is, depending on how they want to keep water up in the system, whether it should come from Jackson or Palisades or Ririe or wherever it comes from.

Q. So those requests during the irrigation season, would that be for storage if there is insufficient natural flow; is that why you would change releases at one of those reservoirs?

A. Yes.

Q. For irrigation demand?

A. Irrigation demand.

Q. And that's just a call with Mike Buse?

A. Yes. And if Mike Buse isn't there, there are other people in the office that we can notify.

Q. And is that at the Burley Regional Office?

A. Yes.

Q. And so how do you understand those requests get implemented by Reclamation?

A. They call their dam tender that is on site at the dam, and they schedule an additional release at the reservoir.

Q. From the direction of Mike Buse, is that --

A. Yes. And Art Hill is probably another person for the Bureau that we have a lot of contact with during the summer for those reasons.

Q. And is Mr. Hill in Burley?

A. Yes.

Q. Okay. So during the irrigation season, your communications all go through the Burley office for changes and releases at any of the federal reservoirs if necessary?

A. Yes.

Q. And then can you describe -- I guess I'll just back up. Are these always phone calls? Do you ever have meetings with Reclamation during the year, or is it just a matter of phone calls?

A. Yes, we occasionally have meetings. The meetings generally come in the wintertime to discuss how much water the Bureau is releasing from the reservoirs. Water District 1 doesn't get too involved in those type of discussions. It's mostly in the summertime during the irrigation season that we are concerned with the releases.

Q. And when you say the wintertime, what time frame are you referring to?

A. The non irrigation season, the flood control season. The Bureau of Reclamation at that time generally they determine where to keep the water and how much to send down through the system.

Q. Okay. You mentioned the final carry over numbers, you have some discussions with Reclamation about that. Can you describe how that takes place.

A. Yes. The Bureau of Reclamation -- when the computerized accounting was first developed in 1978, the Bureau of Reclamation at that time would do the calculations and figure out the carry over for the individual spaceholders. I think it was in around 1980, or the early 1980s where the Bureau of Reclamation and the Department of Water Resources and Water District 1 got together to put their carry over calculations into a Fortran computer program that allows for the calculation of carry over.

And Water District 1 has been running that storage report or storage program ever since that time to calculate the individual carry over. After that is done, we send a copy of that to the Bureau of Reclamation for their review.

Q. And this Fortran program, is that part of

the water right administration accounting program, or is that a separate program?

A. It is a separate program, but in the manuals by Bruce Sandoval and Bob Sutter they talk about both our Snake WRA -- that's our daily water right accounting -- and the SNKSTO, that's this storage program that we are talking about.

So there are several programs that are a part of the water right accounting, and that's one of them.

Q. So the Snake storage -- I guess I'll just refer to it -- the last one you referenced, that's the carry over or final carry over program that you used to calculate which space water is allocated to?

A. Yes. That storage report, that storage program, it takes the initial fill allocation, subtracts off the evaporation, distributes it to all the spaceholders.

And then from that at the end of the year, the storage use, which is calculated in the daily water right accounting, is imported into that program and deducted from the original allocations at the beginning of the season to calculate the final carry over and where it is for each spaceholder in each reservoir.

Q. So is it fair to say you run two programs, one to calculate storage allocation, and then you have your daily accounting program that runs the diversions that you use for input later into that storage program to see who --

A. That's correct. The daily program calculates the natural flow and distributes the natural flow each day. If a diversion is diverting over its entitlement, in excess of its entitlement, the natural flow, it's charged storage. And that storage use is then imported into this storage report program at the end of the year.

Q. So is the storage report program run during your irrigation season, or do you just keep track of how much storage is diverted in the daily accounting program?

A. The storage report is run twice a year generally. The first time is when we've reached the day of allocation and the watermaster allocates the storage. At that time we know the maximum amount of storage allocated to the spaceholders. At that time the storage program is used to distribute that storage to spaceholders, so we know what each diversion has for a storage allocation during the irrigation year.

It isn't run again until at the end of the

year after we know how much storage everyone has used, and we compute the individual carry over the spaceholder is using in that storage report.

Q. So the first time you run it with the allocation, you know, for example, a canal has 100 acre feed allocated for the year, and then when you run the daily accounting, they keep track of the daily diversions of how much storage or how much natural flow that canal may be using; is that correct?

A. That's correct.

Q. And you would have an idea of how much storage they might have left for the year if they get up to that 100 acre foot maximum or get close to running out?

A. Yes.

Q. Okay. So as far as the final carry over, the storage report, when you've imported all that data for the irrigation season, you compare that to the initial allocation to see what is left for carry over; is that correct?

A. Yes.

Q. And then how do you send that to Reclamation?

A. In the past, I've hand delivered it. Lately, just sent it then through electronic mail.

They are all posted on the IDWR website.

Q. What time of the year do you usually send that report to them?

A. It usually occurs around the Water District 1's annual meeting, around the first of March.

Q. And as far as the end of irrigation season when all the canals are turned off, do you have an idea of what the carry over amount is at that time?

A. Yes. If you look at your daily accounting, we import the storage allocations to each of the diversions into the daily accounting, and as you move through the year, the daily accounting subtracts off the storage used throughout the year from that initial storage allocation and shows a remaining carry over.

Q. Okay. And then, I guess, can you describe -- is that referred to -- is that preliminary data at that time for -- at the end of October, or early November?

A. That's correct. And after the season is over, we spend the next months, November, December, January reviewing our preliminary data that they had during the irrigation season.

In addition, the USGS is also reviewing and correcting their stream flow data, which is used in the water right accounting program. They send us

updates of their finalized stream flow data usually around the month of January.

And we take that finalized data, combine it with the Water District 1's finalized diversion data, and rerun the daily accounting for the entire year to get to our final storage usage.

Q. And USGS, can you describe their responsibilities within the District, or what they do.

A. The USGS is responsible for measuring the river stream flow gauges for Water District 1.

Q. Are they contracted through Water District 1?

A. Yes.

Q. So they report daily measurements at each of those stream gauges?

A. Yes.

Q. And how many stream gauges throughout Water District 1 are there?

A. I don't know the precise number. I think we have 39 reaches in our water right accounting, each of those would have a stream flow gauge, so I would say roughly around 40 stream flow gauges -- 30 to 40 stream flow gauges.

Q. And are those measured daily?

A. They transmit a daily flow rate. They are

measured usually once every six week rotation period.

Q. And the daily transmission, is that computer -- where does that information go? Is that something that that --

A. It is sent to the Bureau of Reclamation's hydromet site, and we download that data from the Bureau of Reclamation.

Q. And the daily stream flow data is used as part of your daily accounting program; is that correct?

A. Yes.

Q. Okay. And so when you talk about the adjustments or what USGS does in January, can you explain exactly what they do. You have that daily data that is transmitted to the Bureau that you use during irrigation season. You get to January, and that's, I guess, some finalized data.

Is that a report from the entire season?

A. Yes. During the season most of the stream flow stations on the river, they have a staff gauge. What a staff gauge does is measure essentially the depth of the water. And the particular depth of the water usually corresponds to a flow rate in cubic feet per second. They call those rating curves, this relationship between gauge height and flow rate. And

they compile what they call a rating curve.
So on any day when they go out and they read the staff gauge, they look at the rating table and they can estimate what the flow rate in cubic feet per second is on that day. But they may find that when they go out and actually measure the water that the flow rate may be a little bit higher or a little bit lower than expected.
And so they don't go back and retroactively change what they reported at that time. Sometimes they wait until the end of the season to review all those measurement data, and then they revise the daily flow rates that they had been reporting that we use in the preliminary data.
Q. So the daily information that is transmitted to Reclamation, what is that?
A. That is the preliminary estimate of what the flow rate is in the river on that day.
Q. And that's computer generated, or is that a manual reading of the gauge?
A. I think all the river gauges are now automated where it transmits the gauge height and flow rate electronically.
Q. There will be a sensor or a reading on the gauge that will say it is this high; it is five feet;

it is six feet, and that is transmitted to Reclamation?
A. Yes.
Q. Every day?
A. Yes.
Q. And so the transmitted gauge height, based upon a rate incurred would equal so many CFS; is that correct?
A. That's correct.
Q. And then go check those staff gauges physically, somebody on the ground observes that measurement how many times a year?
A. I think the procedure that the USGS uses when they are not anticipating problems is once every six weeks is their measurement schedule.
Q. And so maybe you can clarify again what happens in January or after the fact that may change that initial preliminary reading.
A. Sometimes they find when they make these measurements, the water that they measure doesn't quite fit the rating curve.
Q. When they physically go out and measure it?
A. When they physically go out and measure it.
And so what they will find is if they are expecting, let's say, 100 CFS, and they measure 110

CFS, what that generally means is that they have been under estimating the flow rate at that gauge up until that time. And so --
Q. From the last time they measured?
A. From the last time they measured.
So what they do to get the most accurate record is they need to go back and interpolate that 10 CFS change that occurred between that measurement and the measurement that happened six weeks earlier. Sometimes they don't get around to doing that until the end of the year in January.
Q. And they do that for every gauge?
A. Yes.
Q. And do they do it at different times of the year; they just kind of make one compilation at the end?
A. When I first started working here, generally, they waited all the way until the end of the year, the winter months, to sit down and do that review for the entire year.
Just in the last few years, they have been doing it on a quarterly basis. Every three months they try to sit down and finalize their data.
Q. And if they finalize that early, does that affect the Water District's daily diversion data, the

preliminary accounting, or do you just run that separate based upon information you receive from that daily reporting to the Bureau of Reclamation?
A. We try to update our accounting as soon as we get any updated numbers from the USGS, and we'll go back and rerun the previous accounting until that time.
Q. Can you describe how that is done.
A. Let's say we start the accounting at the beginning of the irrigation season on April 1st. We run through July, and in July the USGS sends us an update saying we have finalized our data for these particular flow stations from April through June. At that time we'll import all that finalized data, replace the preliminary USGS data that we are using, and then rerun the accounting, which uses that USGS data to calculate the reach gains and determines natural flow and storage water.
Q. And does that typically change much in maybe that three month window?
A. It's hard to say. If you look at it from a basin wide perspective, it doesn't change that much, but an individual diversion could affect it significantly.
Q. And that update they give you in June,

what -- they do that again three months later or at the end of the year, or does it depend on the stream gauge?

A. I think it depends on both the stream gauge, their schedule of measurements, and the available staff that they have to review that data.

In 2010, it seemed that they were rather quick where they updated each quarter within the first month. This past year a lot of the data we had to wait all the way until January before they had a chance to review it, and I don't know what the reason for that was.

Q. Okay. So in the example you gave me, some updated data given on a quarterly basis, is it accurate to say that that would be essentially the final data from that time frame? There wouldn't be any changes to that time frame if the Water District was using it?

A. I think so. But I think there has been some occasions where the USGS will go look back at the quarterly data that they had supposedly finalized previously -- or "approved" is the word that they are now using. And they will still make some changes if they discover some additional discrepancies in December or January that they had not discovered

previously.

Q. And so some gauges may be updated quarterly, some may not be; is that correct?

A. Correct.

Q. And so from the Water District's standpoint, when you get to that January, their final adjustments at that time, that's what you consider to be the final data for that year from the USGS?

A. Yes.

Q. And do they ever change it after that or they make one final submission to you and say, this is what we have for the year?

A. I'm not aware of them ever changing it after that point, but it is certainly possible that they could have.

Q. So when you interact with USGS in that wintertime frame after the irrigation season, how do they transmit that data to you?

A. In the past, it was hand delivered. In the last few years, they have done it electronically.

Q. And is it a review of the daily measurements and there may be changes to some days, maybe not changes to others from the preliminary?

A. Yes.

Q. And then can you describe what the Water

District does with that final measurement data from USGS at that time.

A. It replaces all the preliminary data that we had received from them, and we rerun the final accounting with that final data.

Q. And the final accounting would be reflective of diversions of natural flow, diversions of storage for the year for each water right holder?

A. Yes.

Q. And how does that change -- I guess, in your time has it changed significantly from that preliminary data to the final?

A. I don't understand the question.

Q. Well, if you've run your daily accounting program for each water right holder through the year to say you've been diverting "X" amount of natural flow, you've diverted "Y" amount of storage, when you get to that final adjustment, when you have the final data from the USGS, does that change that accounting significantly, or does it vary across the District?

A. It varies. We have never made an analysis to the effect each year of the changes due to the preliminary versus the final USGS data.

Q. Can you describe the -- I'll use an exhibit. It may be easier.

(Deposition Exhibit No. 7 marked.)

Q. (BY MR. THOMPSON) Tony, my question was going to be, can you describe the priorities for the storage rights within each reservoir, and maybe you can review this Exhibit 7, and tell me if it accurately reflects the various reservoirs, the various priorities for storage rights within those reservoirs.

MR. BROMLEY: Travis, I don't see an acknowledgement of who created this on this document. I'm just curious if you could tell me.

MR. THOMPSON: I don't really know.

MR. BROMLEY: Okay.

THE WITNESS: The diagram has a stacked bar chart of the various reservoir accounts in Water District 1 according to priority with the most senior priority of Jackson Lake 1906 on the bottom of the bar, and the most junior priority of Ririe Reservoir 1969 at the top of the bar.

The only one in here that I don't recognize is the Island Park 1940 priority. And I'm not familiar with that.

Q. (BY MR. THOMPSON) I guess, other than that, does the listing of priorities by reservoir appear correct?

A. Yes, it appears correct.
Q. And the Palisades WWS, American Falls WWS, do you recognize that priority, the 3/29/1921?
A. Yes. That represents the winter water savings portion of the reg.
Q. And I just wanted to use this for a general document rather than go through each of the water rights to get a sense of the various priorities within the reservoirs within the Water District.
Can you generally describe how you administer these storage water rights?
A. The water right accounting program calculates the natural flow available in each reach of the Snake River and its tributaries each day. As that water flows down the system, that natural flow is distributed to diversions or reservoirs according to priority and the location of the region they are in.
Q. And can you describe -- I guess, how would you define natural flow, what that is?
A. Natural flow is calculated using a mathematical equation in the water right accounting where it takes the outflow USGS gauge, minus the inflow USGS gauge, plus diversions between those two gauges, plus change in storage, plus evaporation. It is essentially the gain of water between the two USGS

gauges.
Q. And as far as a source of water, what do you define natural flow to be, where it is from?
A. We don't identify the source of where the gain or the natural flow is coming from, only that it is measured at one gauge and measured at a second gauge. And where it arises in between, we don't necessarily identify.
Q. So as far as the potential sources of the actual water, it could be runoff from a water shed, snow melt? It could be precipitation? It could be tributary under flow?
A. Yes, all those things.
Q. Return flows from other canal projects?
A. Yes.
Q. Tributary stream flow?
A. Yes.
Q. So the definition of natural flow that you use, you calculate the measurement at one point, and then at the end of that reach, there is another measurement; is that correct?
A. Yes.
Q. And then I'm sorry I interrupted you. But could you go back to describing how you deliver water to these storage rights. You said you used a natural

flow calculation.
A. Yes. The natural flow, if available under that priority, is then stored in the reservoir. And the reservoir only has a right to the accrual of that natural flow of gains that come in upstream of the dam.
Q. So for each of these reservoirs, is there a measurement point above the dam that is used by the Water District?
A. There is usually a USGS gauge immediately below the dam, and that would be the end of the reach, which includes the reservoir.
Q. So maybe you can describe -- you don't have to go through all these, but maybe an example of Jackson Lake. How you would determine available natural flow to distribute to that storage right?
A. Yes. The outflow gauge would be the Snake River near Moran, which is immediately below Jackson Dam and the Snake River. That's the outflow gauge.
Then we would subtract the inflow gauge. There is no inflow gauge to Jackson. That reach runs to the top of the basin, and so the inflow would be zero.
So to figure out the natural flow available of Jackson Dam, we would take the Snake River near

Moran, minus zero, plus the change in storage in Jackson Reservoir to calculate the reach gain or natural flow available at that point.
Q. And can you tell me that second calculation, how that works; the change in storage, how that is added to that.
A. The Bureau of Reclamation operates a stage elevation recorder that records the elevation of the water surface. That correlates to a volume of water in the reservoir. The change in storage is the change that takes place over the 24-hour period that we calculate the natural flow from midnight to midnight.
So, for example, if the reservoir was reporting 800,000 acre feet of water at midnight, and the next day it was 800,100 acre feet of water, the change of the contents would be a positive 100 acre feet.
Q. So you would add that to the measurement at the Moran to determine what the natural flow was in that reach --
A. That's correct.
Q. -- above Jackson?
And are you aware of any diversions above Jackson? Is that all protected headwaters area?
A. I'm not aware of any diversions above

Jackson.
Q. And for Palisades, could you describe the same exercise there.
A. Well, there are several reaches between Jackson and Palisades. The next one would be from the Snake River near Moran to Snake River near Alpine, and we would calculate the reach gain in that reach and add it to the natural flow that was available up above. For example, if the Jackson right were full, the natural flow that arises in that first reach there above Moran would be added to the downstream reach from Moran to Alpine.
Then we also have a reach represented by the Greys River, and then a reach by the Salt River that comes in above Palisades Reservoir. And finally, the reach from Alpine to Irwin. Irwin is the USGS gauge immediately below Palisades Dam.
Q. If I could just stop you real quick. I'm sorry. Exhibit 6, if you can turn back. That's the Bureau teacup.
A. Yes.
Q. And when you reference Alpine, Greys, and Salt River, are those three points identified above Palisades Reservoir, is that where those are measured?
A. Yes. The four digit code for Snake River

near Alpine is "ALTY," shown on the teacup diagram. Greys River is indicated by "GREY." And then the Salt River is "SALY."
The Irwin gauge isn't shown on this teacup diagram, but it is immediately below Palisades Dam, and so all those USGS gauges are used to compute the gains in each one of those reaches that would be available to fill the Palisades storage right.
Q. Okay. And how about for American Falls? Describe that as well.
A. Yes. American Falls, that can draw water from natural flow from all the reaches upstream, which would include the Henry's Fork and all tributaries -- Snake River and all tributaries.
Q. And the outflow measurement for American Falls, where is that?
A. The outflow is Snake River at Neeley, "AMFL."
Q. Right below the dam?
A. Right below the dam.
Q. Okay. And so when you said you calculated the inflow for a specific reach, is it for every one of those different reaches above American Falls that goes into that calculation?
A. Yes. Yes. We calculate the reach gain in

every reach, and I believe there is 39 reaches in Water District 1 from Milner to the top of the basin.
Q. So if there is water available in each of those reaches to satisfy the American Falls priority, you deliver it to that storage right?
A. Yes.
Q. And so for each of the reservoirs, you perform the same exercise to determine if there is water available to deliver to those storage rights?
A. Yes.
Q. And, I guess, can you walk through how you administer the different priorities in the reservoirs, how you determine when one right is filled and satisfied where you can start delivering water to the next one.
A. Each of these rights has a volume limitation. And at the beginning of the year, there will be some carry over usually in each of those storage rights. And the space that can be filled by this natural flow during the irrigation season or prior to the irrigation season can exceed the volume limitation with that carry over for the previous years subtracted out of it.
Q. Can you give an example.
A. An example -- the easiest example would be

Jackson Lake. It holds 874,000 acre feet. Let's assume that only 100,000 acre feet of that 100 percent fill had been used the previous irrigation season, and let's assume it was all in the junior 1913 priority space. There is going to be more than 100,000 acre feet that arises above Jackson Lake Dam that would be storable to that priority. But the water right accounting only allows 100,000 acre feet of that natural flow that arises above the dam to be stored into that right, and at that time that Jackson Lake right is full 100 percent. At that time all the reach gain or natural flow that arises above Jackson Dam then flows downstream to fill a junior priority reservoir.
Q. So when you say full, the example you gave, is the water physically held in the storage reservoir at that time.
A. Not necessarily. In the case of Jackson, rarely is it early in the year, because the Bureau operation policy is hold Jackson Lake level through the entire winter. If you look at our water right accounting program, it is accumulating storage each day through the whole winter, although physically that water is passing through the dam and hopefully it's being held in some downstream reservoir or being

passed out the system past Milner Dam.
Q. And what level does Reclamation hold Jackson Lake at throughout the winter?
A. I believe it is roughly around 200,000 acre feet of empty space.
Q. And do you understand the basis as to why they do that?
A. I think it is for flood control purposes.
Q. So they don't go above that mark regardless of what is flowing into the reservoir; they will hold it at that 200,000 less of full at any given point?
A. I think that is their practice.
Q. Do you administer storage water rights in priority as against natural flow water rights for irrigation if they are coinciding in the same during the irrigation season?
A. Yes. When we measure the natural flow and distribute it to water rights, the distribution is based on priority regardless of the type of use.
Q. And is that the same for natural flow rights as against storage rights?
A. Yes.
Q. So during the irrigation season, April or May or June, if there is a demand for a natural flow right that is senior to a storage right, you fill that

natural flow right first?
A. That's correct.
Q. And does that work vice versa, if there is a storage right senior in priority to a natural flow right, you would fill that right first?
A. Yes.
Q. And you have talked about this a little bit before, but can you just walk through the accounting of the administration of the water rights in the District in those circumstances.
A. Yes. The water right accounting calculates the reach gain or natural flow in each reach of the basin, and then allocates that natural flow to the water rights according to priority.
Q. And operating that accounting program, do you consider that part of the Water District's administration of the water rights?
A. It is a tool that the watermaster uses to administer the water rights.
Q. Is it, I guess, part and parcel of that administration? Could you administer the water rights without that program?
A. Yes.
Q. By some calculation?
A. Yes.

Q. So if you're -- and that's my question, I guess, the daily accounting to the water rights, how you account for natural flow when you look at reach gains, is that part of your administration of the water rights?
A. Yes.
Q. And that would be the same for the storage rights?
A. Yes.
Q. And you talked about this a little bit before, but you make adjustments to the accounting of a water right holder's diversions for the year?
A. Yes.
Q. Can you describe some of those.
A. Well, one we've talked about with the USGS first supplying is their preliminary data during the irrigation season, and then improving it or correcting it at the end of the irrigation season. That also applies to our diversion data. We measure the canals and use the same practices that the USGS uses to at first estimate what each diversion is diverting each day.
And then as we measure it through the irrigation season, we can refine those estimates to a more accurate number.

Q. So the canal -- I'm sorry to interrupt. The canal diversions, the head gate on the river transmits the same sort of data from a USGS stream gauge as far as a daily measurement of what is being diverted into the canal?
A. Yes. It transmits the gauge height, and then there is a rating curve that calculates the discharge, but we find that when we periodically go out and measure the discharge, it may not correspond 100 percent to that rating. And so if we find that is the case, then well go back and make adjustments to those previous estimates.
Q. And who does the measurements of the canals?
A. Water District 1.
Q. And is that a similar process to what USGS does from the stream gauges, as far as when we go out and physically measure the water compared to the data that has been transmitted -- is the function that Water District 1 takes on for the canals when they go look at a measurement on a canal diversion compared to the transmitted data, is that the same sort of exercise?
A. Yes.
Q. So that's one type of adjustment, and that is adjustments made by USGS or the stream flow data to

show what you have to deliver, and then adjustments to actual deliveries based upon measurements at each canal?

A. Yes.

Q. And are there other adjustments?

A. Yes. When we review our data, we may find that some type of discrepancy or error we may have over looked, and when we find those errors or -- another example, during the irrigation season, we don't have daily reporting of the small irrigation pumps, and we collect that data later in the irrigation season. That type of data is incorporated into what we call our final accounting.

The difference between the preliminary and the final accounting is that at the end of the year we are able to spend more time analyzing the data, and when we can find ways to improve the data, we make those corrections.

Q. And, I guess, would rentals of storage water be an adjustment to diversions as well -- or the accounting for somebody's use that year?

A. Rentals don't interfere with the daily computation of daily flow and the distribution of it. What rentals do is simply offset the storage use that is calculated by the daily accounting.

Q. So it is an adjustment to a storage diversion depending upon the rental?

A. It's an adjustment to the balance of the storage remaining for the diversion.

Q. And private leases would be accounted for the same way, is that an adjustment to a lessor's account, an adjustment to somebody that is leasing that water that may be diverting it?

A. Yes.

Q. And does the Water District implement private leases of storage?

A. What do you mean by implement?

Q. I guess, somebody comes into the Water District with a private lease agreement for "X" number of acre feet, how does that get implemented on the ground between the two entities as far as actual water being provided and accounted for?

A. If it satisfies the requirements of the rental pool procedures and the lease is approved, Water District's 1 role is simply to remove that amount of storage described in the lease from the lessor's allocation to the lessee's allocation.

Q. And is that accounting for that type of arrangement part of your administration through the Water District?

A. Yes.

Q. And when you make that accounting for leases, is that part of the accounting of Reclamation storage water rights from whichever reservoir that water is leased from?

A. Could you ask the question again?

Q. Yeah. When you account for the -- on a lease, the canal comes in and says, I have a private lease for a 10,000 acre feet of our American Falls storage, do you account for that as part of Reclamation's storage right somehow?

A. No. When we receive the lease, the amount that is described in the lease is deducted from the spaceholder's storage allocation. You won't know until the end of the year as to what effect that had on the spaceholder, if he had more than one -- if he had multiple storage accounts in different reservoirs.

Q. So for each canal's daily diversion, we talked about, you have the preliminary allocation of storage. We know what canal has what water early in the season as part of the storage program. And we are running the daily accounting program to determine if they are diverting natural flow or storage.

If that entity leases water or receives leased water to use, how is that adjusted or accounted

for through the season?

A. It is adjusted from the diversion's total storage allocation. The reservoir from which it is coming from is not identified at that time.

Q. It is deducted from somebody's storage account at some point, added to somebody's if they have storage, to their account?

A. Yes.

Q. So you would agree that that exercise, the accounting of what the Water District does for those adjustments, that is part of water right administration?

A. It is required for the watermaster to know when a particular diversion run outs of its allocated water supply.

Q. Is that a "yes"? Is that the answer to my question?

A. Can you ask the question again?

Q. The implementation of a lease, the accounting for that, the adjustments that you make to somebody's storage account, be it from the lessor or from a lessee, is that part of the Water District's administration?

A. Yes.

MR. THOMPSON: This might be a good place for a

break.
(Recess taken from 10:14 a.m. to 10:29 a.m.)
Q. (BY MR. THOMPSON) Tony, I think you have Exhibits 2 and 3. And these were recommendations made by the Department of Water Resources for water rights at American Falls and Palisades. Can you just describe the storage season of use.
A. The storage season of use is year round.
Q. And when do you typically deliver water to the storage rights?
A. Typically, from about mid October until sometime in mid July.
Q. And is there a storage season -- I guess, informal -- apart from the season of use that -- is that what you would describe it from mid October to July?
A. We determine our final carry over on October 31st. From that point on, water can be stored into the storage reservoir rights until it meets it's buying limitation all the way up until the day the watermaster allocates all the storage to the spaceholders, which can occur any time between mid April in drought years to the end of July in wet years. And so the end of the storage season would be at some point during that time.

Q. Whenever you've reached that final maximum allocation?
A. Yes.
Q. If you could turn to page 2 on the recommendation on Exhibit 2 -- I'm sorry. Back on page 1. Do you recognize that remark under the place of use listing, that first remark?
A. Yes.
Q. And can you generally describe that?
A. The historical practice has been that water is held high in the system to maximize the amount captured above Milner Dam, so water stored to the accrual of the American Falls storage right could be physically held in Jackson, Palisades, or Island Park or any upstream reservoirs.
Q. And does that vary from year to year physically where that water may be stored under that right?
A. Yes.
Q. And is that part of the administration of this storage water right as currently administered by the Water District?
A. Are you asking me where the stored is part of the administration?
Q. I guess this practice, this operation of

physically storing water in different reservoirs under this water right, is that part of the administration of this water right?
A. Water District 1 keeps account of the storage in the water right. Where it physically resides, the water master doesn't get involved in that.
Q. Who determines that?
A. The Bureau of Reclamation.
Q. And do you know where this operation originated?
A. No.
Q. Do you have any understanding of the history of Reclamation storing water under this water right in unoccupied spaces of upstream reservoirs?
A. No.
Q. Are you aware if Reclamation always followed this practice?
A. No, I don't know that they have always followed it.
Q. You don't know when they began it?
A. No.
Q. Do you know when the Water District started administering water rights in this manner? You said that wasn't part of your administration, or it is?

I'm confused.
A. Where the water is held is not part of any administration.
Q. So when you account for it, you just account for it based upon what we talked about earlier, inflow, outflow minus inflow at each particular reservoir; and then whether the water is physically held in upstream reservoirs, you don't know?
A. That's correct.
Q. So is this remark, I guess, in your opinion necessary for the administration of the water right?
A. What it allows for is the continued practice of holding water high up in the system, absent this remark, someone can make the argument that the water that is stored to the American Falls right has to physically reside in American Falls Reservoir.
Q. And you don't know if Reclamation operated in that manner historically?
A. I've assumed they always have, but I don't know.
Q. That they operated by physically filling a water right in American Falls rather than upstream reservoirs, or you don't know if they have always done it this way, I guess, is my question.
A. I don't know that they have always done it

this way.
Q. Does the Reclamation ever communicate to the Water District where the water is being held under each water right?
A. No.
Q. Would the Water District ever change this type of administration?
A. I don't know.
(Deposition Exhibit No. 8 marked.)
Q. (BY MR. THOMPSON) Tony, do you recognize the document that has been handed to you as Exhibit 8?
A. Yes.
Q. Have you seen this document before?
A. Yes.
Q. Can you generally describe it.
A. It's the Burley Irrigation District versus Henry Eagle decree.
Q. And what's the title?
A. Yes.
Q. What is the document entitled?
A. I don't understand the question.
Q. I guess at the top of the caption, there would be -- in the right-hand side a title that would identify what this is.
A. Oh, Findings of Fact and Conclusions of Law.

Q. And you said you recognize this document as part of the Eagle decree proceedings?
A. Yes.
(Deposition Exhibit No. 9 marked.)
MR. SIMPSON: Is this complete, Travis, or is it excerpted?
MR. THOMPSON: It should be complete.
Q. (BY MR. THOMPSON) Do you recognize Exhibit 9?
A. Yes.
Q. Can you describe it.
A. It's the Supplemental Decree, Burley Irrigation District v. Henry Eagle.
Q. And I'll give you a moment to just kind of review this. Both of the Findings of Fact and the Supplemental Decree have exhibits, and I just wanted to ask you, are you familiar with those exhibits, and do those appear to be complete and correct copies?
A. Yes.
Q. And are you aware of a similar decree entered in Fremont County District Court about this time?
A. No.
Q. Not aware of another district court proceeding for water right holders above Blackfoot

titled Aberdeen-Springfield Canal Company versus Eagle?
A. I have heard of the Aberdeen-Springfield Eagle Decree, yes.
Q. But you haven't seen the actual decree or the exhibits to that proceeding?
A. Yes, I've seen them.
Q. And does that decree contain exhibits similar to this, the Burley Irrigation District Decree?
A. They are similar, yes.
Q. Do you know if all named parties -- and I don't have a list -- all named parties to the Eagle Decrees hold storage space?
A. I don't know that for a fact.
(Deposition Exhibit No. 10 marked.)
Q. (BY MR. THOMPSON) Do you recognize this document, Tony?
A. Yes, this is Exhibit C from one of the Eagle decrees.
Q. And have you seen this exhibit before?
A. Yes.
Q. Can you describe it.
A. It's an excerpt from the Bureau of Reclamation's contract with the American Falls

Reservoir District.
Q. And what's the -- I guess, the first paragraph, 19(a), do you understand that provision? Can you describe what that provision says.
A. Yes. The provision describes the practice of holding water in the reservoir system space that is furthest upstream in order to affect the greatest practical concentration of water.
Q. And does that provision describe Reclamation's operations today?
A. Yes.
Q. And does this provision reflect the remark on Exhibit 2 under the place of use element that we were just discussing?
A. Yes.
Q. Do you know if the agreement to hold stored water in the reservoir system space that is furthest upstream, if that provision is included in all spaceholder contracts with Reclamation?
A. I don't know.
Q. Does this provision -- I guess, to your knowledge has anyone ever challenged Reclamation's operations under this provision?
A. Not to my knowledge.
Q. And what's the date of the Eagle Decree, do

you know?
A. Signed July 10, 1968.
Q. And are you aware if Reclamation has followed this provision since that time?
A. I don't know for certain if they have.
Q. You said you didn't know when they started this type of operation holding water under one water right for one reservoir in another unoccupied space; is that correct?
A. Yes.
(Deposition Exhibit No. 11 marked.)
Q. (BY MR. THOMPSON) Do you recognize Exhibit 11, Tony?
A. Yes.
Q. Can you describe it.
A. It's Exhibit A that's attached to the Eagle Decree. It is an excerpt from the storage contract between the Bureau of Reclamation and North Side Canal Company.
Q. And you see the title there above paragraph 17(a). Can you read that.
A. "Saving of Winter Water: Special Storage Right."
Q. And do you have an understanding of what is generally referred to as winter water savings space?

A. Yes.
Q. Can you describe that.
A. The Bureau negotiated with canals that if they could shut off during the non irrigation season for a period, I think, of 150 consecutive days, they would get a preferred priority for their storage right in their reservoir.
Q. And do you know the history of this provision, just where it originated or the purpose behind it?
A. I think the purpose was to free up water for the new Palisades Reservoir.
Q. Do you know which reservoirs this winter water savings space is located in?
A. Palisades Reservoir and American Falls Reservoir.
Q. Do you know what the priority is for this winter water savings space?
A. The priority that has been assigned in the Water District 1 accounting is 1921.
Q. And back to Exhibit 7, if you have that bar chart handy. Does this exhibit reflect the space in various reservoirs stored under that winter water savings priority?
A. Yes.

Q. And what is that priority?
A. Well, the priority listed on this diagram for Palisades winter water savings is March 29th, 1921. And for American Falls, also listed as March 29th, 1921.
Q. And is that the priority you have in your accounting for the administration of these water rights?
A. Well, I'm not absolutely certain without checking, but I think that is the priority.
Q. Do you know which spaceholders have winter water savings space?
A. No, I don't know all the spaceholders that have winter water savings space.
Q. And you mentioned you believed it was for freeing up water to store in Palisades, that they would cease winter diversions. Do you know which entities -- I guess you don't know which entities had established those rights in the winter that they exchanged for the space?
A. I have a list in my office of the current spaceholders with winter water savings space, but I don't know them off the top of my head.
Q. Maybe we could get that at lunch. I'm just curious for a list, if you have it.

A. Okay.
Q. I guess the purpose behind this provision ceasing to divert water in the winter, did that help fill storage water rights in the upper Snake?
A. It would seem to me that it would.
Q. And I guess looking at it today, would that practice continue to help fill reservoir rights today?
A. Yes.
Q. If you could look at both Exhibits 2 and 3. Those are the recommendations for American Falls and the Palisades storage rights. If you could turn to page 2 of each of those exhibits. And let's start with Exhibit 2. And I think it is that second full paragraph. Can you just read that remark.
A. The paragraph that starts with "A portion"?
Q. Correct.
A. "A portion of this right is designated as the first to fill for the benefit of the contract holders as provided in the provisions for saving winter water as recognized in the Burley Irrigation District v. Eagle, Supplemental Decree (Idaho 5th Judicial District, July 10, 1968) and Aberdeen-Springfield Canal Company v. Eagle, Supplemental Decree (Idaho 7th Judicial District, March 12, 1969)."

Q. And given that the winter water savings provision provides an earlier priority date for certain space in those reservoirs, would this remark or provision similar to what we have in Exhibit 11 be necessary for administration of the storage water rights?

A. Yes.

(Deposition Exhibit No. 12 marked.)

Q. (BY MR. THOMPSON) Do you recognize this document, Tony? I'll give you a chance to look through it.

A. Yes.

Q. Have you seen it before?

A. Yes.

Q. Can you describe it.

A. This is a stipulation to resolve certain objections that were made towards the storage water rights.

Q. And can you turn to page 2. Can you just describe that issue that has been resolved related to the winter water savings remark.

A. Yes. The issue was over the winter water savings remark that was included in the director's recommendation for 1-2064 and 1-2068. And the resolution was to split the water in those two

reservoirs into two separate priorities to represent the winter water savings and non winter water savings portions.

Q. And does that resolution accurately reflect how the Water District has administered delivery of water to the winter water savings space prior to the general reservoir priority?

A. Yes.

Q. And has anyone ever challenged the Water District's administration of this provision?

A. Not that I'm aware of.

Q. And I guess without this provision, either as resolved or originally recommended or even going back to what is described in Exhibit 11, would the Water District have a basis to administer the storage water rights to this earlier priority without that provision?

A. This resolution and this stipulation makes it more clear that the Water District can administer the 1921 priority.

Q. And so in your accounting program, has there been a specific priority for that space that you've delivered to?

A. Yes.

Q. And do you know when that began?

A. For Palisades winter water savings, I believe it began with the Water District 1 computerized accounting in 1978. I can't recall any documentation of it being done before then, but I'm not absolutely certain.

With the American Falls winter water savings, that actually wasn't added into the accounting program until sometime in the past 20 years.

Q. Do you know, if prior to the accounting program, the Water District delivered water to that priority -- to the winter water savings priority?

A. No, I don't know.

Q. And if they did deliver to that priority, would it be reflected in the annual reports?

A. No, it may not, because the way the water accounting was done prior to 1978 is that the watermaster would start his accounting sometimes as the reservoir system reached its maximum contents, and at that time he could have simply made the assumption that the winter water savings portion was full.

I can't ever remember a year where the winter water savings would not have been full, any empty space in those reservoirs would have been charged to the spaceholders of the non winter water

savings space.

Q. It's got a pretty senior priority as far as storage priorities in the system, would you agree with that?

A. Yes.

Q. And you don't know when certain canals ceased these winter diversions to gain the benefit of that additional storage?

A. I don't know the precise date.

Q. I guess, would you agree, looking at Exhibits 10 and 11, that those provisions from those exhibits from the Eagle Decree have been captured in the remarks under the place of use for the storage water rights as recommended?

A. Could you repeat the question?

Q. Yeah. Maybe I'll take it one at a time. Exhibit 10, this is the temporary upstream storage provision from Exhibit C from the Eagle Decree, would you agree that that provision has been captured in the place of use remarks for the water rights for American Falls and Palisades?

A. As recommended by the director?

Q. Correct.

A. Yes.

Q. And then looking at Exhibit 11, the winter

water savings provision, would you agree that that provision has been captured in the place of use remarks for both the storage rights as well?
A. Yes.
Q. And that the winter water savings provision -- let me clarify. The stipulation that resolved that remark, in your opinion, that's an accurate reflection of how that priority is administered?
A. Yes.
(Deposition Exhibit No. 13 marked.)
Q. (BY MR. THOMPSON) Do you recognize this document, Tony?
A. Yes.
Q. Can you generally describe it.
A. It's Exhibit B from the Eagle Decree. It is an excerpt from the Bureau of Reclamation contract with the North Side Canal Company.
Q. And can you, I guess, generally describe what paragraphs 19 and 20 in that exhibit provide for.
A. Yes. Apparently there was an exchange with the space in Jackson Lake and space in American Falls between two or more canal companies, and it describes that exchange and what happens if the space does not fill.

Q. And do you know which entities completed that exchange of Jackson space for American Falls space?
A. Reading this, it appears it is between the Minidoka Project and the North Side Canal Company.
Q. And are you aware if Minidoka Irrigation District ever completed that exchange or not?
A. I'm not sure that they did.
Q. Do you know whether this agreement for this exchange is included in all spaceholder contracts with Reclamation?
A. I don't know.
Q. Based upon your understanding of this provision, and I'll call it a guarantee, what does this exchange guarantee provide for the lower valley exchange space?
A. It credits the lower valley exchange space with the amount of storage they otherwise would have received if the exchange had not occurred.
Q. And do you understand the criteria that must be met to trigger that exchange?
A. I haven't understood that, only -- the only understanding I have is just reading this paragraph.
Q. And are there certain criteria that must be met for this guarantee to be implemented?

A. According to what is written in the contract, yes.
Q. Back to page 24. The end of that paragraph, Tony, that last sentence, could you read that.
A. "The determinations under this article shall be made by a committee of three comprising the state watermaster of District No. 36, a representative to be selected jointly by the Burley and Minidoka Irrigation Districts and the company and the officer of the United States in charge of the Minidoka project."
Q. And then the determination there referencing is the exchange guarantee of certain conditions that are met up above in that paragraph; is that your understanding?
A. Yes.
Q. And to your knowledge has this exchange credit ever been calculated before by the committee referenced here?
A. No, not to my knowledge.
Q. Could this exchange credit be calculated by this committee and implemented by the Water District?
A. I don't know.
Q. You don't know if it could?
A. It could, but I don't know that it would.
Q. I guess, just the physical calculation of

looking at the data, looking at Jackson, looking at American Falls, the references to storable inflow, is that a calculation that could be made by this committee?
A. Yes.
Q. And would it have to be made by the watermaster as far as the information necessary to make it?
A. Well, the watermaster is included in the committee.
Q. Is the information included in this provision information the Water District keeps?
A. Yes.
Q. If this credit were calculated, or this exchange guarantee, I'll call it, if it were made, how would you calculate it -- how would you implement it?
A. The way it would be implemented is we would simply transfer -- we would deduct whatever the amount was that was guaranteed from one entity and would give it to the other entity based on what is written in the contract.
Q. Would it be like a storage adjustment at the end of the year?
A. It could actually take place after the date of allocation.

Q. Based upon the criteria, the information you would have at that time would allow the Water District to make that calculation at that time?
A. Yes.
Q. And would the implementation of this provision affect the accounting of individual spaceholder accounts at the storage rights for Jackson and American Falls?
A. No.
Q. It wouldn't affect the accounting?
A. No. The way you would determine the amount that would be moved from one entity to the other would be you would run a parallel accounting, as if the exchange had not occurred, and compared the two to calculate the amount that would need to be adjusted.
Q. So if there was an adjustment, if that were to be made, would that affect your accounting of those spaceholders' accounts as of that time?
A. It would change the amount designated as the storage allocation to those entities, but for the daily accounting and distribution of water, it wouldn't affect it.
Q. All right. I guess, would you agree if this provision were implemented, it would be part of the Water District's administration of these storage

rights at American Falls and Jackson?
A. Yes.
Q. And if you look back at Exhibits 2 and 3, these were the director's reports again -- and they are in two different places, but the same remark. If you look at the top of page 2 of Exhibit 3, that's the Palisades director's report?
A. I've misplaced Exhibit 3.
Q. We can look at Exhibit 2. That's fine. If you look at the third paragraph on page 2, that remark, could you read that.
A. "The delivery of water to this right may be subject to the procedures described in the United States Bureau of Reclamation spaceholder contracts and the Burley Irrigation District v. Eagle, Supplemental Decree (Idaho 5th Judicial District, July 10, 1968) and Aberdeen-Springfield Canal Company v. Eagle, Supplemental Decree (Idaho 7th Judicial District, March 12, 1969) together with the natural-flow and storage deliveries as calculated by the by th Idaho Department of Water Resources."
Q. I guess, Tony, tell me, in your opinion, would this provision in Exhibit 13 -- the exchange provision we've been discussing, in your opinion, would that qualify as one of the procedures described

in the spaceholder contracts and the decree -- the Eagle Decree?
A. It could, yes.
(Deposition Exhibit No. 14 marked.)
Q. (BY MR. THOMPSON) Do you recognize Exhibit 14, Tony?
A. Yes.
Q. Could you describe it.
A. It's Exhibit F. It is an excerpt from the United States Department of Interior Memorandum Agreement between the Bureau of Reclamation and the Bureau of Indian Affairs regarding to the water supply for the Michaud Division of the Fort Hall Indian Reservation.
Q. And can you describe where the Michaud Division of the Fort Hall Indian Reservation is. Do you know where it is?
A. I think that it is near the mouth of the Portneuf River.
Q. Is it an irrigation project?
A. Yes, I think so.
Q. And it is operated by the Bureau of Indian Affairs, is that your understanding?
A. That's my understanding.
Q. And if you take a look at paragraph 8(a) in

that exhibit, it references measurements of certain wells and streams.
Do you know who measures that water use?
A. Water District 1 measures the surface pumping plant that pumps out of the Portneuf River. I don't know who is currently measuring the wells.
Q. Would those wells be in a Water District?
A. I don't know.
Q. Does Water District 1 receive any data regarding the wells that are pumped?
A. Not that I'm aware of.
Q. You just have the measurements from the pumping plant, the surface stream referenced in this paragraph?
A. Yes.
Q. And that's data that the Water District keeps?
A. Yes.
Q. What is your understanding of this provision as it relates to water stored for the Michaud Division?
A. Could you ask the question again, please?
Q. Yeah. Do you have an understanding of what this provision requires as for accounting for stored water held by the Bureau of Indian Affairs for the

Michaud Division?
A. I don't.
Q. Does the Michaud Division hold any storage?
A. Yes, I think so.
Q. Do you know where that storage is held?
A. I think they have storage in both American Falls and Palisades.
Q. And does the Water District collect and report the -- at least the surface water use as part of its annual report?
A. Yes.
Q. But not the groundwater use?
A. Correct.
Q. Has the Water District, to your knowledge, ever implemented this provision to give credits to natural flow or storage water rights that have been infringed upon by that water use both from surface streams and from groundwater pumping?
A. Yes. I think I've seen some reference to it in the old watermaster reports prior to 1978.
Q. And to your knowledge, was the -- all of the water use made by the Michaud Division provided to the Water District at that time --
A. I don't know.
Q. -- from both the wells and the surface

streams?
A. I don't know.
Q. How was that credit implemented?
A. I don't know. I'm not familiar with it. I just remember reading about it.
Q. And it apparently was made at one time for uncertain years?
A. I think so.
Q. And do you understand how this credit would be made?
A. I don't recall.
Q. If you look at page 21 -- paragraph 2(b), if you could take a look at that, and maybe just give me a description of how that could be implemented, if you know.
A. "The water chargeable to Indian Bureau stored water as provided in this article shall be determined from day to day during the irrigation season of each year. Corresponding credits from day to day shall be given by the watermaster to the water rights, whether natural flow or storage rights, that have been infringed on by pumping for the Michaud Division. The amounts represented by such infringements, to whomsoever they shall accrue, shall be made up out of stored water available to the Indian

Bureau under this agreement, from day to day, if necessary. The determination of the charges and the credits hereunder shall be under a formula to be devised by the watermaster, after consultation with the Advisory Committee, taking into account as one factor the so called Newell Formula with respect to the inflow into American Falls Reservoir, as this formula is affected, in the judgment of the watermaster, by the operation of this contract and by other factors that affect the formula. Departures from that formula shall be called to the attention of the Advisory Committee from time to time."
The Water District doesn't use the Newell formula to calculate the gains of natural flow in the Blackfoot to Neeley reach, so, no, I don't know how this would be calculated.
Q. As far as the measurements of day to day water use, if that was determined to infringe upon other water rights and the credits given from storable water, is that something that the Water District could calculate?
A. We calculate the effects of the diversion, the surface diversion from the Portneuf River, but we don't calculate the impacts from the well pumping.
Q. And how do you calculate the current surface

water impacts?
A. In our reach equation that calculates natural flow that arises between the -- near Blackfoot gauge on the Snake River and the Snake River near Neeley gauge. The equation, again, is outflow minus inflow plus diversions, and so any diversion between those two points, which includes the Fort Hall pumping plant is added into that natural flow of calculation.
Q. And you referenced the Newell formula no longer being used. When was that used?
A. I think it was used from the time American Falls Reservoir was constructed up until 1978.
Q. So it would have been the formula in effect, assuming this contract was entered into in 1957, as of that time?
A. Yes.
Q. I guess the reference to charging storable water, if the Michaud Division holds storage in American Falls or Palisades, would a charge to that storage credit given to other water rights that have been infringed upon, could that adjustment be made by the Water District?
A. Could you ask the question again?
Q. The Bureau of Indian Affairs, the Michaud Division, I understand they hold storage in American

Falls and Palisades -- or one of the two reservoirs. They hold some stored water. If there was a credit charged against that storage credited to some other water right that was infringed upon by this water use, would that adjustment be treated like any other adjustment to their storage?

A. Yes. The adjustment could be made.

Q. I guess, if this provision was implemented or required to be carried out, would you view it as part of the administration of the storage water rights?

A. Yes.

Q. In looking back at Exhibit 2, if that's one you have handy, the American Falls director's report, looking again at that third paragraph under the remarks on page 2, in your opinion would this provision qualify as one of the procedures referenced in the Reclamation spaceholder contracts and the Eagle Decree?

A. Yes, it could qualify.

Q. Are you aware of any other agreements with other spaceholders that have similar provisions to this?

A. I don't know.

MR. THOMPSON: This might be good time for

another break.

(Recess taken from 11:23 a.m. to 11:34 a.m.)

MR. THOMPSON: Back on the record.

(Deposition Exhibit No. 15 marked.)

Q. (BY MR. THOMPSON) Tony, do you recognize Exhibit 15?

A. No. I've never seen it before.

Q. Can you look at the title of the document and tell me what that says.

A. "Status Report, Workings of Palisades Water Savings Agreement."

Q. And who is the author?

A. U.S. Bureau of Reclamation, Boise, Idaho, dated August 5, 1968.

Q. And you said you've never seen this document before; is that correct?

A. That's correct.

Q. So do you know if the Water District or a Committee of Nine approved this report or accepted it?

A. I don't know.

Q. Look at page 1, the first paragraph -- I guess I'll ask you if you would agree with Reclamation's assessment that the Palisades contracts resulted in gains and efficiency in total water use in the Upper Snake River Basin?

A. Could you ask the question again?

Q. Yeah. I guess the statement there that this was a status report on important gains in the efficiency of total water use and referencing the workings of the Palisades water savings and exchange agreements entered into by some 57 water users entities, I guess, if that is Reclamation's assessment that the result of the Palisades contracts resulted in gains of water efficiency, total water use in the Upper Snake River Basin, would you agree with that assessment?

A. No.

Q. Why not?

A. It doesn't increase the amount of gains of water. It simply changes the timing of when the water is used.

Q. So would you think that water is used more efficiently because of those Palisades contracts?

A. Yes. If you think additional water available during the irrigation season increases efficiency, yes, I would agree with that.

Q. And if you could turn to page 2. The last paragraph carries over into page 3. I'll just give you a minute to read that.

A. Which section was I supposed to read?

Q. That last full paragraph that carries over onto page 3.

A. Okay.

Q. Those numerical points referenced as principal points of the compromise reached between Reclamation and the various spaceholders, do you recognize those points as being reflected in the exhibits we discussed earlier this morning from the Eagle Decree from those Palisades contracts?

A. Yes.

Q. And could you just go through and describe those principal points. You don't have to read them. If you can just generally --

A. No. 3 is the coordinated operation of the reservoir system for maximum storage water yields.

Q. And do you understand that to be the temporary upstream -- holding of reservoir space in unoccupied space upstream, is that coordinated operation?

A. Yes. No. 5 is described as the permanent exchange of the contract storage rights between American Falls and Jackson Lake. We talked about that earlier.

And I'm not sure of any of the others that we've talked about.

Q. I guess, looking at No. 1, would that point reflect the winter water savings provision?
A. Yes.
Q. And No. 2 talks about the curtailment of use of water for power at -- for power generation at Minidoka Dam. And do you understand that provision?
A. Yes.
Q. And is it your understanding that the -- both the winter water savings and the curtailment of the power right of Minidoka Dam helped the increased reliability of storage?
A. Yes.
Q. And does this description of the compromise, Reclamation describes here, these principal points, describe the reservoir operations as agreed to in the Palisades contracts?
A. Yes.
Q. And to your understanding would this description cover the exhibits to the Eagle Decree?
A. Yes.
Q. In looking at the winter water savings provision where certain canals agree to cease winter diversions, allow that water to be stored in exchange for that special storage right, that earlier priority right, what was the compensation given to those

entities that agreed to curtail their winter deliveries?
A. A portion of their reservoir space was given the earlier preferred priority.
Q. And to your knowledge, that space is always filled?
A. Yes.
Q. And looking at that second provision, curtailing the power rights at Minidoka Dam, do you know what the compensation that was given to do that, to increase storage?
A. I think the principle is that the Bureau of Reclamation does an evaluation of the power loss revenue as a result of storing water upstream instead of delivering it to the Minidoka Power Plant. And then the owners of the Minidoka Power Plant are then later reimbursed for that loss of power.
Q. So if the upstream spaceholder gains water storage because of that curtailment, they make a payment to the Bureau for that power loss; is that your understanding?
A. Yes.
Q. And would you agree that that compensation, that payment given for the curtailment of the power right is different than the compensation received by

those who got winter water savings space?
A. Yes.
Q. We talked about this earlier -- before -- and I guess, is there a difference as to how you administer natural flow water rights as opposed to storage water rights?
A. Yes.
Q. Can you explain that a little bit.
A. The difference is that if a natural flow right for irrigation is not being diverted, it's not charged against its volume of limitation if it has one. With the storage rights, if the Bureau of Reclamation chooses not to divert it unless it runs completely out the system, that water is charged against the volume of limitation of the water right.
Q. So if a natural flow water right, if an entity doesn't divert it, it's not charged as a diversion to that entity; is that correct?
A. That's correct.
Q. But if water is flowing by a reservoir, it is charged as it was diverted by that reservoir?
A. It is charged towards the accrual of that unfilled reservoir account and priority.
Q. And are you aware of the basis for that different accounting?

A. No.
Q. And to your knowledge, are canal companies, irrigation districts required to divert their water right quantities, maximum quantities at all times of the year?
A. No, they are not required to.
Q. And does their diversion requirement vary depending upon the time of year?
A. Yes.
Q. And as far as canal companies, districts -- irrigation districts within the Water District, what is the typical turn on time when those canals start diverting water for irrigation?
A. The period of use varies from -- March 15, I think, is the earliest that they can turn on in some locations, and it can extend all the way until, I believe, November 15th.
Q. And what is a typical turn in time for canals say above Blackfoot?
A. Typically, mid-April, early May.
Q. And is that dependent upon the specific operations of individual canals when they decide to turn on?
A. Yes. And it is dictated by the weather and the water requirements for the crops.

Q. And if water is not diverted by one right holder, it might flow past that diversion and be available for another right holder downstream?
A. Yes.
Q. I guess, what happens -- this is kind of a general question -- when water flows past Milner Dam? What are the circumstances that lead to that?
A. Two things that I can think of. One, the Bureau chooses to release the water past Milner Dam; or, two, the system physically can hold the water that is coming down from upstream but allow it to flow past Milner Dam also.
Q. So if water is running down the Snake River, people aren't diverting it, storage is full, it may be going in past Milner Dam at that point?
A. Yes.
Q. And as far as your definition of natural flow, can natural flow, flow past Milner Dam?
A. Yes.
Q. And was that the two areas you just described or not? Can you describe that.
A. If the reservoir system is full, and there is more natural flow than the irrigation demand, we are filling all water rights, and there is surplus water flowing past Milner, under that circumstance,

there would be natural flow flowing past Milner.
Q. And do you understand the terms "beneficial use" and "waste" in terms of a water right -- that definition?
A. I understand how beneficial use and waste is defined, yes.
Q. And how would you define waste?
A. Waste is diverting water without applying it to a beneficial use.
Q. And would you agree that that circumstance that you just described of water flowing past Milner Dam is not wasted in that sense of unlawful waste under a water right?
MR. BROMLEY: Calls for a legal conclusion.
THE WITNESS: Yes.
Q. (BY MR. THOMPSON) Can you describe the initial fill of a storage water right compared to refill circumstances.
A. Yes. If -- after the reach gains are measured and the natural flow is determined and distributed to priorities, an unfilled storage right is entitled to the natural flow that arises upstream from the dam under the priority of the storage water right.
Q. And as far as the Bureau of Reclamation,

when you fill that storage water right, do I have it correct that they don't have any choice as far as the accounting to fill that storage water right; it's filled?
A. It's filled. They only have the choice as to whether or not to capture the water.
Q. And that is different than a natural flow water right holder who may choose to divert available water or not?
A. Yes.
Q. And is that a function of the accounting program or an agreement with Reclamation as far as filling their storage water rights?
A. Both.
Q. And can you describe each of those.
A. That's the way that it was programmed in the account with the agreement of the Bureau of Reclamation when the accounting was developed in 1978.
Q. So the Bureau agreed that its water right could be accounted for as always filling regardless of their decision to physically store it?
A. Yes.
Q. And that was my next question. Does the initial fill, according to the Water District 1 accounting program, always match the physical fill of

the reservoir system?
A. No.
Q. And can you describe the circumstances where it doesn't.
A. When that storage that accrued to the storage account on paper and the water right accounting is released past Milner, the physical contents would be less than the water that we have accrued on paper.
Q. And do you know which reservoirs are formally operated for flood control in the Water District?
A. I think there are only three, Jackson, Palisades, and Ririe.
Q. And do you know the basis for those flood control operations? Are they required to operate in a certain way?
A. Yes.
Q. And what is the -- I guess, the document or requirement that would dictate those operations?
A. With Palisades and Jackson, the Bureau of Reclamation has what they call flood control rule curves and in those rule curves, based on the amount of water held in the snow pack above those reservoirs, they are required to evacuate and maintain a certain

amount of empty space.
Ririe Reservoir is a little bit different where I think they are required to draw the reservoir down to a certain percentage on November 1, or close to that date, and then they have a rule curve similar to Palisades and Jackson that begins around the 1st of March or April.
Q. And did you say Jackson operates under a rule curve as well?
A. Jackson -- I guess, it has two things. I think they are required to have 200,000 acre feet of empty space by November 1st or close to that date. And then I believe they operate on a combined rule curve with Palisades and Jackson, and I think in that rule curve, 75 percent of the evacuated space is assigned to Palisades and 25 percent is assigned to Jackson.
(Deposition Exhibit No. 16 marked.)
Q. (BY MR. THOMPSON) Tony, do you recognize Exhibit 16? Have you seen this document before?
A. No, I haven't.
Q. And I'll represent it is part of the reports admitted as part of the Palisades project and appendix related to flood control, and I just wonder if you had seen this rule -- flood control rule curve contained

in that document for Palisades, if that is something you are familiar with?
A. I have a copy of the rule curve. It doesn't look quite like this, but I'm sure it is probably the same. I don't think they have changed it.
Q. And do you know if -- whether these flood control requirements were part of the projects original authorization by congress?
A. Yes, I think they were.
Q. And is this the flood control rule curve Reclamation uses to manage Palisades Reservoir?
A. Yes, I think so.
Q. When do flood control operations typically occur?
A. Well, the first date on this flood rule curve is March 1st. It looks like most of the lines at the earliest run through March 20th and then continue through July 20th.
Q. And from your experience in the District, when Reclamation operates on the flood control rule curve, can you describe what they do. What's the process they go through?
A. Can you repeat the question?
Q. Do you know how Reclamation operates the reservoir when it is trying to stay on the rule

curve -- the flood control rule curve, what it does?
A. Yes. They monitor the snow pack, and they use the rule curve to make projections of where they will need to be in the upcoming near future, and sometimes they'll anticipate releases. They won't wait until the day they are required to make it realized, nor will they change that every day or every week. I think they do the evaluation about every 15 days as to how they should operate their releases from those reservoirs.
Q. And do you know what they consider when they make those release decisions?
A. Yes. The snow pack and the flood control rule curve.
Q. And do they start in the winter anticipating for that at certain reservoirs?
A. No.
Q. So they just continue to fill the reservoirs for maximum storage until they get to the flood control requirements?
A. No.
Q. How do they do it?
A. For example, this year, they have been releasing over 3,000 CFS past Milner. That release is not what they consider flood control, because it is

not required by their flood control rule curves. But they base it on reservoir operations as to whether that is to prevent erosion from ice caps or to protect their riprap on American Falls. There could be various reasons.
Q. So they don't typically try to fill the reservoirs to maximum content prior to the flood control rule curve season?
A. Correct.
Q. And does the Water District interact with Reclamation for purposes of its flood control operations?
A. We interact, yes.
Q. How?
A. The Bureau occasionally holds meetings to talk about its projected releases and sometimes calls Water District 1 when it is changing the releases out of the reservoir, but Water District 1 doesn't determine how much water should be released.
Q. And is that true for the earlier reservoir operations you described in the winter that may not be flood control related as well?
A. Yes.
Q. In your opinion is the flood control rule curve a restriction on Reclamation's ability to

physically store water in a reservoir?
A. Yes.
Q. How is a flood control operation handled through Water District 1's accounting?
A. Water District 1 accounts for the water that could accrue to the reservoir. When the Bureau releases water as a result of the flood control rule curve, that amount that is accrued to the reservoir isn't reduced based on that release.
Q. So the Water District accounting program accounts for that water as it is still available in the system stored under that water right?
A. It accounts for the water that is stored under the water right and also keeps track of the storage that goes out the end of the system.
But for that storage that goes out the end of the system, it is up to the Bureau to identify which storage space that water came from.
Q. Okay. And is that where we talked about earlier where the initial fill of the system, if it is a fill, in the accounting program, the water rights are satisfied on paper or in the accounting program may not necessary match the physical contents in the reservoir at that time?
A. If storage was released past Milner, yes.

Q. And for flood control winter operations, those could be two examples of when those wouldn't match up?
A. Yes.
Q. And as far as flood control operations, the Bureau advises the Water District; is that correct -- when it is going to make certain releases, or how does that happen?
A. Yes. They notify Water District 1 usually before the releases are made. If they don't notify us, we monitor the releases every day, so we would see them regardless.
Q. What happens to water when it is released for flood control, say from Palisades? What happens to that water?
A. If there is available space in American Falls, it would be captured in American Falls. It sometimes could be diverted by downstream users, or it would go out the end of the system past Milner Dam.
Q. And so water diverted by downstream users typically under a natural flow water right at that time, is that what happens?
A. It could be a diversion of a natural flow right, or it could be a diversion of the storage water.

Q. And when does that typically occur?
A. When does what typically occur?
Q. When diversions are made from water that has been released for flood control.
A. That would happen during this period when they are releasing water out of Palisades for flood control, April, May, June.
Q. And are there typically any diversions in March from space that has been released for flood control?
A. Typically, there is not.
Q. Is there a typical flood control release out of Palisades as far as CFS, or does it vary depending on the year or time of year?
A. It varies.
Q. Is there a typical operation as far as 10,000 CFS in March, and 20 in April, or is it just all over the board?
A. No. It just follows the rule curves and some years you won't have any release for flood control at all. In other years -- 1997 was the biggest water year I can remember where there was in excess of 20, 30,000 CFS being released.
Q. And do you know, when they are on that flood control rule curve throughout that part of the season,

does Reclamation have discretion to deviate from that?
A. I don't think they have much discretion to deviate from the flood control rule curves. I know in the past at times they haven't followed them precisely, and they are notified by the Corps of Engineers that they need to get to whatever amount that they need to get to in order to comply with the flood control.
Q. And do they typically try to -- do they try to run a consistent program where they are not releasing that 30,000 at the last minute, or they try to account for what snow is still available to come down? Do you know how they make that decision?
A. Water District 1 is not a part of that decision. But the Bureau of Reclamation does make those decisions. It is a reasonable thing to do to anticipate when you know the water supply is going to require you to dump a large volume of water to spread that out over a larger period of time.
Q. And they try to account for climate forecasts, existing weather conditions, the existing storage conditions?
A. Yes.
Q. And you said the Water District does not have any influence or input over those decisions?

A. We sometimes have input. I don't know what influence we have.
Q. What sort of input would you provide?
A. We tell them that we think they are releasing too much water, and it would benefit the spaceholders to decrease their releases.
Q. Benefit the spaceholders how?
A. It increases the probability that the physical contents will match the paper accrual.
Q. So they are operating on the flood control rule curve, too much space evacuated in the Water District's opinion, better chance of physically filling if they wouldn't release so much, is that the kind of input?
A. We don't argue with them if they are complying precisely with the flood control rule curve. It is only when sometimes they make projections or anticipate the amounts that they need to release, and they release them early.
Q. Or they may be increasing releases ahead of that rule curve, is that the situation?
A. Yes.
Q. And does the Water District have input on Reclamation's reservoir releases at any time throughout the flood control rule curve period?

A. Do we have any input?
Q. Yes. I guess, if they set a release in April, 10,000 CFS out of Palisades, does the Water District have any input or function of administration that would change that release?
A. We certainly have input. I'm not sure how much influence we have.
MR. THOMPSON: This would be a good place to break for lunch.
(Recess taken from 12:08 p.m. to 1:38 p.m.)
MR. THOMPSON: Back on the record.
Q. (BY MR. THOMPSON) Tony, just getting back to some questions on flood control space. If I recall, you said there were three reservoirs that are formally operated for flood control; is that correct?
A. Yes.
Q. Those three are Ririe, Palisades, and Jackson?
A. Correct.
Q. And if the Bureau initiates a flood control operation, it is under their project authorization for any one of those reservoirs; is that your understanding?
A. Yes.
Q. And if water is released out of one of those

reservoirs, physical space water is actually evacuated, how does it physically fill again?
A. By closing the gates and capturing surplus water.
Q. And under what water right, does it refill?
A. There is no water right that it refills under.
Q. And how does the Water District account for that?
A. It's called unallocated, unaccounted, undefined storage, all three of those terms have been used.
Q. And say, at Palisades, Reclamation sets a flood control operation motion, they release water, water is physically evacuated, does that happen at a time when that space physically refills? Does it come later? Does it depend --
A. Well, it comes later after the flood control.
Q. So can you describe how that would work.
A. Let's say they evacuated space out of Jackson and Palisades, and it wasn't able to be captured in American Falls Reservoir physically and went out the end of the system, the physical contents in the reservoir system would be less than what we

have accrued on paper to the storage rights.
We would continue filling water rights in priority according to the natural flow computed each day according to the water rights. If Palisades and Jackson rights -- storage rights were full on paper, none of the natural flow would be allocated towards those rights. Instead they may be going to junior irrigation rights.
In a flood control operation, there is usually sufficient snow that comes down that is in surplus to the demand by water rights. That's physically captured in the reservoir. In the accounting program, that shows up as this unaccounted for or unallocated storage. That account is used to refill or match the paper contents, if they are able to completely fill the reservoir with that unaccounted for storage.
Q. Is that Reclamation's goal, even with the flood control release, try to match what has already been accounted for on paper?
A. Yes. I think the goal is to release flood control water and then maximize the storage after that occurs.
Q. Is water ever released out of American Falls for flood control?

A. I don't know the answer to that question. It may have. Typically, it is not.
Q. And you are not aware of any formal flood control requirements for American Falls Reservoir?
A. I'm not aware of any.
Q. So when the physical contents don't match what has been accounted for on paper, what typically -- what storage rights, if there has been flood control operations, are affected?
A. Water District 1, when we get to the day of allocation and there is short fall because of a flood control operation, we ask the Bureau of Reclamation which storage accounts that that shortfall should be applied to.
Q. And what do they typically tell you?
A. Most often it is 75 percent to Palisades and 25 percent to Jackson.
Q. So any refill of that unaccounted for storage to physically fill space that has been evacuated from Jackson or Palisades would benefit those storage water rights?
A. Yes.
(Deposition Exhibit No. 17 marked.)
Q. (BY MR. THOMPSON) Do you recognize this document? I think it was a deposition exhibit from

four years ago, but go ahead and describe it, if you can.
A. It is the Watermaster Handbook. It was compiled by the Idaho Department of Water Resources. I don't see a date on this version.
Q. If you look at the second page, I think there is update at least through 2000.
Do you know of any other more recent versions of this document?
A. I don't know what the most recent version is.
Q. Is this something the Water District uses?
A. No.
Q. If you can turn to page 20. It has a paragraph entitled, "Stored Water." The first sentence states, "Reservoirs are allowed to fill only once an irrigation season unless otherwise specified in the water right or determined by the director."
Do you recognize this? Is this a Department policy?
A. I don't know whether it is a Department policy, but the handbook is published by the Department.
Q. Has the Water District ever been instructed or advised by the Department of Water Resources to

distribute water to reservoir rights in this manner?
A. I'm not aware of how the process was started in 1978 when the accounting program was compiled, but I'm sure they had some direction from the Department.
Q. Are you aware of reservoir rights in Water District 1 being operated differently than what this watermaster handbook reflects?
A. No, I'm not aware of an example.
Q. You haven't been aware of any accounting practices or how storage water rights were accounted for prior to '78 within the Water District?
A. Well, the accounting for storage was different prior to 1978 because they didn't account for usually -- until the reservoir system reached its maximum contents.
Q. So is it your understanding that reservoirs were allowed to fill more than once in irrigation season prior to 1978?
A. They were allowed to fill, and if there was sufficient water supply to supply all water rights, to fill them a second time, yes, I'm sure that was allowed.
Q. And were refill of different reservoirs -- was that accounted for differently by a reservoir prior to 1978?

A. Prior to 1978, they didn't have the computer accounting process, so it was different.
Q. And have you seen evidence of where storage rights at American Falls may have refilled more than once an irrigation season?
A. Well, Lynn Crandall and Henry Eagle both gave credit to the American Falls spaceholders for a refill.
Q. And those two gentleman were the prior watermasters?
A. Yes. And then that practice stopped when Art Larsen, who was the watermaster that followed Henry Eagle, inquired of the director of Water Resources as to whether or not the practice should be continued. And the director issued an opinion that it should not be continued.
Q. And that was Director Higginson?
A. I believe so.
Q. Any information that prior directors disagreed with the Water District's accounting, their operations for refill prior to that time?
A. No, not that I'm aware of.
Q. And do you know who decided to make that change? Was that the director in nineteen -- do you know what year or when that happened?

A. It was in the 1970s, I think. I'm not sure of the exact year. But, yes, it was the director that made that decision.
Q. And to your knowledge was there any statutes, rules, court decisions that prompted that change?
A. Not that I'm aware of.
Q. In the refill of evacuated flood control space, you called that unaccounted for storage; is that only a situation where all other water rights are filled that are requested to be filled?
A. Yes -- well, depending on the location. It results from water that is physically stored in the reservoir for which there is no demand from any water right for that natural flow that creates that unaccounted for storage.
Q. So it could be a situation -- April, May, June there may not be peak demand from all junior water rights for, say, irrigation purposes, that water that may go to fill those rights could go back to physically filling the reservoirs?
A. Correct.
Q. And in your time has there ever been a situation where that demand from junior rights has maybe forced a change to operations that would

otherwise refill a reservoir flood control evacuated space?
A. I don't understand the question.
Q. Well, I take it that this unaccounted for storage that is calculated, that's available when all junior rights are filled; right?
A. Yes.
Q. And the Bureau is setting certain releases to, I presume, meet that demand at that time?
A. Correct.
Q. Maybe physically refilling that evacuated flood control space?
A. Yes.
Q. Has there ever been a time when demand from junior water rights has forced a change to that physical refill operation?
A. Demand by junior water rights would reduce the amount of unallocated storage.
Q. So if there was an increased demand from juniors, it could affect physical refill of evacuated flood control space?
A. Yes, it could.
Q. And I guess how is that decision made when the Bureau is physically refilling that flood control space and the Water District is distributing water to

meet all junior rights, how do you interact to determine we need "X" amount out of Palisades, for example?
A. Well, our only interaction is if the river would go dry and there was some canal that wanted their natural flow right delivered and there physically wasn't water there, we would request the Bureau to release additional water from the reservoirs.
Q. But typically, in those situations when physical refill is occurring late in the spring, I take it that is when it typically occurs. Is there a certain time of year -- when flood control space that has been evacuated is physically refilling, is there a certain time when that usually happens?
A. Any time a reservoir is full on paper, their storage right has met their volume limitation and their space that was evacuated, there is a potential to refill, and that can occur any time between February and July.
Q. So is it fair to say that physically it takes more water to match the paper fill than what is represented by the paper fill?
A. If zero water spilled past Milner, the physical contents would match the paper fill. It is

only when you release storage fill past Milner that the physical contents and paper contents don't match.
Q. Like a flood control release?
A. Yes.
Q. So would you agree if a flood control release is made, like out of Jackson or Palisades, but on the accounting program it has been 100 percent allocated and it has been filled, in order to match that accounting -- that paper fill, it may take more than what's represented on that physically to provide that water?
A. Well, the amount it would take would be equal to the amount of storage that is released past Milner.
Q. So let's take Jackson for an example. If it's kept at 600,000 acre feet through the winter, but on paper it's 800,000 acre feet, or it is full, the water right has been satisfied, I presume that 800,000 acre feet is past the Moran outflow point at that point?
A. 200,000 acre feet.
Q. With the -- well, to account for the fill on paper. Let's look at that first. In order for that fill to occur in the accounting program, you have to look at storage contents; correct?

A. Yes. The inflows into the reservoir.
Q. So there would be that 600,000 acre feet if there is that much water physically in the reservoir, and then that 200,000 would have been passing the outflow at Moran at some point?
A. Correct.
Q. And my question is, so physically you've had past at that point -- you've either had 200,000, plus the 600,000 that is being held in the reservoir -- you've had 800,000 available at that point, but to physically match what is in the accounting, it would take more than that 800,000.
Would you agree with that?
A. No. Only if that 200,000 spilled past Milner.
Q. So if it did, if water did spill past Milner, it would take more than 800,000 physically to match that accounting for 800,000?
A. Well, there would need to be a surplus of 200,000 beyond what natural flow rates were demanding for water in order to refill that evacuated space.
Q. Okay. So it takes more water than what is on paper to physically fill that reservoir?
A. Yes.
Q. Can diversions by junior water rights impact

the physical refill of evacuated flood control space?
A. Yes.
Q. Has that happened before?
A. I'm not sure, but I think that it likely has.
(Deposition Exhibit No. 18 marked.)
Q. (BY MR. THOMPSON) Do you recognize this document, Tony?
A. Yes.
Q. Can you describe it.
A. The 2006 annual report for Water District 1.
Q. And I'll represent these are just some excerpts from that annual report, not the entire volume. But can you generally describe the physical fill of the storage system in 2006, how it occurred.
A. No, I don't remember.
Q. Does this summary on page 1 reflect what happened that year?
A. Yes.
Q. And does it identify how much storage was released for flood control that year?
A. What was your question?
Q. How much storage was released for flood control purposes that year?
A. It doesn't say.

Q. Does the water past Milner mid-April to May 16th -- that may not have all been flood control, that 900,000 acre feet?
A. It may not have been.
Q. Do you have any idea how much of that would have been flood control?
A. I don't.
Q. Would that be reflected in the annual report?
A. Not necessarily.
Q. Who would have that information?
A. I don't know that it has been calculated.
Q. Is that something that could be calculated?
A. We'd have to get the Bureau of Reclamation to calculate it. There would have to be some assumptions made as to the water spilling past Milner, whether it came from Jackson or Palisades or American Falls or Island Park.
Q. And that's something they tell the Water District every year when there is water past Milner that, this is where it came from, how much?
A. No. We wait until the day of allocation, and if there is a shortfall between the physical contents and the amount -- the shortfall between the physical contents and the amount that was recorded on

paper, at that time the Bureau identifies who the shortfall goes to. We don't identify every acre foot that goes past Milner.
Q. So that third paragraph in that first page, does that identify the shortfall in 2006?
A. Yes.
Q. And how much was that?
A. 71,742 acre feet.
Q. So would that be divided between Jackson and Palisades as flood control space that did not physically refill?
A. Yes.
(Deposition Exhibit No. 19 marked.)
Q. (BY MR. THOMPSON) Tony, have you seen this water right permit before?
MR. BROMLEY: Travis, do you have some copies?
MR. THOMPSON: Yeah. Sorry.
THE WITNESS: No, I don't think I've seen this before.
Q. (BY MR. THOMPSON) So are you familiar with the Idaho Water Resource Board's recharge permit for the Snake River?
A. Yes.
Q. And I'll represent that this is the right that was eventually assigned to the Water Board.

Does the Water District report -- does your accounting program and your annual report include diversions to the Water Board's permit?

A. In previous years, no.

Q. So in 2006, it wouldn't have been accounted for?

A. That's correct.

MR. FLETCHER: I missed your answer, Tony. Did you say that it is recharged prior and it is not in the accounting program?

THE WITNESS: It was not in 2006.

MR. FLETCHER: Okay.

(Deposition Exhibit No. 20 marked.)

Q. (BY MR. THOMPSON) Is it in the accounting program today?

A. It hasn't been in the accounting program through 2011, and we hope to facilitate it in 2012.

Q. Do you recognize Exhibit 20?

A. I can't recall if I've seen this before or not.

Q. This is a letter from former Director Dreher to, at the time, Senator Chuck Coiner discussing distribution to water right permit 7054, the Board's recharge right, and the water right for hydropower purposes at Milner Dam. And I just was curious, did

you have any input into this letter as to the distribution of water to those two rights during 2006?

A. I may have.

Q. And do you know how much water was diverted under the Board's recharge permit in the spring of 2006?

A. No.

(Deposition Exhibit No. 21 marked.)

Q. (BY MR. THOMPSON) Tony, I've handed you Exhibit 21. It is just a portion of a presentation from the ESPA Camp Advisory Committee, and it identifies on the second page approximately 38,000 acre feet of recharge from the Snake River in the spring of 2006, and would that number be appropriate or subject to further check by you to determine how much recharge was accomplished that year?

A. Yes, I don't know what -- I don't know who calculated this number, and I don't know how it was calculated.

Q. Do you know who would account for that, if it wasn't the Water District?

A. Well, Bill Quinn is currently the recharge coordinator. I don't know if he was the recharge coordinator in 2006/2007.

Q. So somebody perhaps at the Department was

keeping track of how much water was diverted under the recharge permit that year?

A. Yes.

Q. But it wasn't recorded as far as the daily accounting for the Water District?

A. No. Because the water right wasn't in the water right accounting program.

Q. I guess, do you know how they would have authority to divert that water? Did they request the watermaster to allow that diversion?

A. Well, the diversion would have been allowed when we were filling the 1980 priority.

Q. And on page 4 of Exhibit 20, that letter from former Director Dreher, on that fourth page in that second paragraph he references, "Had diversions of water for recharge not occurred after May 16th, some additional water would have accrued to storage space that had filled but subsequently evacuated for flood control and filled again."

A. I'm sorry. I didn't see what --

Q. It is on the last page.

A. Oh, the last page.

Q. The first full paragraph there, the second to last sentence. I'll give you a chance to read it if you would like.

A. Okay.

Q. Do you understand the explanation in that first full paragraph at the end?

A. I think so.

Q. And can you describe what you think happened in 2006. I guess, is this justifying that permit or --

A. I think Mr. Coiner might have been asking as to why water wasn't allowed to fill 1-7011, which I believe is the Milner Power Plant water right, and yet 1-7054 was allowed to divert water, and I think Mr. Dreher's response is that the power plant right is subordinated to any upstream additional storage, but 1-7054 is not.

Q. And so based on this explanation, and if the number is accurate, around 38,000 acre feet was recharged under the Board's permit that spring. Do you know how much water that was diverted for that recharge could have been physically stored in the reservoir's system to refill evacuated flood control space?

A. No, I don't know.

Q. If we knew that number -- or I guess had that recharge not occurred, would that have reduced the 71,000 acre foot physical water shortfall to

Jackson and Palisades water rights?
A. It may not have.
Q. Can you describe how it may or may not have.
A. If the water the Bureau was physically releasing from American Falls Reservoir was in excess of the needs for irrigation diversions between American Falls and Milner, that water would have spilled past Milner and would not have been physically stored.

The recharge right could take advantage of that and divert that water for recharge under the 1980 priority, so they would decrease the amount of water that was being spilled past Milner without affecting the refill to reservoirs.
Q. So any recharge that occurred below American Falls would not have any impact on physical refill of the storage system?
A. It could have impact if the Milner flows were shut to zero, and the Bureau was releasing additional water out of American Falls that they otherwise would not have been releasing to fill that 1980 priority right.
Q. So would the Bureau have been directed to release water to fill that right?
A. If the canals between American Falls and

Milner were diverting that water and the flow wasn't sufficient in the river, they would contact the Bureau of Reclamation and ask them to release more water from American Falls.
Q. The Water District or the Water Board?
A. The canals themselves I believe in the lower valley contact the Bureau of Reclamation directly to order their water deliveries from American Falls.
Q. And do you know if that was done for this recharge permit?
A. I don't know.
Q. Do typically the requests for increased releases go through the Water District?
A. Above American Falls, Water District 1 asks that the canal managers contact Water District 1 when they are going to increase their diversion, and sometimes we'll relay that to the Bureau of Reclamation to prevent the river going dry usually at Blackfoot. In response to that, the Bureau usually increases the releases out of Island Park or Palisades.

Below American Falls, the canal managers historically just contact the Bureau of Reclamation in Burley directly.
Q. To dictate releases out of American Falls or

Walcott?
A. Yes.
Q. And getting back to any recharge above American Falls that may have been done in the spring of 2006, had that recharge not occurred, would it have reduced this physical shortfall to Jackson and Palisades water rights?
A. If there was additional empty space available in American Falls to capture that water that was recharged, it could have increased the amount of water -- I should say, decrease the short fall due to flood control.

If American Falls had been physically full and those diversions not diverted the recharge water, it could have also passed through the system past Milner.
Q. So it could be different depending upon the year, depending upon the circumstances at American Falls if recharge above American Falls, whether it would, or maybe not reduce an allocation shortfall to Jackson and Palisades?
A. Yes.
Q. So would you agree if in that year there was space in American Falls, that could have captured that water that was diverted for recharge, spaceholders in

Jackson, Palisades would have received a greater allocation?
A. Yes.
MR. THOMPSON: That's all the questions I have for now. I'll turn it over to Kent.
MR. FLETCHER: I think Tom wants to go, because they are talking about leaving a little bit early.

EXAMINATION
QUESTIONS BY MR. ARKOOSH:
Q. Good afternoon, Tony. I'm Tom Arkoosh, and we've met previously. We have met so many times, in fact, that during this deposition, unless you object, I'm going to use your Christian name "Tony," if that is okay?
A. Yes.
Q. Would you look again at Exhibit 19, please, which is the permit No. 01-7054. You said it is not in the accounting program yet to your knowledge, if I understood correctly.

Do you know the status of this water right?
A. I don't know the status of the water right.
Q. Do you know that there was some litigation concerning this water right?
A. I had heard a little bit concerning the

water right, yes.
Q. Do you know whether it has been moved or is being moved to license status?
A. I don't know.
Q. So you pretty much told us all you know about this water right?
A. Yes.
Q. Okay. When was American Falls built, do you recall -- American Falls Dam, American Falls Reservoir?
A. I don't recall the date. It certainly was after 1921. I think close to 1930 would be my guess.
Q. And the right in that reservoir is 1921 -- or some of the rights in that reservoir; is that correct?
A. Yes.
Q. I'm going to try to use the term "storage account" for an irrigator's -- the amount of water in an irrigator's account, and refer to the reservoir or say "reservoir fill" to refer to the amount of water actually in the reservoir. Because you've made very clear that a lot of times they don't match up; is that right?
A. Correct.
Q. So when American Falls was built, from the

years during the 30s and 40s and 50s when an irrigation account was depleted or debited and water was vacated from the reservoir to service a right holder, and then water came down the river again, was that account refilled?
A. Yes.
Q. Do you recall when Palisades Dam was constructed?
A. I believe it was in the late 1950s.
Q. Is Palisades Reservoir subject to the same one refill rule in the eyes of the Department we've been talking about here today?
A. Yes.
Q. And I understand you testified that at least under two watermasters after Palisades Reservoir was constructed, senior irrigator accounts were refilled in priority if water was available to American Falls Reservoir?
A. I would characterize it as being refilled ahead of the Palisades accrual, not necessarily in priority.
Q. Okay. I don't want to make it a quibble, but senior rights were refilled prior to junior rights being filled; is that correct?
A. Well, I'm not sure how the accounting was

done before 1978, but after 1978, for example, the Minidoka canals divert storage out of Walcott. That is the first storage used, and it has the senior priority to American Falls, and I don't think they were ever credited with having their right refilled.
Q. Walcott sounds more like the exception to the rule. Walcott essentially being sometimes treated as an outlier; is that correct?
A. No. It is treated the same as other reservoirs.
Q. And you don't perceive it to be an exception to the rule -- your example to be an exception to the rule?
A. No.
Q. So between the time that Palisades was built in 1978, is it your testimony that you don't know the order of fill and whether refill was allowed, or you do know the order of refill?
A. Could you re-ask the question?
Q. Yeah. Between the time that Palisades was built in 1978 and -- I think some of your testimony was there was a change sometime in the '70s, but let's just use 1978 as a definitive date. Do you know or do you not know the order of refill of American Falls Reservoir?

A. Well, the refill is according to priority.
Q. Even if junior rights were not filled, senior rights were refilled?
A. The only evidence I saw prior to 1978 had to do with the fill of Palisades, and there wasn't any mention of any other junior rights that could have been diverting water at the time.
Q. Okay. So do you know the order of refill of the senior right accounts in American Falls? Were they refilled prior to fill of the junior accounts in Palisades?
A. Yes, they were.
Q. Okay. And then as I understand your testimony, all of that changed -- and I'm going to use the year 1978. Is that the right year?
A. It could have been. It was during Art Larsen's tenure as watermaster.
Q. Approximately that time?
A. Yes.
Q. Do you understand the reason for the change? Why there was a change?
A. Yes.
Q. What was the reason?
A. As it was explained, I think, in the 1978 watermaster report, there was no regulation according

to the volume limitations of the water right, and that was the reason for the change in regulation.

Q. There was no limitation or there was a limitation?

A. There was a volume limitation to the storage rights.

Q. Look at Exhibit 7, please. As the system fills over the winter, does -- for instance, the earliest priority is the entire -- well, let's not use Jackson. It is not a good example, because everything above Jackson flows into Jackson. But let's use American Falls and the ones junior to that -- Palisades and American Falls and the ones junior. As the stream of water comes down the trunk of the river, how is the decision made how much is devoted to 1921 rights and how much is devoted to 1936 rights and how much is devoted to 1939 rights? How many cubic feet is devoted to each right? How is that decision made?

A. There is no flow right assigned to the storage rights. As we calculate the natural flow in each reach, the entire natural flow upstream of a reservoir could go into fill that right if it hasn't reached its volume limitation, if it is senior to all upstream diversions or storage reservoirs.

Q. Has there ever been a flow right assigned to

American Falls?

A. Not that I'm aware of.

Q. Each year these reservoirs may fill -- sometimes the entire trunk of the stream may be devoted to a senior right, sometimes the stream may be devoted to several accounts separately; is that correct? It may differ each year?

A. Yes.

Q. How is that decision made?

A. It is not a decision. The natural flow is calculated for each reach and distributed to the rights according to priority. You can have several different rights being filled on any given day depending on their position and their priority.

For example, assuming the reservoir system isn't filled, none of the individual reservoirs accounts are filled, all the water rising above Jackson Lake is going to be stored in the Jackson storage account. But if American Falls isn't full, all tributaries, all spring flows, all additional natural gains below that point would go in to fill American Falls Reservoir, which has a junior priority to Jackson.

Q. That's just because the water rises downstream from Jackson; is that correct?

A. That's correct.

Q. So let's make it simple for me. As between the 1921 rights in American Falls and the 1939 rights in Palisades, how is a decision made to divide that stream? Is the American Falls account filled completely first, because it is a senior right, and then water is devoted to the Palisades accounts? Is that how that is done?

A. Yes. The 1939 storage right and Palisades can't accrue any water until the American Falls storage account has filled to 100 percent.

Q. And there is no limitation on flow or cubic feet a second in this determination?

A. Correct.

Q. Why do you say there is a volume limitation on these reservoir rights?

A. The volume limitation originates, I think, from the original license for the storage rights.

Q. And the original license is one of the documents you brought for American Falls R-269, the new designation being, slash, 01-2064; is that correct?

A. Yes.

(Deposition Exhibit No. 22 marked.)

Q. (BY MR. ARKOOSH) And would you point out

for me where the limitation arises.

A. The volume limitation was based on the 1.7 million acre feet of active contents.

Q. Does it say 1.7 million acre feet of active contents in there somewhere?

A. Yes. It describes the total quantity amount as 1.8 million acre feet, but it says, "That the amount of water to which such right is entitled and hereby confirmed, for the purposes aforesaid, is limited to an amount actually needed and beneficially used for said purposes, and shall no not exceed 1.8 million cubic feet per second, acre feet per anum, of which amount 1.7 million acre feet represents the rate of cubicle contents of the reservoir and 100,000 acre feet is the maximum annual bank storage."

Q. And what language in there says "no refill" to you?

A. There is no language that says no refill.

Q. So how do you interpret that document to mean no refill?

A. I said this document is the basis for the volume limitation.

Q. Okay. And is there anything in that document in your opinion that indicates there shouldn't be any refill in priority?

A. No.
Q. So where do we find out that there is no refill of that volume when the space is -- when the account is vacated, the account is not refilled?
A. I think that originates from the director's reply to Art Larsen when he asked the question.
Q. So would you agree with me then that the -- I hope I'm saying this correctly -- the rule of no refill of a senior account until junior accounts are filled arises from the edict of Art Larsen?
A. I would say it arose from the director of the Department of Water Resources through Art Larsen.
Q. And that wasn't argumentative, the word edict, but it arises from a determination made by Art Larsen, so far as you know?
MR. FLETCHER: It was a letter from Higginson to Art Larsen.
Q. (BY MR. ARKOOSH) Arises from Mr. Higginson from a letter from Art Larsen; is that right?
MR. FLETCHER: To Art Larsen.
THE WITNESS: It arises from a response from Keith Higginson to a letter he received from Art Larsen.
Q. (BY MR. ARKOOSH) Okay. Is there any other -- I mean, obviously, for years we did it the

other way. We just talked about that. Is there anything else that you can point to, other than a director's directive, that authorizes this change?
A. No.
Q. And you don't know the reasons behind the directive?
A. No.
MR. ARKOOSH: Let's take a minute.
(Recess taken from 2:33 p.m. to 2:43 p.m.)
MR. ARKOOSH: Back on the record.
Q. (BY MR. ARKOOSH) Tony, you've told me that you find the volume limitation in Exhibit 22. We've discussed that; is that correct?
A. Yes.
Q. And you've told me that the prohibition against refill of a senior's account and junior's account -- junior accounts weren't also filled occurred sometime in the '70s?
A. Yes.
Q. And isn't it correct that in 1921 when Exhibit 22 was drafted that if water got to -- well, actually, it would be 1930 when the reservoir was built -- if water got to American Falls Reservoir, it either refilled those senior accounts, or it was wasted past Milner?

A. Prior to when?
Q. Probably 1930 when the dam was actually built.
A. Yes.
Q. So this language that says 1 million 800 acre feet per anum, does not contain a limitation in and of itself to a refill, because this language was extant at the time they were in fact refilling senior accounts prior to filling junior accounts?
A. That may be true.
Q. Even today, Tony, do we really have administration tied to a volume limitation of 1.8 million acre feet in you view?
A. No.
Q. What happens is that reservoir fills and refills and fills and refills several times a year, doesn't it?
A. No. The volume limitation is now 1,672,000 acre feet, the active capacity of the reservoir.
Q. Okay. The material part of the question was not the number itself. So I'll use 1.7, and it will be that new capacity number. It is just easier for me to remember.
Today we have, for instance, carry over each year; is that right?

A. Yes.
Q. So when we have carry over, do you just fill the reservoir accounts -- I mixed the words. Do you just fill senior irrigator accounts including carry over up to 1.7?
A. Carry over is deducted from the 1.7 to determine the empty space that is available to fill in that year.
Q. So if a senior right had the entirety of its storage volume carried over, it would receive no new water in the new year; is that correct?
A. That's correct.
Q. There was at one time until very recently a power right that flowed through American Falls; isn't that correct -- of 255 acre feet?
A. Yes. I'm not very familiar with the power right though.
Q. Was that in excess of that 1.7 million acre foot capacity?
A. Well, if it were a different right, it was a natural flow right. It would be tied to a flow rate and not the volume being stored in the reservoir.
Q. But I just gave you that right in acre feet, not flow. So then if it was a storage right, it would be in excess of the 1.7 acre feet; is that right?

A. No. I've always been under the assumption that the limit was always 1.7 million acre feet.
Q. Well, tell me how this system works. If you fill American Falls reservoir and don't release water below Milner, such that all the senior rights that are in American Falls, all those accounts are full, can you not put any more water in American Falls Reservoir when some of those accounts are vacated?
A. Yes, you could.
Q. Could that water be dedicated to those accounts?
A. Yes, it could.
Q. Could that water be dedicated to those accounts prior to the time the junior accounts are filled in full?
A. Probably not.
Q. And why is that?
A. Because if that were the case, there was no flow passing Milner, and you refilled previously evacuated space, that would show up in our water right accounting as unaccounted for, or this undefined storage. Depending on how that undefined storage was distributed, it may or may not go to the senior water right holders.
Q. At the end of the year when you do your

actual final determination?
A. Well, on the day of allocation.
Q. Or on the day of allocation.
So what if that -- the natural flow that filled that space was only 1921 priority or earlier after an irrigation evacuation of a senior right, and junior rights had not been filled, and no water was going past Milner?
A. The refill wouldn't occur under a 1921 priority. It would just simply be physical additional storage that was captured in the reservoir system after all natural flow had been distributed to all natural flow water rights.
Q. So you don't give any priority to the natural flow then?
A. Well, this --
Q. Let me give you an example. Let me take the example a little further. Say it is -- and this probably isn't practical, but it states my question. Say that it is May or June, and say senior natural flow rights users are using half of the water in the river and there is 3,000 cubic feet a second at the head of American Falls, so that would leave 1,500 cubic feet a second at the head of American Falls, and there had been senior storage space evacuated, nothing

had gone past Milner, junior space had not been filled that year in full in Palisades, why isn't that natural flow after the senior use the next priority, which is 1921? Why are you giving that natural flow a different priority?
A. Because there is no water right for it.
Q. Well, isn't there a right to store the early priority of 1921?
A. Yes. But in your example I assume that we filled it to 100 percent, we met the volume limitation, so from that point forward, until we start the next irrigation season, there isn't any water stored under that priority storage right.
Q. So if the volume limitation found in R-269, which is Exhibit 22, meant that it was the carrying capacity set forth in the certificate of completion of works and not an annual entitlement, then could that natural flow, as it did when that document was drafted, have a priority date of 1921, or the next priority in line, after natural flow users took water from the river?
A. If that were allowed, then you would have to account for the storage being diverted to each diversion from which reservoir account that it came from in order to refill that evacuated space, and the

current accounting does not do that.
Q. Isn't it the purpose of accounting to reflect the right and not operate the rights in accordance with what the accounting is able to do?
A. The purpose of the accounting is to calculate the natural flow available each day and distribute it to the water rights.
Q. As reflected in the water rights?
A. According to the volume limitations, the flow rates, the diversions, and the water rights.
Q. The water rights?
A. (Witness nodding head.).
MR. ARKOOSH: Okay. And let the record reflect he nodded his head affirmatively.
Q. (BY MR. ARKOOSH) So accounting aside then, what I described is something that could be done as it was done historically?
A. Well, if it was allowed -- if it was determined that there was no volume limitation, yes, that would change the way we account for water.
Q. I want to go back and talk a little more about natural flow. Your view of this natural flow that is coming into the reservoirs is that it has no priority date? The natural flow that is attended to the storage right set forth in Exhibit 22.

A. As long as the storage right in American Falls hasn't reached its volume limit, the water stored in that account is under the 1921 priority. After it has been filled 100 percent, and the example you used is that only half of the natural flow in the system is being required by irrigation demand, that other half, that surplus water is physically captured in a reservoir. In our water right accounting, that shows up as undefined storage, and there is no water right or priority for that undefined storage.

Q. In your water right accounting there is no priority for it, but let's forget about the accounting for a minute. I want to talk about water rights and not water right accounting.

If there is unfulfilled storage with 1921 priority, and it is the most senior unfulfilled storage, do you have an explanation why the natural flow available to that storage would not go to fill that water right account, other than what the director said?

A. If there were no volume limitation, as long as there was sufficient natural flow to fill up to the 1921 priority, it would go into that evacuated space.

Q. Now, you pushed me quite a bit toward the water right accounting. Do you concur with me that

the purpose of the water right accounting is to reflect the water rights and not other way around, that is, we are going to administer water rights in accordance with what our accounting does? Do you agree with that?

A. I agree -- the purpose of the accounting is to account for all the water in the system, natural flow and storage, and distribute it to those that have water rights, and it should follow the water rights, not the water rights following the accounting.

Q. So how is it we have natural flow coming down the system, unfulfilled 1921 rights, and it is not going to the 1921 rights? Without reference to the accounting.

Is it just because of the director's -- what the director told us to do?

A. Yes.

MR. ARKOOSH: Okay. I'm done. We are going to leave real quick now.

(Mr. Arkoosh and Mr. Simpson exited.)

EXAMINATION

QUESTIONS BY MR. FLETCHER:

Q. Tony, as you know, I'm Kent Fletcher. I'm here today representing Minidoka Irrigation District. I'd like to follow up a little bit about the nature of

the accounting program just in the general sense.

Well, first of all, in the Notice of Deposition you were asked to bring with you all records and documents relied upon by Water District 1 in the administration of the storage water rights listed at Attachment A, and I note that you did not bring any decrees or licenses with you; correct?

A. Correct. Well, no. I did bring the license for Palisades and American Falls.

Q. That's true. You didn't bring any decrees with you today?

A. No.

Q. And isn't it true that the Water District relies upon decrees when administering water rights?

A. Yes.

Q. And as far as the accounting program goes -- and you've described this to some degree -- but isn't the accounting program basically a tool to administer the water rights that are set out in decrees and licenses?

A. Yes.

Q. Would it be fair to say that the accounting program attempts to reflect those water rights that are set forth in the various decrees and licenses?

A. Generally, that's correct.

Q. But I think you also said, and correct me if I'm wrong, the accounting program doesn't create a water right, does it?

A. That's correct.

Q. And the accounting program standing alone does not create a condition or an element necessary to administer a water right, does it?

A. No.

Q. In fact, the accounting program -- one of the goals is that it reflects conditions on water rights and the elements necessary to administer the water right; isn't that correct?

A. Yes.

Q. And is it the purpose of the accounting program, to your knowledge, to eliminate any water rights?

A. No, I don't think that's the purpose.

Q. Okay. And by the same token, to your knowledge, does the accounting program attempt to eliminate conditions or elements necessary to administer a water right?

A. No, it does not.

Q. I don't know if I'm going to use the correct terminology, so please correct me. The accounting program, as I understand it, during the irrigation

season is attempting to account for the delivery of water on a daily basis; correct?
A. Yes.
Q. But there are adjustments that have to be made to the information that the accounting system provides to you; correct?
A. Well, I don't know what adjustments you are referring to.
Q. Well, I think you already talked about some of them. Sometimes the gauges are wrong?
A. Yes.
Q. So you have to make adjustments to the numbers that the accounting program has initially kicked out; correct?
A. We try to update it with the most accurate information available.
Q. Right. But those adjustments are part -- would you consider the adjustments that you have to make to those numbers that come out of the accounting program part of the administration of water rights?
A. Yes.
Q. Another adjustment I can think of right off the top of my head is at the end of the season for many years the accounting program -- or the District had to do some kind of calculation dealing with the

Foster Decree return flows; correct?
A. No. That was actually embedded into the accounting on a daily basis, and that could have been corrected just like a USGS gauge or any other correction.
Q. So it was part of the actual accounting program?
A. Yes.
Q. And since the agreement has been reached on the Foster Decree and confirmed by the court, has the accounting program been changed to just make that adjustment at the end of the year?
A. It has been changed based on the settlement of that credit. Where now there is not a daily calculation, there is simply a storage exchange between a few different entities.
Q. Okay. And does that require a manual adjustment of something, or is that just built into the program as it is now written?
A. It's a manual adjustment.
Q. So the accounting program allows for manual adjustments?
A. Yes.
Q. And these manual adjustments are part of the administration of water rights?

A. Yes.
Q. What is your understanding of the term an element of a water right that is necessary for administration of that right?
A. Priority date, period of use, place of use, flow rate volume. I'm not sure if I'm leaving something out.
Q. Well, there are certain elements that are set out in statute, but a lot of our discussion today and in the past has been about stuff that is not specifically set out in a statute, but whether or not something is necessary to administer a water right.
Do you know what I'm talking about?
A. Yes.
Q. And those things that you are talking about, the elements -- I wasn't trying to quiz you about whether you knew all the elements of the statute. It is catch-all language at the end of the statute that I was getting at. It says that the director is supposed to determine remarks and other matters as are necessary for definition of the right for clarification of the element of a right or for administration of the right by the director.
And I guess what I was getting at in a general sense is, what is your understanding of what

that language means? Because the other elements that you talked about are set out in here. Those are specified, so what is your understanding of what that additional language means?
A. If there is something beyond the elements of the water right, if there are certain conditions of how the water right should be delivered, then it is up to the director to ensure that that is in the accounting program, and it is delivered according to that procedure.
Q. Okay. And so that can be something built into the program to be accounted for on a day-to-day basis, or it can be something that you have to manually enter into the program to adjust later?
A. It could be either.
Q. Okay. You had talked about the winter water savings provision of the Eagle Decree, Exhibit 12, I think it is. I don't know if you have that handy.
But I think you are familiar with what I'm talking about, the winter water savings water rights. To your knowledge is there any basis for those water rights, other than the Bureau contracts and the Eagle Decree?
A. None that I'm aware of.
Q. Just so I understand this, this past year

for -- I don't know how many months in a row, but all winter and fall and starting somewhere in the middle of the summer, water has been flowing past Milner; correct?

A. Yes.

Q. And starting October 1st -- so I understand what you are telling us about accruing things to storage -- has all of that water that is flowing past Milner been accounted for as being water available to be stored?

A. Most of it has.

Q. Okay. So to your knowledge, do the records of the Water District show that all of the storage space in the system is full as a result of all the water that has been released past Milner?

A. I don't think the whole system is full, but there are several accounts that are full.

Q. Because the teacup chart, which was another exhibit here, does that show paper fill or physical fill?

A. That shows physical fill.

Q. So it is not an accurate reflection of what you show in your accounting program; correct?

A. What we show in our accounting program is the water that was physically stored, plus the water

storage that had been released past Milner.

Q. So anything that is released past Milner does not show up in that teacup chart?

A. That's correct.

Q. So theoretically, if this spring, starting with the irrigation season, any junior user -- when I talk about junior user, I'm talking about any user with priorities behind Palisades, any junior natural flow user -- on the system can demand delivery of water before you refill these reservoirs that have been evacuated all winter?

A. If they have a water right that is in priority and in their place of use -- period of use, yes.

Q. Okay. Now, the releases this winter have not been based upon the flood control curve; correct?

A. Correct.

Q. So you talk a lot about how those are treated, but how are other releases treated -- I guess you would call this operational releases? What do you call these kind of releases?

A. In the accounting, it is simply storage past Milner. At the end of the irrigation, in 2011 on October 31st when we did our final accounting, there was some storage water that had gone past Milner in

October because of these operational releases from American Falls.

We contacted the Bureau in order to complete our final accounting to see which account that storage past Milner that was released in October came out of, and they instructed us to take it out of the carry over accounts in the American Falls Reservoir.

Q. Okay. So basically it is your position that the Water District does what the Bureau tells it to do concerning those issues?

A. No. We account from the natural flow that arises above Milner and where that is diverted. And if it is storage water that is diverted, it must come out of a storage account. If it isn't an individual canal or a pumper that has a storage allocation and is released past Milner, then we need to have the Bureau of Reclamation identify which account in which reservoir that storage came out of.

Q. Well, how do you determine if water has actually been diverted into storage versus just being released past Milner? When these releases have been continuous all winter long, how do you determine it was ever diverted into storage?

A. We determine that the natural flow in each reach above the dam when it is in priority is stored

entirely, regardless of the physical release outside the dam.

Q. So it doesn't matter if it was ever diverted into storage or not?

A. That's correct.

Q. And you may have already answered this question, but do you know the basis for -- other than the accounting program, for stating that water can be charged to diversion for storage even though it wasn't diverted into storage?

A. Well, I think the basis of that in the accounting is that the Bureau doesn't have the option of choosing not to store the water above Milner.

Q. Why not?

A. Well, I'm not sure I can explain it, but that is how it is done in the water right accounting.

Q. Yeah. I am just looking -- I was wondering for the legal authority or any authority to create or anything that mandates that they have to divert water into storage if it is available.

A. When they sat down to develop the computerized accounting in 1978, the IDWR, Water District 1, and the Bureau of Reclamation were all in agreement with doing it in that manner.

Q. I want to talk about a slightly different

issue with you, but it is kind of predicated on the same thing. Last fall during the irrigation season Minidoka Irrigation District was diverting water for irrigation and that was being charged to its storage account. At the same time junior natural flow users were diverting water. Why wasn't the water being charged to Minidoka's priority natural flow right instead of storage?

A. In that situation, we were releasing water out of American Falls, and it was continuing to go past Milner without being diverted. The water right accounting program as it is currently written, and has been written since 1978, can't accommodate that situation.

Q. Cannot?

A. Cannot. We are working on trying to change that.

Q. Okay. Basically, it was an anomaly, wasn't it when you have people with like 1980 priority dates diverting natural flow while somebody with a 1903 natural flow right is being charged storage?

A. That's correct.

Q. That would not be in conformance with your understanding of the Priority Doctrine in Idaho, would it?

A. That's correct.

Q. And just for the record, the general principle is, isn't it, that if in your accounting that if water is available to divert by a district, and it has natural flow available and potentially storage available, that you charge it first to natural flow?

A. That's correct.

Q. Okay. During your discussion of refill, you had mentioned that if water is evacuated from Jackson or Palisades -- excuse me -- dealt with flood control. If water is evacuated from Palisades or Jackson as a result of flood control, it only -- I don't want to use the wrong word -- it only is charged against storage in those reservoirs if water is spilling past Milner.

Do you remember saying that?

A. Yes.

Q. Is that because if water is not spilling past Milner, you are holding that water in a different reservoir in the system?

A. That's correct.

Q. Okay. So the water is there; it is just being held somewhere else?

A. That's correct.

Q. I'd like you to look at Exhibit 9. It's the Eagle Decree. And I'd like you to turn to Exhibit E.

MR. ORR: Is it "E" like Edward, Kent?

MR. FLETCHER: Yes.

Q. (BY MR. FLETCHER) Are you to that page?

A. Yes.

Q. Are you familiar with that exhibit?

A. Yes.

Q. You have reviewed it during the course of discussions about these storage issues, haven't you?

A. Yes.

Q. Okay. I'd like you to turn to sub B. I believe it is on page 24. I think I took my copy out of the original. What page number is yours?

A. Page 24.

Q. Okay. First of all, do you understand that this language on Exhibit E comes out of contracts between the Minidoka Irrigation District and the Bureau of Reclamation?

A. Yes.

Q. And it is attached as Exhibit E to the finding of facts to the supplemental decree?

A. Yes.

Q. I'd like you to look at paragraph sub B at the top of page 24 and tell me what you think that

means.

A. Well, it outlines the process for this exchange water between Jackson and American Falls and that the exchange shouldn't adversely affect the District.

Q. Well, doesn't it just give the District the right to ask for this exchange each year? Isn't that what it says at the top of paragraph B?

A. Yes.

Q. And do you have any idea why this language is in this contract?

A. No.

Q. Do you know what purpose it would serve to have this in the contract?

A. Well, if I was an irrigation district with space in a reservoir and there was a request to exchange that space with another reservoir, I would make certain that I wasn't being adversely affected or getting less water as a result of that exchange.

Q. Okay. If this exchange were made, who would administer that change?

A. The Bureau of Reclamation.

Q. Okay. Would the Water District have to make changes in its accounting?

A. We would probably certainly be involved in

the calculation of it.
Q. But your records would have to be changed to reflect the exchange; correct?
A. Currently, we don't calculate any exchange.
Q. Well, I know you don't currently. But if the exchange were to take place, wouldn't you have to change your records to reflect that exchange?
A. Well, I don't know of any scenario where that would occur.
Q. Okay. You don't know of any time in the past where it has occurred?
A. I do not.
(Deposition Exhibit Nos. 23-25 marked.)
Q. (BY MR. FLETCHER) So I'm going to ask you first to look at Exhibit 23, which I believe is a March 31, 1965, letter.
Is that what yours shows?
A. Yes.
Q. You have not seen the document before?
A. I have not.
Q. Okay. Can you look through it and tell me what it says.
A. Yes. This is a request to the watermaster.
"In accordance with Article 21(b) of our contract with the United States of America concerning storage

capacity in American Falls, Jackson Lake and Palisades Reservoirs, and related matters, the Minidoka Irrigation District makes the following request:
"The District requests that, to the extent of the District's use of Jackson Lake stored water in the year 1965, an exchange of Jackson Lake stored water be made for water stored to the credit of upper valley water users in American Falls Reservoir or out of any water in that reservoir that is available for exchange, to the extent there is water to effect such exchange."
Q. Okay. And Article 21(b) is making apparent reference to this same clause that we were just talking about, the Eagle Decree?
A. Yes.
Q. Same number anyway; right?
A. (Witness nodding head.)
Q. Exhibit 24 is a 1966 letter saying basically the same thing; is that correct?
A. Yes.
Q. Exhibit 25 is a 1967 letter saying basically the same thing?
A. Yes.
Q. Do you know anything about the history of the charging of conveyance losses to storage

deliveries?
A. Yes.
Q. Tell me about it. What do you know?
A. Prior to 1978, I think the Committee of Nine and the watermaster got together and voted on a percentage of loss to deduct from storage allocations to represent the conveyance loss incurred when water was being conveyed from reservoirs to the points of diversion.
In 1978, that process changed to where there was no conveyance loss charge for storage conveyance.
Q. Now, I believe in an email that you sent to Jerry Rigby you thought one of the reasons for this type of exchange would be to -- it may benefit MID to make this exchange in the event there is greater demand on storage.
Do you remember making those representations?
A. I don't recall.
Q. Does that sound logical to you that you would move the water from Jackson down to American Falls?
A. It makes the delivery easier if you are delivering it a shorter distance.
Q. And also, are you familiar with the

potential changes that are being talked about concerning the accounting system that one of the proposals may be to charge conveyance losses to storage?
A. I've heard those rumors, yes.
Q. And if, in fact, conveyance losses were charged to storage, Jackson Lake is a lot farther away from Minidoka Irrigation District than American Falls is; isn't that correct?
A. Yes.
Q. And if it can exchange its water down to American Falls, it would incur, theoretically, less conveyance losses; correct?
A. Yes.
Q. So it would be to the benefit to -- or it could be in some years to the benefit of the District to make this exchange to avoid conveyance losses?
A. Yes.
Q. So if in the future the District elects to use this right, would you agree that the Water District would need to account for that exchange as part of the administration of these rights?
A. I don't know the answer to that, but that would be an issue I would raise before it was changed.
Q. Well, if the District doesn't account for

it, who else is going to account for it?
A. Well, the District would account for the loss. The question is, who the loss gets charged to.
Q. Yeah, but I'm talking about the exchange itself. I mean, doesn't the District in administering water rights need to know where MID is holding its storage?
A. Not necessarily. The reason we don't get requests for these exchanges anymore is because it happens. We physically deliver water from American Falls to the lower valley canals whether they have space in American Falls or not. It is just the practical thing to do. You hold storage up high in the system. It satisfies the goals that have been set.

When you charge losses for storage conveyance and a canal diverts storage, you then have to identify which reservoir that storage is coming from and our current accounting does not do that. So there would need to be a change to identify where the storage is coming from, and then you would have issues such as this, Minidoka canals are using storage, should they be charged any storage conveyance loss, and then is that conveyance loss that is not charged to the Minidoka canals -- who is that spread to? So

those questions would need to be answered.
Q. I think we are saying the same thing. If those changes were made and conveyance losses are charged again, which they have been in the past, then the District would have to figure out a way to account for those conveyance losses?
A. Correct.
Q. And that would require the District as part of its administration to figure out where MID is receiving its storage from?
A. Yes.
Q. So that it could do the conveyance loss calculation?
A. Correct.
Q. And to your knowledge, there is nothing in any law or rule or regulation currently that requires the District to charge conveyance losses to the storage, or precludes it from charging conveyance losses to storage; is that true?
A. I'm not aware of any.
Q. So, I guess, to your knowledge is it the position of the director that it is a discretionary accounting function?
MR. BROMLEY: Objection. Calls for speculation.
MR. FLETCHER: Well, if you know.

THE WITNESS: I don't think the director has addressed that issue yet.
Q. (BY MR. FLETCHER) I'd like you to look back at Exhibit 9 -- Exhibit E of Exhibit 9.
A. Exhibit E, is that what you said?
Q. Yeah, Exhibit E again. The same one we were looking at earlier. Only this time I would like you to look at paragraph 22(b)(1), which is on my copy the top of page 26. And I'd like you to just review that paragraph and then tell me what you think it means.
A. Well, it is a very long sentence, and I have trouble interpreting the meaning of it.
Q. Okay. Well, doesn't it indicate that the District has the right to designate, for purposes of allocation on paper, reservoirs from which the District and its water users are to receive water and designate the reservoir in which carry over will be stored?
A. Yes, that appears --
Q. To your knowledge, does any other storage holder have that language in their contract?
A. Not that I'm aware of.
Q. Okay. Isn't it true that in the past, at least in the rental of water, the District has designated the storage it wants it rentals pulled out

of, or do you know that?
A. It does not designate the storage from which the water comes from.
(Deposition Exhibit Nos. 26-28 marked.)
Q. (BY MR. FLETCHER) Going back to what we were talking about, you said that MI -- do you remember what you said when I asked you about designating storage?
A. Yes.
Q. What was your answer?
A. My reply was that you are not allowed to specify the space from which your rental is coming from or going to.
Q. And when you say you are not allowed to, are you saying the accounting program does not authorize that?
A. One of the current rental pool procedures -- there is no provision for doing that, and the reason for that is because of the way the accounting works. You could submit an assignment and say, I want to assign my water out of Palisades Reservoir, but since the rental water is the first water used, and you have water in American Falls Reservoir, which is the easier to refill reservoir, according to the Bureau of Reclamation carry over rules, which are embedded into

the accounting program, your usage of storage would come out of American Falls and not necessarily out of Palisades.

It could be a wash. If you ended up using all of your American Falls storage for your own irrigation purposes, the net result might be that the rental causes a reduction in the carry over in Palisades that you otherwise wouldn't have.

But the reason why we don't have you designate from where the storage is coming from is because of that inconsistency. Where the carry over rules provided by the Bureau, which are embedded in the accounting don't allow for you to designate which of your space, if you want space in more than one reservoir to use your storage from.

Q. Okay. But the Bureau has entered into a contract with Minidoka Irrigation District that does allow it to designate its storage; correct?

A. Well, it is in the Eagle Decree, but it has never been a part of the water right accounting program.

Q. Okay. So, I mean, based upon what you said earlier about the accounting program, the accounting program can be modified to recognize various rights, just like you are trying to recognize the recharge

right of the state right now; correct?

A. It could be modified.

Q. Okay. I think you said that MID is not allowed to designate. Isn't it true looking at Exhibit 26, 27, 28 that it did in fact designate the reservoir from which rental water would be taken from?

A. Yes. In these old rental pool procedures, the form allowed you to do that, and I pointed out to the watermaster that the accounting program didn't accommodate that necessarily, and so the procedure was changed.

Q. Okay. But MID's contract wasn't changed to your knowledge; correct?

A. That's correct.

Q. And the provisions of the Eagle Decree were not changed; correct?

A. Correct.

Q. And if the court determines that this type of language should be included in the water right, then the Water District would have to administer that designation by MID; correct?

A. If that was decided by the director, yes.

Q. So it would be necessary for administration to have this type of language within the decree for the Water District to carry it out?

A. If the water right carried the same provisions as the contract.

Q. Okay. I'd like you to look at paragraph 27(a) of the same Exhibit E that we've been looking at -- Exhibit E of the Eagle Decree, and it is clear back on page 38.

And I think you've talked about this type of provision before. If you need to read through it, I'll give you a minute.

A. And this is paragraph 27(a)?

Q. Yes.

A. And this provision basically sets forth what I talked about, I think, earlier that the goal is to hold water as high in the system as possible and allows temporary exchanges in order to do that?

A. Yes.

Q. Would that be a fair assessment of what the paragraph is all about?

A. Yes.

Q. Other than the contracts -- because this -- let me back up. This type of language is in most contracts to your knowledge, isn't it? Or do you know?

A. I don't know.

Q. Okay. Other than the contracts and the

Eagle Decree, do you know of any provision that would allow the watermaster to do these types of exchanges -- any law or regulation or accrual?

A. No. The current accounting system is all based on the original meeting with the Department and the Bureau of Reclamation in 1978 when it was formulated.

Q. And if the fill of reservoirs was based solely upon priority, what would the result be on how things fill -- how the system filled?

A. If it was just based on priority, we wouldn't have flood control, and it would probably result in water being sent downstream instead of being held in upstream junior reservoirs, and may result in a reduced storage allocation.

Q. And the people that it would hurt the most is the junior storage holders; isn't that correct? If you look at the priorities in the system, Jackson would be filled without release; correct?

A. Yes.

Q. And then Walcott would be filled; correct?

A. Correct.

Q. And then American Falls would be filled?

A. Correct.

Q. And then you'd start diverting to Palisades?

A. Yes.
Q. So the physical fill would follow the priority; correct?
A. Correct.
Q. Okay. Doesn't holding water up in the system benefit junior users?
A. In most cases, yes, I would agree with that.
Q. And getting back to my question on this, other than the Eagle Decree and the contracts, is there anything that you are aware of that would authorize the Department to make these kinds of temporary exchanges?
A. No, I'm not aware of any additional --
Q. If this language is not referenced in the water right, will the Department change the way it administers storage rights?
A. No.
Q. Why not? Well, what would allow you to do it any other way besides priority if this language is not in the water right?
A. Because by holding the water up high, it maximizes at amount of water in the system, and that is a benefit to the system, and we would do it regardless of whether the language was in the Eagle Decree or not.

Q. What would allow you to do that?
A. I don't know of anything that would allow us not to do it.
Q. Well, if I'm a spaceholder -- theoretically, if I'm a spaceholder only in American Falls, what would give you the right to hold my water anywhere other than American Falls, if you don't have this language in the water right?
A. Just because you are a spaceholder in American Falls, I don't think you can force the water to be held physically in American Falls. If it were held in another upstream reservoir and there was no adverse affect to you, I don't know why you could force that water to be held in American Falls Reservoir.
Q. Well, I don't have a right to store water anywhere except for American Falls Reservoir under that example.
A. Well, that's the purpose of the remark, to clarify that there is the ability to store water in any reservoir above Milner.
Q. Okay. And the basis for that remark is the Eagle Decree and the contracts with the Bureau?
A. Well, the contracts for the Bureau say that, and the practice was done before the Eagle Decree, so

it wasn't the Eagle Decree that originated the practice.
Q. Well, the contracts predate the Eagle Decree too; correct?
A. Correct. But if it weren't for the contracts, I'm not sure that we still wouldn't be using the same procedure to store water.
MR. FLETCHER: I don't think I have any other questions.
MR. THOMPSON: I've got a quick follow up on one exhibit if I can go through it based on Tom's discussion.
(Deposition Exhibit No. 29 marked.)
FURTHER EXAMINATION
QUESTIONS BY MR. THOMPSON:
Q. Tony, Travis Thompson again. Just a quick follow up with the discussion you had with Mr. Arkoosh about the District giving direction to Art Larsen in the '70s.
Have you seen this exhibit before?
A. Yes.
Q. Is this the letter you were referencing in response to Mr. Larsen's question -- I guess, the director's response.
A. Yes.

Q. And to your understanding, I guess, in that second full paragraph where it talks about American Falls physically filling upstream credit, do you understand what they are discussing there?
A. Yes.
Q. What do you think that was, or can you describe that?
A. In the paragraph it starts, "Holding the water in the upstream reservoir with credit to downstream storage rights is good water conservation practice, and it should be continued for the benefits of all water users in the Upper Snake River Basin." And that refers to when we are filling the 1921 American Falls storage right, the water that arises above Jackson or Palisades may be physically stored in those reservoirs before it has a chance to be physically stored in American Falls.
Q. So it would relate to that remark that we discussed earlier today about the temporary upstream storage under a water right in a different reservoir?
A. Yes.
Q. What is your understanding about that second sentence about any time American Falls physically fills, upstream credit is voided?
A. That goes back to the practice of -- it

applied to both Island Park and Palisades Reservoir. When the American Falls storage right was full, and Island Park and Palisades were holding water to its credit, and there were additional gains that came in from Blackfoot River, Portneuf River that would physically fill American Falls, at that time American Falls paper contents would equal the physical contents, therefore the storage that Palisades and Island Park had previously held to credit American Falls now does not get credited to American Falls, but rather it gets credited to some junior user.

Q. So when American Falls would physically have the 1.7 million acre feet available to spaceholders in American Falls, those credits in the upstream reservoirs would go away and that storage that was credited to American Falls would then be credited to Island Park or Palisades at that time?

A. Correct.

Q. And then can you look at that following paragraph and kind of explain it.

A. "Once filled each season, American Falls Reservoir should not be allowed to refill at the expense of junior users, except for the storage right provided under Water License No. 15134. Once American Falls Reservoir has filled either physically or with

upstream credits, storage should be restricted subject to filling all junior rights. Therefore, the practice of filling American Falls Reservoir with a subsequent drawdown and then calling on water in other reservoirs to refill American Falls, should not be allowed to continue."

Q. And was this getting back to your example when we talked about refill prior to this time frame in American Falls where refill of the American Falls right for storage that may have been used early in the year would fill ahead of the first accrual to Palisades storage?

A. Yes.

Q. And so the director's direction in this letter is to not refill American Falls water that has been used from, would you understand upstream reservoirs -- upstream junior reservoir space?

A. Yes. The purpose of the letter was to cease the practice of giving credit to the American Falls refill ahead of the initial fill at Palisades Reservoir.

Q. Is there anything in this letter or to your knowledge at that time that would go to the refill of evacuated flood control space, since we know American Falls isn't operated for flood control?

A. No. I don't think it refers to the flood control space.

Q. And is there anything -- I guess, other than referencing junior rights, do we know what junior rights this letter was directed at?

A. It says all junior rights.

Q. And at that time any rights junior to American Falls priority, is that what you would understand?

A. My understanding is it is all junior rights, which would be any right junior to the American Falls priority.

Q. Okay. And so the practice that changed at that time with the Water District based upon the direction from the director, is it your understanding that this was limited to physical refill of American Falls storage that had been used previously in that irrigation season?

A. Well, that was the reason for the question, but I think it applies to all reservoirs.

Q. And you stated that it didn't -- nothing in here mentioned application to flood control space. What makes you say that, that it applies to all reservoirs?

A. Well, that -- that was the concept embedded

into the water right accounting program in 1978.

Q. Okay. So the basis for the change to apply to all reservoirs happened with the accounting program?

A. Well, I think the basis is this letter.

Q. And is this letter limited to American Falls Reservoir?

A. Well, the letter only talks about American Falls Reservoir, but the principle was applied to all reservoirs.

Q. And have you seen that principle, I guess, formally -- some formal direction, letter, memo, otherwise from the director as to Palisades, or as to Jackson?

A. No. I haven't seen a letter from the director pertaining specifically to those reservoirs.

MR. THOMPSON: That's all I have. Thank you.

MR. ORR: Let's take a short break while I get copies from out here.

(Recess taken from 3:59 p.m. to 4:05 p.m.)

EXAMINATION

QUESTIONS BY MR. ORR:

Q. Tony, I'll identify myself for the record, even though we know each other. I'm Michael Orr representing the State of Idaho in this matter. What

I'd like to do is go over some subjects that have already been covered. Based on prior testimony and questions, I have a few questions and clarifications. I'd like to see if we can work through it. And because of the course of how subjects have arisen, I may end up jumping around too, and I apologize for that. I'll try to do my best to keep things organized. But we may jump around a little bit.

And just right off the bat, I would like to touch on a point that was just recently raised. And pursuant to that, I have got an exhibit here.

(Deposition Exhibit No. 30 marked.)

Q. (BY MR. ORR) Do you have it there, Tony?

A. Yes.

Q. Okay. I think you were asked regarding Exhibit 29, a letter from Director Higginson to Watermaster Art Larsen about his continuing the practice of refilling American Falls Reservoir in priority. If there was -- I'm probably going to misquote this, but if there was any basis for extending that policy to other reservoirs in connection with that point, I'll direct you to the third paragraph down on this document, which is entitled "Minutes of Nine Meeting Minutes, September 21, 1979." And maybe if you could just read that

third paragraph to us.

A. "Lester Saunders asked the Director of the Department of Water Resources, Stephen Allred, to explain the watermaster's process for crediting water to the reservoirs. Steve explained that any water available at a reservoir for storage is credited to that reservoir storage right. Once a right is filled on paper, even if water has been released and additional space is available, the priorities of the reservoirs are considered to no longer be in effect. This is offset by the fact that any diversion which takes over its natural flow entitlement is charged with storage used. Steve explained that there are alternatives to this approach, but this is the best accounting method for showing what is happening in the system. Steve stressed that the computer only does the accounting and does not eliminate the need for human judgment."

Q. Thank you. So my question regarding this paragraph, does this seem to you to be the director extending or recognizing the extension of the policy of the 1970 letter from Director Higginson to Larsen extending that policy of that principle of that letter to all the reservoirs?

A. Yes.

Q. Okay. We might come back to this one a little later, but I wanted to get to that point at the outset.

Returning back to some other things that have been covered. I'd like to ask you to discuss a little bit more the distinction what Water District 1 does and what the Bureau does. What Water District 1's duties and responsibilities are, and what the Bureau's responsibilities are, particularly with reference to the distinction between natural flow accounting and storage accounting.

A. We calculate the reach gain in each reach of the river. The sum of the reach gains is the natural flow available to water rights. The natural flow is then distributed in the accounting program to either storage rights that are in priority or other natural flow diversions such as irrigation canals. That process is independent of the physical releases determined by the Bureau of Reclamation out of the reservoirs.

If the water accounted for on paper accrues to a storage account and that water passes Milner, the accounting program has a sum total of that storage that was released past Milner, but does not identify which reservoir it came out of.

Q. Okay. So the watermaster determines, if I'm correct, for any given diversion what portion of it is natural flow and what portion of it is storage on any given day; is that right?

A. That's correct.

Q. Why do you have to go beyond that and determine whose storage it is charged against, which reservoir it comes from? What involvement does the watermaster have with any of that? I guess I shouldn't say what involvement. Why is the watermaster involved in any of that?

A. Well, the watermaster has to explain to the water user the total amount of storage that that has been allocated to. That is one reason.

The other reason would be if there is a rental involved, if the water user decides to rent his storage, there can be impacts from that rental. That would be another situation where the watermaster would have to get involved as to which reservoir the water right came out of.

Other than that, the water user doesn't care where the storage water is coming from as long as it is delivered to him.

Q. So the water user's storage allocation or account is pursuant to a contract with the Bureau of

Reclamation; correct?
A. Yes.
Q. Why don't they go to the Bureau to figure that out? Why does the watermaster answer for it?
A. The watermaster in the accounting makes the daily calculations of water credited to the storage accounts. It is the Bureau that identifies how that water in each storage account should be divided up amongst its contracted spaceholders.
Q. So let's go back and talk about accounts. It sounds like there is more than one account here. Can we talk about water right accounting. A storage account, if I'm hearing you right, can be the amount of water that accrues to a reservoir right, but it can also be a storage accounting sometimes to identify storage allocation for an individual spaceholder in a canal; is that right?
A. That's correct.
Q. So we have to be careful about using the term "storage account." It doesn't really have a firm agreed upon meaning. It can be ambiguous. It has to be defined with respect to which type of account you are talking about, a reservoir account, which is a water right; or a contract storage account, which is something else; is that correct?

A. That's correct.
Q. So once the reservoir water right has filled -- and I don't want to beat a dead horse here. I'm just trying to understand -- why isn't the Bureau accounting for the storage use by each spaceholder? That seems to be a matter between the Bureau and the spaceholders. Why is the watermaster getting in the middle of that? I thought they stopped at the head gate.
A. Well, the storage is delivered to the head gate. The Bureau of Reclamation doesn't calculate the natural flow each day. So when water is being diverted at a head gate, the Bureau of Reclamation doesn't know whether it is storage water or it is master flow. The watermaster determines that.
Q. Why doesn't he stop and say, you have "X" natural flow and "Y" storage; you guys figure out between yourselves whose water it is and who it comes from; my job is done? And, again, I'm asking these questions to try to understand how it works.
A. Well, I think up until about 1980 the watermaster simply kept track of the natural flow in the storage, and it was the Bureau that sorted out the storage allocations. The watermaster simply provided the Bureau with the total reservoir fill, and the

Bureau would decide -- divide up those portions to its spaceholders according to the contract, and then at the end of the year, it was the Bureau that determined where the carry over was held of all those individuals.
I think it was in about 1980 where the Bureau, the Department, and Water District 1 got together and decided to put that process into this Water District 1 accounting. So now we have not only the daily water right accounting that computes whether or not a diversion is diverting natural flow or storage, we also have this storage report that takes the total reservoir accrual that's imported into the storage report and then divided up amongst the individual spaceholders according to the way the Bureau used to divide it up according to its contracts.
Q. That changed in 1980 approximately?
A. Approximately.
Q. Do you know why it changed and what the change was?
A. I don't know. I can only speculate that it was just easier for the watermaster to be in charge of all the calculations in coordination with the Bureau.
Q. So there is the water right accounting

program, and there is the storage report. Those are two different programs?
A. Yes.
Q. The storage report, if I'm understanding you correctly, accounts for individual spaceholder's storage usage pursuant to their Bureau contracts?
A. Correct.
Q. And prior to 1980, the Bureau used to handle what the storage report handles now, the accounting for individual spaceholder's storage usage?
A. Correct.
Q. So have the individual spaceholders acquired stand alone water rights to the storage that the watermaster is administering, or is the watermaster essentially administering contracts for the benefit of the Bureau?
A. Well, the watermaster administers the fill to the reservoir storage account.
Q. And that would be under the water right accounting program?
A. And that would be under the water right accounting program. That total accrual to the reservoir storage water right is then distributed to the contract spaceholders according to this storage report.

Q. So if I'm understanding you correctly, the storage report accounting for storage usage is separate from water right administration?
A. The daily water right accounting program would certainly be considered water right administration. The storage report is just the distribution of that total quantity of water that was delivered to that reservoir storage right.
Q. And the distribution of the water that accrues to a reservoir storage right is controlled by the contracts between the Bureau and the spaceholders; correct?
A. Correct.
Q. So what happened in 1980, that is, the change from having the Bureau make those -- doing the storage report accounting to having Water District 1 do it, was a matter of convenience; is that correct?
A. I can only speculate. I don't know the reason, but that's the most likely reason that I can think of.
Q. Are you aware of any documents that record why it was done, why this change was made in 1980, any statutory changes, any orders from the director, anything of that nature?
A. No.

Q. To your understanding as you view it, is Water District 1 accounting for storage use in the storage report because Water District 1 is now in charge of that determination, or alternatively, it is simply doing it to assist the Bureau?
A. It is doing it to assist the Bureau.
Q. So does the Bureau still have final say over the charges and accounting in the storage report? Do they have final authority to approve it or change it even from how Water District 1, I don't know, sets it forth?
A. Yes.
Q. How is that done? Is there some kind of approval loop? Do you send the storage report to the Bureau? How do they review it and change it?
A. Yes. When we run the storage report twice during the year, once is on the day of allocation. We are in communication with the Bureau of Reclamation at that time. They approve it verbally, not written. And then again at the end of the year, after we've completed our daily final accounting, we complete a draft storage report that we post on the web for Fremont-Madison, for our water users and the Bureau of Reclamation to review. And, again, that is approved by the Bureau of Reclamation verbally, not in writing.

Q. But it is your understanding that the Bureau has the authority to approve or change the storage report?
A. Yes.
Q. So prior to the 1980 shifting of the storage report from the Bureau to the Water District 1, to what extent did the watermaster keep track of individual canal or spaceholder storage accounts, if at all, if you know?
A. The way I understand the process was the watermaster would calculate the fill to the reservoir storage right. He would then forward that to the Bureau of Reclamation, which would issue their storage allocations to individual spaceholders.
The watermaster would then use that to determine whether or not a canal or a water user had exhausted its water supply, which could include both natural flow and storage allocation.
As long as the water user didn't exceed its storage allocation, even though that may be comprised of several different reservoir spaces, there was no involvement from the watermaster, and then at the end of the year, he would forward the information of storage used by each water user, and the Bureau would calculate where the water was held, the carry over was

held in each reservoir.
Q. So for purposes of regulation in terms of something like curtailment, in that situation the watermaster would have to know if an individual spaceholder or canal had any water, or how much water they had in their storage account?
A. That's correct.
Q. Okay. I believe earlier today you testified that the storage report program and the water right accounting program provide data to each other or fill in variables to each other.
Do you recall that?
A. Yes.
Q. Can you describe exactly how that works and what that interconnection or cross referencing would be.
A. Yes. Start at the beginning of the irrigation season on November 1st. We import the carry over information from the previous year's storage report, so that we know how much empty space is in each reservoir account, so we can fill that in our daily accounting.
So once that information is imported into the daily accounting on November 1st, then we run our daily accounting as it measures the daily natural flow

available and the new accrual or fill into those water rights. We reach a point called the day of our allocation after Milner spill has ceased after we have stopped accruing any reached gains into any of the storage of any water right accounts, and after we've reached our maximum reservoir contents, at that point we know how much water we can allocate. If it doesn't match the amount of water in the system, then we contact the Bureau. And if there is a shortfall, we ask them from which account do we deduct the shortage.

Q. Are you talking about reservoir accounts, spaceholder accounts? Which type of accounts are you referring to?

A. We are talking reservoir accounts.

Once we have that information, we then take that amount that is credited to the storage water rights, and we put that into the storage report along with an estimated value of evaporation for the remainder of the year that is deducted from the storage accounts. And that program calculates the individual amounts that will be allocated to the various spaceholders according to the Bureau's direction.

Once that is done, then that data, that net amount allocated to each spaceholder, which may be

comprised of multiple reservoir accounts, or portions of, then that net value is then imported back into the daily water right accounting program so the watermaster can use that as the total, and the water user can also use that to determine how he is going to manage his water supply and for the watermaster to determine when that diversion has exhausted its storage supply and would be limited to only natural flow after that point.

Q. Okay.

A. And then, I guess, the last step is at the end of the year, then the total storage use from each diversion is then imported back into the storage report. It is deducted from the allocation, according to the procedures that were outlined by the Bureau of Reclamation for their carry over procedures, to determine where the carry over is -- or the amounts of carry over and each reservoir storage account, so we can then take that value to start our following years -- our water right accounting on November 1st. So that's the full circle.

Q. Okay. Administering the reservoir rights, filling them is a separate thing than accounting for individual storage use under those rights; is that correct?

A. That's correct.

Q. We have natural flow administration, and the reservoir rights are filled with natural flow. And then on the other hand, we have storage administration, which is primarily a Bureau -- an area that falls under the Bureau's contracts with the spaceholders, and that's a separate issue, but the watermaster as a matter of convenience does track it in the accounting programs; is that correct?

A. That's correct.

Q. Mr. Fletcher discussed the accounting programs. This is probably a good time to raise this point. I think everyone was in agreement that the accounting programs don't define the rights. As I understood it, that was your position at least.

My understanding of the accounting programs is that they reflect an interpretation of the water rights and how they are to be administered. Would you agree with that statement? And if not, tell me how it is not right.

A. Those would not be my words.

Q. Let me know how you would put that.

A. My words would be that the water right accounting program calculates the gains based on this inflow, outflow equation. Those cumulative gains are

defined as natural flow. The natural flow is then distributed according to the priorities, the locations, amounts and volumes described in the water right.

Q. Let me get a more concrete example here and see if I wrote this down right. Well, this isn't real concrete, but I'll try it this way. I heard you testify in response to a couple questions, which unfortunately I don't have in front of me. Words to the effect of, that is not how we do it in the accounting. Now, my understanding of when you said that was not that you were saying the accounting is the legal authority for administering water rights, that that is not what you meant.

Does that sound correct to you?

A. Could you ask the question again?

Q. In response to some questions from, I think, from Mr. Fleshier and maybe others earlier, I heard you say, well, that is not how we do it in the accounting, the administration type questions.

When I heard you say something like that, I was assuming that you meant -- or I was assuming that you did not mean that the accounting is the legal definition of the right. That that is not what you are trying to say. This question may be too abstract.

I don't know. Let me know if it doesn't work.
A. The accounting is not the legal definition of the water right. I agree with that.
Q. So the accounting program, as you just described it a few moments ago, doesn't it embody some decisions or determinations that have been made about how the water rights are to be filled and administered, for instance, Mr. Fleshier referenced that sometimes there are textural conditions in water rights that have to be incorporated in the accounting. It is not all just fill-in-the-blank elements.
Does the accounting program reflect any of those such conditions, provisions, or interpretations of water rights?
A. Yes. And if it didn't, and a water right owner didn't feel that the accounting was distributing their water right correctly, they certainly have the opportunity to complain to the District or to the director to have that changed.
Q. So any provisions of the accounting program that contain such interpretations are just -- correct me if I'm wrong -- are simply that; they are just interpretations that have been made and coded into the program. Someone somewhere made a decision about how to code the provision of the decree in. That's all it

means; right?
A. That's correct.
Q. And to the extent it makes an incorrect interpretation, that's always open and subject to change?
A. That's correct.
Q. I'd like to ask you to pick up Exhibit 9, the Burley Eagle Decree.
Do you have that?
A. Yes.
Q. And I'm looking at what on the bottom is numbered page 19. On page 4 -- I'm sorry -- page 19, up at the top, paragraph 4, would you read that first few lines.
A. The fourth paragraph of 17?
Q. 19 -- page 19.
A. It is page 19, but Exhibit A starts with paragraph 17?
Q. Maybe I'm looking at the wrong one.
MR. FLETCHER: No. He's talking about the actual body of the decree, page 19.
Q. (BY MR. ORR) Yeah. Exhibit 9, page 19. From what I've got, that's the body of the decree.
A. Oh, okay. I'm on page 19.
Q. Paragraph 4.

A. Okay. Would you like me to read it, or what was your question?
Q. Sure. Go ahead and start reading paragraph 4, if you would.
A. "That the contracts entered into between various of the parties, plaintiff, and the United States of America, Bureau of Reclamation as the same have been amended and modified in connection with the Palisades project and other projects, were intended to be and are binding upon all persons claiming the rights to the use of the water to the Snake River and its tributaries above Milner Dam and constitute a common plan for the administration of the Snake River."
Q. Okay. And then the next paragraph, if you just -- I'll read along here with you. Paragraph 5, "That the following provisions of the contracts as amended, which provisions are common to each amended contract entered into between each party thereto, the United States of America, Bureau of Reclamation, are hereby ratified, confirmed, and approved."
Now, below that there are subsections that are lettered A, B, C, D. Can you tell me what those little subsections numbered A, B, C, and D are referring to?

A. "A" is relating to the winter water savings storage right.
Q. And does it identify an exhibit that goes with that?
A. It says, "A copy of a typical example of such a common paragraph is attached hereto as Exhibit A and by this reference made a part hereof as though set out in full herein."
Q. And I'll ask you just to look at each B, C, and D and ask you if they are generally the same, if they identify provisions relating to, and then describe subject matter, and then state that a copy of the typical example of such is attached hereto as an exhibit; is that what each of those provisions does?
A. Yes.
Q. So looking at this, would you conclude that the exhibits to the Eagle Decree are simply examples?
A. That's what it says.
Q. And what does this page, by your reading, identify as being the binding language? Is it the examples or the contracts themselves?
A. Well, it would be the contracts themselves.
Q. Do you know how many Palisades contracts there are, contracts that are referred to on this page?

A. I don't know how many Palisades contracts there are.
Q. So I take it you haven't reviewed each of them?
A. I haven't.
Q. Do you know if these exhibits are in fact typical examples of those contracts?
A. I don't know.
Q. Is it possible that the wording on some of the contracts departs from the wording in some of these examples?
A. Yes, it's possible.
Q. Would it be fair to conclude in your mind that what is -- this decree actually says its controlling -- is it the substance of the contracts that that's where you would look for purposes of these particular provisions?
A. Yes.
Q. So if you were to advise, let's say, an employee or someone who was working for you to administer pursuant to the Eagle Decree, does it make any sense to stop at the Eagle Decree? Don't you have to go to the contracts themselves?
A. If it were me, I'd advise my employee to call the Bureau of Reclamation and ask them how it

should be done, because they are the ones responsible for administering contracts.
Q. So this is really a contract administration contract, this Eagle Decree?
A. Yes.
Q. To your knowledge, Tony, does this decree -- Exhibit 9, does it purport to define the American Falls Reservoir storage rate or the Palisades storage rate?
A. It lists the same amounts and quantities as listed on the license.
Q. Can you show me where.
A. No. I only see natural flow rights that are assigned to the canals.
Q. So you don't see the American Falls storage right or the Palisades storage right defined anywhere in this decree?
A. No, I don't.
Q. The supplemental Eagle Decree, Exhibit No. 9, if we go back to the second half of it and look at the exhibits that are appended to it, for instance, Exhibit A, Exhibit B, Exhibit C, et cetera, isn't it true that each exhibit simply identifies itself as an excerpt from a contract between the Bureau and the spaceholders?

A. Yes.
Q. The American Falls and Palisades storage rights haven't been decreed yet. They are only licensed. I think the license for the American Falls right is in the record, and maybe the Palisades right.
Do those licenses contain any of these contract provisions?
A. No.
Q. Have the rights been administered successfully even though those licenses do not contain those provisions?
A. Yes.
Q. I think a little bit earlier Mr. Fletcher referred to administering the reservoir rights solely on the basis of priority, and I think by that he meant without reference to any of these provisions, but I could be wrong. And he pointed out, if I remember correctly, that a spaceholder might be able to object to holding water up high in the system -- the practice of holding water up high in the system if such was contrary to priority.
Do you think the spaceholders who are parties to this decree in the contracts have forfeited their right to lodge any such objection, that they have agreed to holding water high in the system?

MR. FLETCHER: I'm going to object. That calls for a legal conclusion.
MR. ORR: Well, yeah. That is unartfully worded. Let me say it again.
Q. (BY MR. ORR) Do you believe the spaceholders are bound by their Palisades contracts and by the decree if they were a party?
A. I didn't hear the last part of that question.
Q. Do you believe the spaceholders who signed their Palisades contracts that contained the provision allowing water to be stored up higher -- high in the system in contravention of priority, arguable, do you believe they are bound by that provision?
MR. FLETCHER: Again, same objection.
THE WITNESS: Yes.
Q. (BY MR. ORR) And if such a spaceholder were to object to -- to come to you and say, you can't allow them to store water that way consistent with the provision of holding water high in the system, arguably a contravention of priority? If a spaceholder that was subject to such a contract came to you with that objection, would you have a response to them?
A. My response would be to them that I would

think there is no basis for their objection, but they could forward that objection to the Director of the Department of Water Resources for determination.

Q. Would you also direct them to the Bureau?

A. Yes. If they think the Bureau is violating their contract.

Q. So the numbered exhibits that have been introduced into the record that contain copies of exhibits to the Burley Eagle Decree -- for instance, I think, as examples, Exhibits 13 and 14, and there are others. I believe that when asked about those exhibits, you testified that implementing them would be part of the administration of the storage water rights.

Based on what you've told me about the distinction between natural flow administration and storage contract administration, wouldn't these exhibits to the Burley Eagle Decree, Exhibit 9, be part of storage contract administration rather than natural flow water rights administration?

A. Yes.

Q. I'm going to change course here a little bit here, Tony, just because my notes do. This morning, and I'm going to read from a direct transcript that the reporter printed out for me. The question was

posed to you, and I'll just read the transcript here.

"Question: We talked about this earlier before and, I guess, is there a difference as to how you administer natural flow rights as opposed to storage water rights?

"Answer: Yes.

"Question: Can you explain that a little bit.

"Answer: The difference is that if a natural flow right for irrigation is not being diverted, it is not charged against its volume of limitation if it has one. With the storage rights, if the Bureau of Reclamation chooses not to divert, unless it can run completely out of the system, that water right is charged against the volume of limitation in the water right."

Do you recall the discussion?

A. Yes.

Q. And I think you revisited this point with Mr. Fletcher this afternoon. As I understand it, with the discussion here is predicated on the idea that if a natural flow right doesn't divert, it is not charged, but if a storage right doesn't divert, it is charged; is that what you were getting at?

A. Yes.

Q. Okay. Are you personally familiar with the dams, say, at Palisades and American Falls? Have you seen them?

A. Yes.

Q. Can you describe them for me, the general appearance.

A. They are large earth and concrete structures that span the length of the Snake River and back water up, have roads going over the top of them.

Q. So how is it the Bureau could choose not to divert if there are river wide dams that block all inflow?

A. All the water has to pass through the dam. I think the assumption by many people, including myself, is that if water is released from the reservoir, that component may not be stored water. It may be natural flow water passing through the system.

Q. Passing through the system. So it is natural flow that is not diverted, but is simply passed through the reservoir; is that --

A. I think that's the interpretation by a lot of people.

Q. Is that what physically happens?

A. What physically happens is that water comes in on the upstream end of the reservoir. There is

water held in the reservoir, and there is water released from the reservoir, and I don't think you can identify without a doubt as to whether or not the water coming out of the reservoir is previously stored water or is water that is coming into the reservoir.

Q. When you say "previously stored water," is that an accounting term of art? Is it a physical storage term? What do you mean by stored water in that sense?

A. Well, it could be both.

Q. What's the difference?

A. Physically stored water is water that is just held in the reservoir. I don't know if you would assign a time period to that, whether it could be for one day, one hour. I don't know what the definition would be.

In our accounting, it is over a 24-hour period, and it is water that accrues to the water right account that is not necessarily held in the reservoir.

Q. So if I'm understanding you right, based on what you just told me in the description of the dams and reservoirs, all the inflow is physically diverted into the reservoir. Regardless of how it is accounted for, that's physically what happens; correct?

A. It has to go into the reservoir, that's correct, in order for it to go out of the reservoir.
Q. There is not a natural flow channel down at the bottom or a tube that pipes that inflow out to the other end; all the inflow is physically diverted into reservoir?
A. Yes.
Q. And then some water is released out of the reservoir at the dam?
A. Yes.
Q. So when you were referring to earlier in the statement that I quoted from the draft transcript that if the Bureau of Reclamation chooses not to divert -- well, I was going to try to put words in your mouth, but I'll just ask you if you would like to elaborate on that statement given this discussion we've just had.
A. The scenario that I was envisioning in my mind was American Falls Reservoir this winter, for example. There may be 3,000 CFS coming into American Falls Reservoir from the Snake River. There is 3,000 CFS being released from American Falls Dam. The storage reservoir remains level. There is no change in content. That's what I was envisioning when I was saying that the Bureau was choosing not to store the

water.
The same amount coming into the reservoir is the same amount going out of the reservoir, and there was no net increase in the reservoir contents.
Q. So would it be safe for me to assume that whenever during the course of this deposition you have referred to the Bureau of Reclamation choosing not to divert that, what you just described to me is what you are talking, that it is choosing not to change the reservoir elevation?
A. I think it even goes further than that. I think it is choosing not to shut the release of the dam down to zero.
Q. And as a factual matter is it not correct to say they are not diverting; in fact, they are. What you are describing really goes to how much they choose to release.
A. Yes.
Q. So another way to put it would be to say, when water is being, quote, passed through the reservoir or the Bureau is choosing not to divert, it is really an accounting term. It doesn't actually refer to what is physically happening to the water.
A. The releases at the dam are what is physically happening, but doesn't necessarily

correspond to the water right accounting where it may show zero flow going past the dam, because it is all being credited to a storage account.
Q. I didn't word my question very well.
What I'm getting at is when -- again, this statement that the Bureau chooses not to divert isn't the expression that water is being, quote, passed through the reservoir similar, in fact, it is being diverted into the reservoir. You just got releases that are identical in quantity to that given inflow.
A. (Witness nodding head.)
Q. Is that a "yes"?
A. Yes.
Q. So in Idaho, to divert water into a reservoir, do you need a water right to your knowledge?
A. Yes.
Q. So regardless of whether we have water being passed through, quote, from an accounting perspective, or, quote, the Bureau chooses not to divert, in fact, they are diverting and storing all the inflow, and they need a water right to do that; is that correct?
A. Yes.
Q. Going back to the draft transcript, earlier today you were asked, are you aware of the basis for

that different accounting between charging for -- not charging for natural flow rights that choose not to divert and not charging for storage -- or charging for storage when they choose not to divert. You answered, no, you weren't aware of any basis.
Doesn't what we've talked about here explain the difference, in other words, that the Bureau is always diverting, and that's why they are charged even if it is from an accounting standpoint a, quote, pass through?
A. I've never heard that explanation until now, but I don't disagree with it.
Q. So do I understand you to say that you think that that is a legitimate explanation for the, quote, difference, unquote, between charging for storage and natural flow under those circumstances?
A. Well, as you've explained it, there really is no difference. The water in the accounting is what is being diverted by the Bureau according to the explanation that you just gave.
Q. If I understood you right, you agree, that is what is physically happening, they are diverting water? From an accounting standpoint, they may be releasing just as much, but the fact is they are diverting that water?

A. Yes.
Q. This next question may be hard to recall, so I'll take a stab at it. I believe when you were having a discussion with Mr. Thompson earlier, he asked you a few questions that I didn't copy down verbatim, but I'll take a stab at it here. Something to the effect of would you agree that it takes more water than what is on paper to fill the reservoir after a flood control release.
Do you recall discussions to that effect?
A. Yes.
Q. That confused me greatly. I didn't understand what either of you were talking about. If you recall what that was about, would you explain it to me?
A. Yes. Probably the best way to explain it is to use an example. If our system only had one reservoir, and that reservoir capacity was 1.7 million acre feet, if you shut the releases of that down to zero, it would take 1.7 million acre feet to fill that reservoir if you started with it empty.
Let's say you had some flood control provision to evacuate 700,000 acre feet, so you had to draw down that reservoir -- after it already filled -- down to 1 million acre feet. If you didn't get any

additional inflow into that reservoir, we could only allocate 1 million acre feet to the spaceholders.
But if the snow melt follows that flood control release and there is surplus water, to completely refill that reservoir up to the 1.7 million acre feet capacity, you initially had 1.7 million acre feet of water in the reservoir, you drew it down by 700,000 acre feet, and then because of the surplus water that came in later, you captured an additional 700,000 acre feet. Well, when you add that additional 700,000 acre feet to the 1.7 million acre feet that you started with, that net amount is greater than the capacity of the reservoir, and that's how I saw the answer to that question.
Q. Let me see if I can paraphrase this to see if I understand. So in such a situation as you just described, the reservoir fills, and because there is no releases from it during the fill period, the right has also filled, and then you release some of the water, evacuate some of the space, in order to fill the individual spaceholder allocations 100 percent on the date of allocation, you would have to store more water than the right authorizes; is that correct?
A. You would have to store a total amount of the 1.7 million, plus the refill of the 700,000 that

was evacuated.
Q. I think I get it now. Was there anything that you wanted to add to that? Was it as simple as that in your understanding?
A. Yes. The end result would be even though you may have stored more than 1.7 million in that reservoir up until the time you hit your day of allocation, the spaceholders would still get allocated 100 percent. They wouldn't get allocated 130 percent. It would be tied to the amount of water physically in the reservoir, not to exceed what you had accrued to the storage right on paper.
Q. Okay. So when you say the spaceholders are allocated, are you talking about they share the water physically present at that date?
A. Yes.
Q. Okay. Also, earlier I think there was a scenario where -- I can't remember who asked the question, but it was posed to you that it's -- I believe it said something like, isn't it contrary to the prior appropriation system to have a senior water right on storage when a junior water right is receiving natural flow, and I believe you said, yes. I just wanted to clarify that my understanding is that there are qualifications to that statement. It is not

a blanket rule. For instance, correct me if I'm wrong, if the senior is in such a position -- is located in such a position on the reach that there is no natural flow available, they have to divert storage, but the junior can still divert natural flow, even when the senior is on storage, so long as they are not depriving the senior of that natural flow?
A. That's correct.
Q. So it is not simply a question of priority. There are also physical facts, reach gains, locations that enter into it?
A. Yes.
Q. So it is a factor question as well as a legal one. There is simply not a flat legal statement you can make that is going to apply in all situations?
A. That's correct.
Q. Okay. I just wanted to clarify that.
MR. ORR: Let's take a quick break.
(Recess taken from 5:10 p.m. to 5:18 p.m.)
Q. (BY MR. ORR) Tony, I'm going to hand you what I'll represent is a copy of an exhibit to your deposition in February. It is a copy of State's motion for a partial summary judgment.
And you've seen this document before, haven't you? Tony, are you familiar with it?

A. Yes.
Q. I'll ask you to turn to page 2. There is three numbered paragraphs in the center of the page. I'd ask you to read the indented paragraph under paragraph No. 3, that is the remark -- just the remark itself.
A. "This right is filled for a given irrigation season when the total quantity of water that has accumulated to storage under this right equals the decree quantity. Additional water may be stored under this right, but such additional storage is incidental and subordinate to all existing and future water rights."
Q. Do you see the word "refill" in that remark?
A. No.
Q. Do you understand that remark as addressing or having any connection to the question of whether reservoirs may be refilled in priority?
A. Can you ask me the question again?
Q. Well, I believe you just said that you don't see the word "refill" in this remark. So my question is, does this remark pertain to the refill issue that is posed by the State's motion for partial summary judgment?
A. Yes. It pertains to the refill issue.

Q. Can you explain how.
A. Well, it defines what happens to the additional water that's captured by a reservoir after its storage right is filled.
Q. In your opinion would this remark prohibit refilling the reservoir under its original priority, or refilling the reservoir right, I guess, whichever?
A. Refilling the reservoir under its priority?
Q. Under its original priority. Would this remark, if it was implemented in the decree, would it prohibit refill under the original priority of the right?
A. Yes.
Q. Even though it doesn't use the word "refill"?
A. Yes.
Q. So in order to have the effect of barring refill, a decree doesn't have to use the word "refill;" correct?
A. I'm sorry.
Q. So this remark would go in a water right decree, and it would address refill. I think you've agreed. But it doesn't use the word "refill."
A. Yes.
Q. So if this remark was in a decree, that

decree would, if I understood you correctly, prohibit refill and priority even though the word refill did not occur in the decree?
MR. THOMPSON: I'm going to object.
MR. FLETCHER: I'm going to object to the extent you are requesting him to draw legal conclusions. If you are asking what he thinks about it, I guess he can --
MR. ORR: That's okay. I'll move on. That's no big deal.
Q. (BY MR. ORR) Let's look at Exhibit 22.
A. Okay.
Q. I'd ask you to look in the upper right. Where it says "amount," would you read what the amount is.
A. 1,800,000 acre feet per anum.
Q. What is the significance of the per anum portion of that to you?
A. That's per year.
Q. So does that mean this license authorizes storage of 1.8 million acre feet per year?
MR. FLETCHER: I'm going to object to the extent the document speaks for itself. He can give his interpretation, I guess.
Q. (BY MR. ORR) You can answer the question.

And also I'd direct you down below in the textural provision just above the boxed area. Maybe you should read that paragraph as well. It begins, "That the amount" --
A. "That the amount of water to which such right is entitled and hereby confirmed for the purposes after said is limited to an amount actually needed and beneficially used for said purposes and shall not exceed 1,800,000 cubic feet per second" -- that is scratched out -- "acre feet per anum, of which amount 1,700,000 acre feet represents the rate at cubicle contents of the reservoir and the 100,000 acre feet is the maximum annual bank storage."
Q. So based on those two passages, the one you just read and then the part in the upper right, does it appear to you that this license authorizes the storage of 1.8 million acre feet per year?
A. Yes, that's what it says.
Q. If this language was interpreted to allow refill in priority, would that interpretation effectively negate the volume or the amount, the quantity element, the 1.8 million acre feet?
A. Yes.
Q. How so? Can you explain that.
A. Well, it would be unlimited. You could

refill it several times in a year.
Q. So in your opinion, would it be reasonable to interpret the 1.8 million acre feet per anum language, which is recited twice, as being a limit on the amount of water that may be stored each year in priority under this right?
A. Yes.
Q. If it does -- if it is interpreted as barring refill and priority, do you think it would also bar refill that is entirely subordinate to future and existing water rights?
A. Can you ask that again?
Q. I believe you said that this volume language on here, the quantity, 1.8 million acre feet per anum, effectively bars refill in priority under this right, because if it doesn't, you've got an unquantified unlimited water right; is that correct?
A. That's correct.
Q. My next question, going beyond that, would it be okay to refill -- under this right, would it be okay to refill, in your opinion, so long as refill is entirely subordinate to existing and future water rights?
A. Yes.
Q. I think this will be my last one. A little

bit earlier when Mr. Arkoosh was asking you some questions, I believe he said several times, how can you have an unfulfilled -- quote -- unfulfilled is the word he used -- reservoir and not refill it in priority.
To me, that raises a question of what constitutes the fill of a reservoir right. Can you tell me what constitutes a fill of a reservoir right in your opinion?
A. When it reaches its volume limitation.
Q. And does that necessarily mean that the reservoir is physically full?
A. No.
Q. So the reservoir doesn't have to physically fill to fill the right?
A. That's correct.
Q. So if there is space available in a reservoir but the reservoir right has filled, it is not correct to say that it is an unfilled reservoir right -- unfulfilled reservoir right?
A. That's correct.
Q. An unfulfilled right would be a reservoir right which had not accumulated storage to the extent of its full volume; correct?
A. Correct.

Q. Regardless of whether there was physical space available in the reservoir or not?
A. Correct.
Q. Sorry. One more thing. Exhibit 17. If you look at page 2, please, under stored water. The first sentence, if you would read that.
A. "Reservoirs are allowed to fill only once in irrigation season unless otherwise specified in the water right or determined by the director."
Q. I believe you testified earlier that the document from which this exhibit was taken is not something that Water District 1 uses; is that correct?
A. That's correct.
Q. So my question is, that sentence you just read to me, is that principle a principle that Water District 1 follows?
A. Yes.
Q. Is it also the principle that is reflected in Exhibit 29 and Exhibit 30?
MR. FLETCHER: Give me a hint.
MR. ORR: It is the Larsen letter and the Committee of Nine. Sorry.
THE WITNESS: Yes.
Q. (BY MR. ORR) Is it also the principle that was reflected in the water right accounting program

that was implemented in 1978 with respect to storage water and reservoir rights?
A. Yes.
Q. So even though Water District 1 doesn't use this document, Exhibit 17, it follows the principle that is laid out in that document with respect to the fill of reservoir rights?
A. Yes.
MR. ORR: Okay. I'm done.
MR. RIGBY: I'm good.
MR. FLETCHER: Do you have anything, Chris?
MR. BROMLEY: Yeah. At the very outset of the deposition, we are going to come back --
MR. THOMPSON: Can I follow up before you do that? Do you want to do that last?
MR. BROMLEY: I don't care when I do it, but we do need to get it in there, because Tony does read these things, and he wanted to get some things straight.
MR. THOMPSON: I've got a couple follow-up questions.
MR. BROMLEY: Why don't you do that, and I'll just take it last.

FURTHER EXAMINATION

QUESTIONS BY MR. THOMPSON:
Q. Tony, Mr. Orr asked you questions about Exhibit 30. I believe those were the minutes of the Committee of Nine meeting from September 1979. And I think he asked a question, does this seem -- you know, the director's response to a question by Mr. Saunders provide the direction to apply that principle to all reservoirs. I had a question in that paragraph. And in the middle of that paragraph, it says, "Once a right is filled on paper, even if water has been released and additional space is available, the priorities of the reservoirs are considered to no longer be in effect."

And the next sentence says, "This is offset by the fact that any diversion which takes over its natural flow entitlement is charged with storage used."

And do you understand what that offset is referring to or how that is -- what the context of that is?

A. Well, I'm not entirely sure of the context, but I think what he's saying is that a water -- a storage reservoir water right may be filled on paper, and the priority of the reservoir is no longer in effect, and then as people use storage from that

reservoir, when they exceed their natural flow entitlement, they are charged with storage being used.

Q. Like an individual diversion, if I've got a natural flow right for 10 CFS, but I'm diverting 15, would that five be charged storage; is that what --

A. Yes. And that storage would free up space in the reservoir, but that space wouldn't be refilled under priority.

Q. And does that reflect in the accounting program how storage rights were treated from '78 forward?

A. Yes.

Q. And could this response to the question just be an explanation of the accounting program?

A. It may be.

Q. Mr. Orr asked you a number of questions about the use of storage, the allocation program, the daily water rights accounting program, and I think you testified about canals requesting storage through the Water District; is that correct -- above Blackfoot?

A. I think we were talking about the physical operations.

Q. Correct.

A. Yes. And what is your question?

Q. And my question is, would you agree that

the -- knowing the allocations for each canal, knowing the storage entitlement is part of your administration?

A. It is part of it, yes.

Q. And I guess is it necessary for the watermaster to know what each canal has been allocated for storage for the year as part of your administration through the season?

A. Yes. You know, I've heard the word administration used several times, and I'm not sure if administration is as appropriate as regulation. For the purposes of regulation, the watermaster needs to know what the natural flow supply is to a diversion in addition to its storage allocation.

Q. So if you get to the end of a season and a canal may be running out of storage, you would regulate that diversion unless they have taken other measures, rented water, done something else to continue to be able to divert?

A. Correct.

Q. And you review that regulation of the head gate at the river as something different than water right administration, or are they part of the same thing?

A. No. I've been using it as meaning the same

thing.

Q. Mr. Orr asked you questions about the accounting program itself and that -- I guess, the codes that are inputted accounts for natural flow, takes care of different elements. There is a code; is that correct?

A. A Fortran code.

Q. And there is input into that that calculates where water is distributed to; is that correct?

A. Yes.

Q. And in addition to that, you said there are manual adjustments made to the accounting, and that happens every year?

A. It happens every day when we input data into the accounting program.

Q. So the accounting is not just what comes out of the program itself, but there are manual adjustments made by the Water District?

A. Yes.

Q. Mr. Orr asked you a number of questions about Exhibit 9, the Eagle Decree, and he asked you -- I guess -- he asked you do you consider this to be a contract administration decree. Did you understand what he was asking?

A. Well, I don't remember that line of

questioning specifically. I remember him asking me if there was a storage right identified in the decree, and I couldn't find one.

Q. Correct. I don't believe either the water rights for the storage reservoirs were decreed in that proceeding. But as far as a contract administration decree, did you understand what that meant?

A. Well, there are excerpts of the contracts that are attached to the decree. Up until the last year or two, I've never even read these. And if someone was violating the provisions in the contract, I suppose they could use this decree by saying it carries more weight than just the people involved in the contract, but I'm not sure I know the answer to that.

Q. But you would still agree that there are provisions from either the contracts or exhibits to this decree that you use in water right administration?

A. Yes. But those may exist even in the absence of this decree.

Q. And would the winter water savings priority exist in the absence of this -- these contracts or this decree?

A. Probably not.

Q. So it is not just -- I guess, would you agree that the provisions referenced in this decree, the exchange provisions that Mr. Fletcher went through and said, here is an example of Minidoka Irrigation District requesting the watermaster to designate certain space back in the '60s for that exchange, but would you agree that those provisions have been part of administration, not just a contract agreement between the Bureau and that spaceholder?

A. If those provisions were incorporated into the water accounting, yes, it is part of the administration.

Q. And if you look at the first page of that decree, would you agree that the watermaster of the Water District, Henry Eagle, was a party to this decree?

A. He's listed as the defendant, yes.

Q. And do you have any records, information from the Water District that they disagreed with those provisions or what was entered in this decree?

A. No, I've never seen any.

MR. THOMPSON: That's all the questions I have.

MR. FLETCHER: I have a very limited area, Tony, and I dealt with this line of questioning dealing with dams being in the river and diverting all the water.

FURTHER EXAMINATION

QUESTIONS BY MR. FLETCHER:

Q. I was a little confused by some of the answers. I think part of it is a misunderstanding. I don't know. At one point Mr. Orr asked you, isn't it true -- and I'm paraphrasing -- isn't it true that each dam in the river is always diverting all inflow into that dam. And I think you agreed with him.

Isn't it true that diversion into storage is different than water flowing into a reservoir?

A. Well, if you are talking about the paper accounting or the physical routing of water, yes, there is a difference.

Q. Well, dams have outlets for water; correct?

A. Correct.

Q. I mean, water flows by a dam; correct?

A. Through a dam.

Q. Through a dam, or sometimes around a dam, depending on the type of facility; correct?

A. That's correct.

Q. Through a power plant, for example?

A. Yes.

Q. But -- and I'll give you an example. If Twin Falls 1900 water right natural flow right is in

priority, and there is not enough water in the river to store water into American Falls storage, do you allow American Falls to divert into storage under that situation?

A. In the paper accounting, no; physically, it is a possibility.

Q. Okay. When you say "physically it is a possibility," explain that.

A. The physical contents of the reservoir could be increasing.

Q. Okay. So isn't that the real basis for determining if water is being diverted into storage, is that storage is increasing in the reservoir?

A. No.

Q. Okay. Or is -- let me put it another way -- is available by priority to increase the volume of the reservoir?

A. Well, you have to ask me that question again.

Q. Okay. You testified earlier that if water flows through a reservoir that is otherwise available for storage by priority, you count it as though it was diverted into storage.

A. Correct.

Q. Okay. So it doesn't always have to be

physically diverted into storage for you to count it as water in storage?
A. The physical contents don't have to increase in order for us to count it as storage.
Q. But if that reservoir is not in priority, as to the storage rights for that reservoir, you are not accruing storage for that reservoir?
A. Correct.
Q. Okay. And so when that's occurring, when that reservoir is not in priority, it is not diverting water into priority -- it is not diverting water into storage?
A. Correct.
Q. So the fact that there is a physical structure in the river spanning the river and water is flowing into a reservoir, does not necessarily mean water is being diverted into storage; correct?
A. Correct.
MR. FLETCHER: Thank you. That's all I have.
MR. BROMLEY: Okay.

EXAMINATION

QUESTIONS BY MR. BROMLEY:
Q. Tony, did you review your deposition transcript from February?
A. Yes.

Q. And did you provide any change sheets to the reporter?
A. Yes.
Q. And after that, did you contemplate some of the testimony that you had given?
A. Yes.
Q. And in that contemplation, did you think about some answers that you gave that you would like to revisit?
A. Yes.
Q. And you prepared a page. I haven't made copies of it, but I think you could probably read it into the record. Does this explain the changes that you wanted to make?
A. Yes. I discovered after the -- well, maybe I should go back to the deposition. There were several occasions when I was asked, is it possible that the reservoir system contents could increase after the day of allocation, and I answered, no. But I found that that's not necessarily the case in wet years.
I found that when I got back from the deposition, and I was reviewing the 2011 final accounting, there was one day in August after the day of allocation that occurred where the physical system

contents went up by approximately 500 acre feet, so as a result, we had 500 acre feet of additional undefined storage or unallocated storage.
There were several occasions where I said that that could not happen, which I found is not true on wet years. Page 65, lines 10 through 13; page 107, lines 13 through 15; page 107, lines 24 and 25; page 108, lines 1 and 2; page 118, lines 7 through 14; and page 130, lines 14 through 15, I indicated that the physical contents could not increase after the day of allocation, and I found that there is an exception, in addition to the late season fill that occurs in October, there are occasional times or days that we accrue unallocated for storage after the day of allocation.
I looked at how that water -- that additional storage was handled, and it was handled in a couple different ways. Typically, it is used to offset the storage that flows past Milner or reduces the deficit that is charged towards flood control, or in the case of 2011, it simply was left in the undefined account and was added to the carry over at the end of the season and would be allocated in the following season.
And so those are the two exceptions. But it

is rare, and it only occurs in wet years when virtually everyone gets a full allocation and no one runs out of storage.
But I wanted to correct the record to make that accurate. There are times where the physical system contents can increase after the day of allocation prior to what we call late season fill in October.
MR. FLETCHER: Is that it?
MR. BROMLEY: That's it.

FURTHER EXAMINATION

QUESTIONS BY MR. FLETCHER:
Q. Just to make sure we are clear on terms. When you say wet year, you are talking about a year in which rain events occur during the irrigation season that result in decreased diversions?
A. Yes. It is when the natural flow on any given day exceeds the demand by natural flow rights, and the reservoir system is already full on paper.
Q. And typically that is the result of mid season precipitation or precipitation during the irrigation season?
A. Yes. In 2011 our date of allocation was on July 28, and on August 8, we must have been had some

rain. The diversions decreased, and we stored 500 acre feet of water that was in surplus of all the diversions.

MR. FLETCHER: Thanks. I just wanted to clarify what year.

MR. THOMPSON: I want a transcript but no exhibits. A hard copy.

MR. FLETCHER: I'm not ordering.

MR. RIGBY: I'll need one, a hard copy, condensed. I will take an electronic copy of the exhibits.

MR. ORR: I'll take a condensed copy with electronic exhibits.

MR. BROMLEY: A hard copy with no exhibits.

(The deposition concluded at 5:49 p.m.)

(Signature requested.)

CERTIFICATE OF {NAME

I, ANTHONY OLENICHAK, being first duly sworn, depose and say:

That I am the witness named in the foregoing deposition, that I have read said deposition and know the contents thereof; that the questions contained therein were propounded to me; and that the answers contained therein are true and correct, excapt for any changes that I may have listed on the change sheet attached hereto.

DATED this ____ day of _____, _____

CHANGES ON ERRATA SHEET YES___ NO ___

_____

WITNESS

SUBSCRIBED AND SWORN to before me this ____ day of _____, _____.

_____

NAME OF NOTARY PUBLIC

NOTARY PUBLIC FOR _____

RESIDING AT _____

MY COMMISSION EXPIRES _____

CHANGE SHEET FOR ANTHONY OLENICHAK

Page ____ Line ____ Reason for Change_____

Reads _____

Should Read _____

Page ____ Line ____ Reason for Change_____

Reads _____

Should Read _____

Page ____ Line ____ Reason for Change_____

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Should Read _____

Please use separate sheet if you need more room.

SIGNATURE _____

REPORTER'S CERTIFICATE

I, JANET L. FRENCH, CSR No. 946, Certified Shorthand Reporter, certify:

That the foregoing proceedings were taken before me at the time and place therein set forth, at which time the witness was put under oath by me;

That the testimony and all objections made were recorded stenographically by me and transcribed by me or under my direction;

That the foregoing is a true and correct record of all testimony given, to the best of my ability;

I further certify that I am not a relative or employee of any attorney or party, nor am I financially interested in this action.

IN WITNESS WHEREOF, I set my hand and seal this 30th day of March, 2012.

_____

JANET L. FRENCH, CSR, RPR
Notary Public
P.O. Box 2636
Boise, Idaho 83701-2636
My Commission Expires 11/3/2016

Exhibit
42

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA)
)
Case No. 39576)
)

PARTIAL DECREE PURSUANT TO
I.R.C.P. 54(b) FOR

Water Right 37-00856

DISTRICT COURT - SRBA
Fifth Judicial District
County of Twin Falls - State of Idaho
JUN - 9 2010
By Clerk
Deputy Clerk

NAME AND ADDRESS: GARY A DE MOSS
HELEN DE MOSS
PO BOX 61
BLISS, ID 83314

SOURCE: DRY CREEK TRIBUTARY: BIG WOOD RIVER

QUANTITY: 32.00 CFS
760.00 AFY

The reservoir may be refilled multiple times in a single year. All storage uses described by rights 37-856, 37-857, 37-2778, 37-2780 and 37-7754 when combined shall not exceed the reservoir storage capacity of 4365 acre-feet.

PRIORITY DATE: 02/01/1917

Pursuant to a call in times of scarcity, the diversion to storage from November 1 to March 31 is not subject to curtailment by Water Right Nos. 37-238A, 37-239A, 37-239D, 37-240A, 37-240D, 37-447C, 37-447D, 37-607D, 37-608D, 37-1160, 37-1175 and 37-11131.

POINT OF DIVERSION: T04S R14E S06 SENESE Within Gooding County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
Irrigation Storage	01-01 TO 12-31	760.00 AFY
Irrigation from Storage	04-01 TO 10-31	760.00 AFY
Stockwater Storage	01-01 TO 12-31	15.00 AFY
Stockwater from Storage	04-01 TO 10-31	15.00 AFY
Diversion to Storage	01-01 TO 12-31	32.00 CFS

PLACE OF USE:

Irrigation from Storage — Within Gooding County

T05S R13E S03 LOT 4	(NWNW) 28.0		SWNW 32.0	
	NWSW 36.0			
S04 LOT 1	(NENE) 25.0	LOT 2	(NWNE) 1.0	
	SWNE 11.0		SENE 40.0	
	NESW 27.0		SESW 40.0	
	NESE 38.0		NWSE 34.0	
	SWSE 39.0		SESE 21.0	
S09	NWNE 32.0		SWNE 38.0	
	SENE 19.0		NENW 34.0	
	NWNW 18.0		SENW 40.0	
	NESW 40.0		SESW 40.0	
	NWSE 25.0		SWSE 18.0	
S16	NWNE 13.0		NENW 40.0	
	NWNW 39.0		SWNW 30.0	
	SENW 10.0			

808.0 Acres Total

Stockwater from Storage — Within Gooding County

T05S R13E S03 LOT 4	(NWNW)		SWNW
	NWSW		
S04 LOT 1	(NENE)	LOT 2	(NWNE)
	SWNE		SENE
	NESW		SESW
	NESE		NWSE

PLACE OF USE (continued)

	SWSE	SESE
S09	NWNE	SWNE
	SENE	NENW
	NWNW	SENW
	NESW	SESW
	NWSE	SWSE
S16	NWNE	NENW
	NWNW	SWNW
	SENW	

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

This water right is subject to the terms of the Agreement Between Gary A. and Helen DeMoss and Northside Canal Company Regarding Water Rights 37-856, 37-2778, 37-2780, 37-7754, executed October 5, 2007, and recorded in Gooding County, Idaho on October 19, 2007 (Instrument No. 223865).

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. I.C. SECTION 42-1412(6).

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

Eric J. Wildman
Presiding Judge of the
Snake River Basin Adjudication

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA)
)
Case No. 39576)
)

PARTIAL DECREE PURSUANT TO
I.R.C.P. 54(b) FOR

Water Right 37-11989

DISTRICT COURT-SRBA
Fifth Judicial District
County of Twin Falls - State of Idaho
FEB - 3 2010
By
Clerk
Deputy Clerk

NAME AND ADDRESS: BLACK BUTTE HILLS LLC
C/O GREGORY VIK
PO BOX 1607
BELLEVUE, WA 98009

SOURCE: SPRING TRIBUTARY: SINKS

QUANTITY: 1.70 CFS

Right Nos. 37-2211 and 37-11989 are limited to a total combined diversion rate of 1.70 cfs.
The capacity of the storage reservoir is 20.5 AF. The reservoir may be refilled multiple times in a single year.

PRIORITY DATE: 04/15/1957

POINT OF DIVERSION: T02S R17E S11 NWNWSE Within Camas County
NWSESE

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
Diversion to Storage	01-01 TO 12-31	1.70 CFS
Irrigation Storage	01-01 TO 12-31	
Irrigation from Storage	04-15 TO 10-31	

PLACE OF USE:

Irrigation Storage — Within Blaine County
Same as Irrigation from Storage

Irrigation from Storage — Within Blaine County

T02S R17E S01	SWNW 9.0		NWSW 34.0
	SWSW 39.0		
		Within Camas County	
S02	SENE 0.4		SWSW 1.5
	SESW 30.0		NESE 33.0
	NWSE 3.1		SWSE 37.0
	SESE 40.0		
S11	NENE 40.0		NWNE 34.0
	SWNE 28.0		SENE 33.0
	NENW 34.0		SENW 15.0
	NESE 20.0		NWSE 12.0
	SWSE 19.0		SESE 27.0
		Within Blaine County	
S12	SWNE 20.0		NENW 19.0
	NWNW 40.0		SWNW 40.0
	SENW 38.0		NESW 38.0
	NWSW 40.0		SWSW 28.0
	SESW 11.0		NWSE 24.0

787.0 Acres Total

Diversion to Storage — Within Blaine County
Same as Irrigation from Storage

Irrigation from storage is not limited but currently confined to the place of use described above.
The rights listed below are limited to the irrigation of a combined total of 787 acres in a single irrigation season.
Combined Right Nos.: 37-2211, 37-11989, 37-20556, 37-20563, & 37-20568.

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. I.C. SECTION 42-1412(6).

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

Eric J. Wildman
Presiding Judge of the
Snake River Basin Adjudication

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA)
)
Case No. 39576)
)

PARTIAL DECREE PURSUANT TO I.R.C.P. 54(b) FOR

Water Right 37-22116

DISTRICT Court - SRBA
Fifth Judicial District
County of Twin Falls - State of Idaho
DEC - 5 2011
By _____ Clerk
Deputy Clerk

NAME AND ADDRESS: LAVA LAKE LAND & LIVESTOCK LLC
PO BOX 2249
HAILEY, ID 83333

SOURCE: COPPER CREEK TRIBUTARY: LAVA LAKE

QUANTITY: 200.00 AFY

The capacity of the storage reservoir is 50 AF. The reservoir may be refilled multiple times in a single year.

PRIORITY DATE: 08/03/1954

POINT OF DIVERSION: T01N R23E S16 NWNWNE Within Blaine County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
Irrigation Storage	01-01 TO 12-31	50.00 AFY
Irrigation from Storage	04-15 TO 10-31	200.00 AFY

PLACE OF USE:

Irrigation Storage — Within Blaine County

T01N R23E S09	SWSE	
S16	NWNE	

Irrigation from Storage — Within Blaine County

T01N R23E S16	SWSE 14.0	
S21	NENE 15.0	NWNE 31.0
	SWNE 22.0	SENE 40.0
	NESE 40.0	NWSE 18.0
	SWSE 28.0	SESE 40.0
S22	SWNW 33.0	NWSW 40.0
	SWSW 40.0	SESW 11.0
S27	NENW 28.0	NWNW 37.0
	SWNW 30.0	
S28	NENE 41.0	NWNE 21.0
	SWNE 6.8	SENE 40.0
	NESE 12.0	NWSE 1.9

589.7 Acres Total

This right is limited to the irrigation of 253 acres within the place of use described above in a single irrigation season.

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. I.C. SECTION 42-1412(6).

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

Eric J. Wildman
Presiding Judge of the
Snake River Basin Adjudication

Exhibit
43

2008 NOV 24 PM 02:00
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED _____

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	PARTIAL DECREE PURSUANT TO
	)	I.R.C.P. 54(b) FOR
Case No. 39576	)	
	)	Water Right 22-11987

NAME AND ADDRESS: BURTON PHILLIPS
KATHY PHILLIPS
910 N 300 W
TETONIA, ID 83452

SOURCE: SPRINGS TRIBUTARY: SINKS

QUANTITY: 80.00 AFY

The capacity of the storage reservoir is 8.0 AF. The reservoir may be refilled multiple times up to the total diversion volume in a single year.

PRIORITY DATE: 06/01/1965

POINT OF DIVERSION: T06N R45E S09 SESESW Within Teton County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
Irrigation Storage	01-01 TO 12-31	8.00 AFY
Irrigation from Storage	04-15 TO 10-31	80.00 AFY

PLACE OF USE: Irrigation from Storage

			Within Teton County
T06N R45E S09	SWSE	0.3	SESE 20.0
S16	NENE	31.0	NWNE 30.0
	SWNE	8.7	NENW 8.0
	SENW	2.0	

100.0 Acres Total

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. I.C. SECTION 42-1412(6).

RULE 54(b) CERTIFICATE

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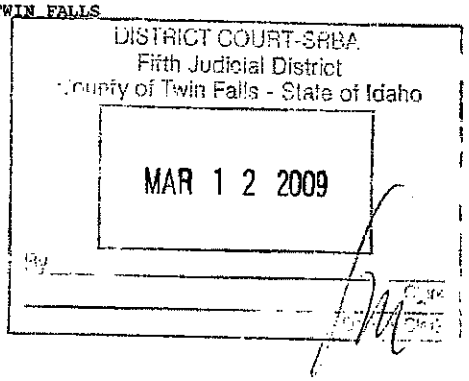
John M. Melanson
Presiding Judge of the
Snake River Basin Adjudication

Exhibit
44

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS



In Re SRBA)
)
Case No. 39576)
)

PARTIAL DECREE PURSUANT TO I.R.C.P. 54(b) FOR

Water Right 29-13471

NAME AND ADDRESS: BRANDY WELLS
R SCOTT WELLS
1922 W PORTNEUF RD
INKOM, ID 83245-1606

SOURCE: INDIAN CREEK TRIBUTARY: PORTNEUF RIVER

QUANTITY: 0.271 CFS
3.00 AFY

PRIORITY DATE: 01/01/1956

POINT OF DIVERSION: T07S R36E S28 SENWNW Within Bannock County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
Irrigation Storage	01-01 TO 12-31	3.00 AFY
Irrigation from Storage	04-01 TO 10-31	3.00 AFY
Recreation Storage	01-01 TO 12-31	3.00 AFY
Aesthetic Storage	01-01 TO 12-31	3.00 AFY
Diversion to Storage	01-01 TO 12-31	0.271 CFS
Aesthetic	01-01 TO 12-31	0.271 CFS

A VOLUME OF WATER IN ADDITION TO THE VOLUME DESCRIBED ABOVE FOR IRRIGATION FROM STORAGE MAY BE DIVERTED AND USED IN A SINGLE YEAR IF AT THE TIME OF REFILL SENIOR WATER RIGHTS ARE SATISFIED.

PLACE OF USE:

Irrigation Storage — Within Bannock County
T07S R36E S28 NWNW

Irrigation from Storage — Within Bannock County
T07S R36E S28 NWNW 14.0
14.0 Acres Total

Recreation Storage — Within Bannock County
T07S R36E S28 NWNW

Aesthetic — Within Bannock County
T07S R36E S28 NWNW

Aesthetic Storage — Within Bannock County
T07S R36E S28 NWNW

USE OF THIS RIGHT WITH RIGHT NO. 29-00604A IS LIMITED TO THE IRRIGATION OF A COMBINED TOTAL OF 15.0 ACRES IN A SINGLE IRRIGATION SEASON.

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. I.C. SECTION 42-1412(6).

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

John M. Melanson
Presiding Judge of the
Snake River Basin Adjudication

Exhibit
45

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
603 Post Office Building
Portland, Oregon
May 19, 1941

Mr. Lynn Crandall,
District Engineer,
Geological Survey,
Idaho Falls, Idaho.

Dear Mr. Crandall:

Replying to your letter of May 13, 1941.

In determining the rights as between the American Falls Reservoir and the Island Park Reservoir I believe it would be proper to credit to American Falls Reservoir the amount of water which it would have received if the Island Park Reservoir had not been built. Under the Idaho law additional rights can be acquired by beneficial use in addition to those included in a court decree. For several years prior to the construction of the Island Park Reservoir, the American Falls Reservoir enjoyed the privilege of refilling to some extent in some years, and the additional water thus secured was applied to beneficial use. For that reason I think it would be proper to credit to American Falls as against the Island Park Reservoir whatever amount of water the American Falls Reservoir would have secured if Island Park Reservoir had not been built.

No doubt it will be desirable, however, to hold as much water as possible in Island Park Reservoir to improve operating conditions in the upper valley and to help those upper valley owners of American Falls rights to secure the full benefit of the rights to which they are entitled in the American Falls Reservoir. That I think should be done in the same way that we sometimes hold in Jackson Lake Reservoir water belonging to the American Falls Reservoir.

Under date of July 10, 1940 we made an additional water filing for the Island Park Reservoir (R 686), increasing the amount of water authorized to be stored therein from 114,000 ac.ft. to 135,000 ac.ft.

Very truly yours,

B. E. Stoutemyer

B. E. Stoutemyer
District Counsel

cc - Burley

Exhibit
46

S T I P U L A T I O N

WHEREAS, on November 21, 1955, the United States, acting through the Regional Director, Region One, Bureau of Reclamation, Boise, Idaho, made application to the State Reclamation Engineer for the State of Idaho, for permit to appropriate 240 cubic feet per second of the waters of the Snake River for irrigation and domestic purposes on the North Side Extension Unit of the Minidoka Project, and

WHEREAS, the Twin Falls Canal Company and the North Side Canal Company, Ltd., have acquired, in full compliance with the laws of the State of Idaho, under decrees entered in the Courts of Idaho, and by actual use, a prior right to the use of the natural flow of the Snake River, and by contract with the United States and by actual use, having acquired prior rights to the use of storage water in American Falls and Jackson Lake Reservoirs, and specifically the right to the use of releases from American Falls Reservoir in the spring prior to the actual filling of said reservoir, and have continually used said waters on lands on the Twin Falls and North Side Projects for irrigation and municipal purposes.

NOW, THEREFORE, IT IS HEREBY STIPULATED AND AGREED, by and between the United States, acting through the Regional Director, Region One, Bureau of Reclamation, Boise, Idaho, and counsel for the Twin Falls Canal Company and North Side Canal Company, Ltd., that all rights arising by, under or through any permit or license issued pursuant to said application dated November 21, 1955, shall be subject to all existing water rights of Twin Falls Canal Company and North Side Canal Company, Ltd., including, but not limited to, the long used and exercised rights of said companies, and each of them, to use water from American Falls Reservoir, in the early part of each irrigation season, when needed, but with the provision that if the said reservoir thereafter fills that such water so used earlier shall be deemed to

been natural flow, and that such use shall not diminish or affect the right of the parties to have and use its full pro rata part of the storage water in said reservoir, and that any permit or license if issued pursuant to said application shall, if possible, contain the following proviso:

> "All rights arising by, under or through this permit shall be subject to all existing water rights of Twin Falls Canal Company and North Side Canal Company, Ltd., including, but not limited to, the long used and exercised rights of said companies and each of them to use water from American Falls Reservoir, in the early part of each irrigation season, when needed, but with the provision that if the said reservoir thereafter fills that such water so used earlier shall be deemed to have been natural flow, and that such use shall not diminish or affect the right of the parties to have and use its full pro rata part of the storage water in said reservoir."

It is expressly understood and agreed, however, that the absence of the above quoted language in said permit shall in no way change or modify the stipulation and agreement herein contained, and it is expressly understood and agreed that nothing herein shall affect any existing contracts between the United States and the Twin Falls Canal Company and/or the North Side Canal Company, Ltd.

DATED This 20th day of December, 1935.

Regional Director, Bureau of Reclamation, Boise, Idaho.

PARRY, ROBERTSON & DALY

By Leigh E. Fisher

Counsel for Twin Falls Canal Company and North Side Canal Company, Ltd.,
Residing at Twin Falls, Idaho.

Exhibit
47

Len Jordan
xxxxxxxxxx

May 20, 1953

Mr. M. L. Tillery
U. S. Bureau of Reclamation
Burley, Idaho

Dear Mr. Tillery:

Storage draft from American Falls started this year on May 3. Allowing for time interval of water flow this corresponds to April 28 at Island Park which would be the last date for storage at that point under its priority right.

Island Park on April 28 held 123,780 acre-feet, which I take it will be its supply for reservoir allotment this year unless American Falls reservoir should refill during the flood period in June. Island Park reached a peak of 135,610 acre-feet on May 8 and held 134,800 acre-feet on May 15 when we began upper valley regulation but the quantity in excess of 123,780 acre-feet represents stored normal flow belonging to canals below American Falls.

The matter will be of no consequence if American Falls refills next month but I am not too certain that it will do so, and if it fails to refill we will likely get quite a protest from the Fremont-Madison Irrigation District if they are only allotted the contents on April 28. If they are allotted more than that amount it would merely be a case of taking water away from someone else and giving to them.

Very truly yours,

Lynn Crandall
Watermaster

Exhibit
48

363 North Placer Avenue
Idaho Falls, Idaho
January 19, 1960

Mr. H. T. Nelson, Regional Director
U. S. Bureau of Reclamation
Box 937
Boise, Idaho

Dear Mr. Nelson:

During the recent lawsuit in Burley regarding the Milner Low District the question arose regarding percentage fill of Palisades space.

The question at issue concerns the matter of moving upstream to Palisades water conserved by winter water savings at Minidoka dam.

For example, last year American Falls reservoir was nearly drained yet it has been possible to spill water past Milner all of this present winter in excess of the Idaho Power Company secondary right, with assurance that American Falls will be filled by the beginning of the 1960 irrigation season.

It is my recollection that at the time of Mr. Clinton's Palisades water supply studies it was calculated that the Idaho Power Company rights would require spilling about 160,000 acre-feet annually past Milner of which 45,000 acre-feet was primary storage and the balance secondary. During the 1959 water year the discharge past Milner was about 340,000 acre-feet or 180,000 acre-feet in excess of Idaho Power Company requirements, which latter amount could have been theoretically retained at Palisades.

The City of Idaho Falls requires about 2,700 second-feet to run its municipal power plants and there are times when this requirement controls the winter releases from Palisades. To store more water at Palisades during the wintertime might require an infringement on the Idaho Falls City power rights which would likely have to be made up by supplying it with an equivalent amount of power. It would also result in a further reduction in winter power production at Palisades and Minidoka power plants.

In this connection it should be noted that in some winters when it appeared that American Falls would fill the following spring, the Idaho Power Company has drawn its primary storage or part of it during the winter time with the understanding that if the reservoir filled the following spring such advance draft would be cancelled. It perhaps has a right to such double use as it is similar to irrigation draft on American Falls during May in some years by irrigation rights which was later cancelled if the reservoir later filled.

The above matters will particularly require study and consideration if the plans for furnishing a water supply to the Salmon Project include groundwater pumping into Snake River because assurance will be necessary that such pumped water can be retained in the Snake River reservoir system to the extent necessary to replace stored water diversions by the Salmon project.

Very truly yours,

Lynn Crandall

cc: U.S.B.R., Burley
U.S.B.R., Broadway office, Boise
H. C. Eagle, Idaho Falls

Exhibit
49

July 27, 1959

North Side Canal Company
Jerome, Idaho

Dear Sirs:

Because of the early drawdown of American Falls Reservoir this season and the subsequent filling of Palisades Reservoir, it has been necessary to make computations of the amount of stored and normal flow available to the various canals.

These computations require a daily segregation of flow between Moran and Milner starting April 18 (Milner time). The final computations will be included in the annual report of Water District No. 36. In the meantime, preliminary computations have been made which should be sufficiently accurate to enable individual canal companies to determine the water available for their use for the 1959 season.

The accompanying table shows results of above computations. It will be noted that about 65,000 acre-feet was available from normal flow as a credit to American Falls Reservoir. It is proposed to allot this to the various canals in proportion to their use of stored water prior to the regular regulation season. This will be in addition to their full American Falls allotment.

Very truly yours,

H. C. Eagle
Watermaster

Exhibit
50

July 20, 1959

Mr. Merle Tillery
U. S. Bureau of Reclamation
Burley, Idaho

Dear Mr. Tillery:

I have gone thru preliminary calculations to determine storage use by canals below American Falls for period April 18 to June 30. This involved distributing the available natural flow on a daily basis to the canals or reservoirs whose priorities could be filled.

Before I release these figures to the canal companies concerned I would appreciate having someone in your office look them over for any seeming errors. Final computations will differ to some extent from these tentative figures.

PRELIMINARY STORAGE COMPUTATIONS
April 18 to June 30, 1959 (Milner time)

Canal	Storage Diversions (Acre-feet)	Percent Storage Diversions	Proposed Share of Am.F. refill
Michaud Canal	6,030	1.27	825
Minidoka Canals	70,250	14.84	10,471
Minidoka N. S. Pump	20,450	4.32	2,808
Gooding	157,700	33.31	21,652
North Side Canal	183,400	38.74	25,181
Twin Falls Canal	4,990	1.05	682
Milner Low Lift	22,180	4.69	3,049
Idaho Power Co.	8,450	1.78	1,157
Total Storage Use	473,450	100.00	65,000
Palisades stored	376,000		
	849,450		
Drop in American Falls Reservoir			774,000
Normal flow credit for Am.F. refill			65,000
Normal flow to Lake Walcott			5,250
			844,250

Very truly yours,

H. C. Eagle
Watermaster

PRELIMINARY STORAGE COMPUTATIONS
April 18 to June 30, 1959 (Milner time)

Canal	Storage Diversions (Acre-feet)	Percent Storage Diversions	Proposed Share of Am. F. Refill
Minidoka Canal	6,030	1.27	825
Minidoka Canals	70,350	14.84	10,471
Minidoka U. S. Pump	20,450	4.32	2,805
Gooding	157,700	33.31	21,952
North Side Canal	183,400	38.74	25,101
Twin Falls Canal	4,920	1.05	682
Milner Low Lift	22,100	4.69	3,049
Idaho Power Co.	8,450	1.78	1,157
Storage need from American Falls	473,450	100.00	65,000

American Falls water in Palisades 376,000

Drop in American Falls Reservoir 774,000

Normal flow credit for American Falls refill 65,000

Normal flow to Lake Walcott 9,650

The above figures will be subject to small changes when final computations are available. Further credits will accrue to some canals for period July 1-7, during which time Palisades Reservoir stored another 40,000 acre-feet. Most of this will go to North Side Canal Company and Twin Falls Canal Company. If time permits final computations will be made before end of season and results sent to those concerned.

Exhibit
51

August 26, 1959

Mr. Robert Perebauer, Manager
American Falls Reservoir District #2
Shoshone, Idaho

Dear Bob:

Tabulated below are pertinent data on your storage account thru July 31. While figures are preliminary I believe there should be no large changes when final computations are made.

Storage allotment	400,000 acre-feet
Share of American Falls Refill	33,958
Total	433,958
Storage used thru July 6	165,400
Storage used July 7-31	77,000
Total thru July 31	242,400

If you have any questions please feel free to write me. Final computations will be included in annual report.

Very truly yours,

H. C. Eagle
Watermaster

August 26, 1959

Mr. Earl Sears, Manager
Milner Low Lift Irrigation District
Burtaugh, Idaho

Dear Mr. Sears:

Tabulated below are my preliminary figures on your storage account thru July 31.

(All figures in acre-feet)

Allotment:		
American Falls	45,687	
Palisades	26,986	
Rentals	1,275	
American Falls Refill	4,771	
Total	78,719	
Used thru July 6		23,240
Used July 7-31		14,300
		37,540

If you have any questions regarding above figures please feel free to write me. Final computations will be included in this year's annual report.

Very truly yours,

H. C. Eagle
Watermaster

Exhibit
52

Idaho Falls, Idaho
May 10, 1962

Mr. Glenn Simmons
U. S. Bureau of Reclamation
Burley, Idaho

Dear Glenn:

In order to justify as low as possible releases from Palisades for the next few weeks, I have made further study of our records. If we should continue our present releases it appears to me that Palisades reservoir would not fill before about June 10. Under these conditions our records would show the following:

Natural runoff at Heise (April 1 to May 6)	836,100 acre-feet
Actual runoff at Heise May 7 to June 10	1,130,000
Stored in Palisades May 7 to June 10	225,000
Stored in Jackson Lake May 7 to June 10 (about)	520,000
Natural runoff at Heise (April 1 to June 10)	2,691,100 acre-feet
Forecast for period April 1 to July 31	3,800,000
Left for period June 11 to July 31	1,108,900
Remaining space in Jackson Lake (about)	50,000 acre-feet

Under the above conditions the parameter would require no reserve space for flood control on June 11. Should inflow figures near the end of the period remain high we might want to keep a small amount of vacant space in Palisades.

There are several reasons for storing water as early as possible in Palisades Reservoir this year. As long as the spill at Milner continues the water stored in Palisades is all saved. Much of that stored later might be creditable to American Falls refill or other natural flow rights.

It is possible that Jackson Lake will not fill physically while its priority is in effect. Should this happen the difference would probably have to be made up from Jackson Lake credits in Palisades.

With the present flow of 16,000 second-feet at Heise we are getting a small amount of damage. If it is feasible we should try not to exceed this flow and reduce it as soon as possible.

The above figures assume normal precipitation for the period involved. Actually we have been below normal so far. Should excessive precipitation occur our operations would likely need revisions.

Also it is possible that the runoff forecast is too low. However, this seems unlikely to me unless there should be a large increase in precipitation.

I appreciate the fact that the rules have not been rigidly followed this spring in provided flood space. I think conditions have justified this flexibility and that the waterusers will appreciate the extra consideration that has been given.

Very truly yours,

H. C. Eagle
Watermaster

cc: H. T. Nelson
Leonard Graham

Exhibit
53

R. Keith Higginson
xxxxxxxxxxxxxxxx

83401

November 23, 1966

Mr. Robert Wagner, Manager
Falls Irrigation District
P. O. Box 5
American Falls, Idaho 83211

Dear Mr. Wagner:

Final storage computations for the Falls Irrigation District are as follows:

Use:

Total storage at headgate	25,283 acre-feet
River transmission loss	650
Total charge	25,933 acre-feet

Supply

Allotments: American Falls	23,300 acre-feet
Palisades	35,174
American Falls refill	79
Total	58,553 acre-feet
Less rental	10,000
	48,553 acre-feet
Holdover	22,620 acre-feet

Very truly yours,

H. C. Eagle
Watermaster

cc: Glenn Simmons

R. Keith Higginson
xxxxxxxxxxxxxx

83401

November 23, 1966

Mr. Alfred Peters, Manager
Twin Falls Canal Company
Twin Falls, Idaho 83301

Dear Al:

Our storage computations are to the point that we can send you a summary of the season's operations. The attached tables show computation of river transmission losses. Based on the above tables your storage account is as follows:

Supply		Use	
American Falls	151,185 a.f.	Headgate diversions	184,834 a.f.
Jackson	97,183	River transmission loss	2,047
American Falls refill	340		
Total	248,708 a.f.	Total	186,881 a.f.
Holdover	62,000 a.f.		

Very truly yours,

H. C. Eagle
Watermaster

cc: Glenn Simmons

Twin Falls

R. Keith Higginson
~~XXXXXXXXXXXXXX~~

83401

November 23, 1966

Mr. Douglas Finkelnburg, Manager
North Side Canal Company
Jerome, Idaho 83338

Dear Doug:

Our storage computations are now to the point that we can give you a summary of the season's operations. The attached table shows computations of river transmission losses. I made an assumption as to the amounts you would want to use from Jackson and Palisades. If you would like us to use different figures it will change slightly the river loss charge and location of your holdovers.

Based on the above mentioned tables, your storage account for the year is as follows:

Supply		Use	
American Falls	438,360 a.f.	Used at headgate	757,710 a.f.
Jackson	312,007	River loss	18,783
Palisades	100,276		
American Falls refill	848	Total	776,493 a.f.
Total	851,491 a.f.		
Holdover	74,998 a.f.		

Very truly yours,

H. C. Eagle
Watermaster

cc: Glenn Simmons

US Canal

COMPUTATION OF LOWER VALLEY RIVER TRANSMISSION LOSSES - 1966

Storage in Acre-feet

Canal	Total Use	Lower Valley Supply	Used from Upper Valley	Percent
Fort Hall Michaud	29,498	83	29,498	5.488
Falls Irrigation	25,283	13,379	11,983	2.229
Minidoka Project	529,674	413,121	116,553	21.683
A & B Irrig. Dist.	55,841	47,858	7,983	1.485
Gooding Project	451,724	450,867	857	.159
North Side Canal	757,710	439,208	318,502	59.252
Twin Falls Canal	184,634	151,525	33,309	6.197
Milner Low Lift	64,538	45,687	18,851	3.507
Total			537,536	100.

American Falls Upper Valley storage to exchange	279,410
Upper reservoir water to lower valley	258,126

Canal	Share of American Falls Exchange	Upper Reservoir Storage Use		
		Jackson	Palisades	River Loss
Fort Hall Michaud	15,334		14,164	1,601
Falls Irrig. Dist.	6,228		5,755	650
Minidoka Project	60,584	55,969		7,164
A & B Irrig. Dist.	4,149		3,834	433
Gooding	445		412	47
North Side	165,556	100,000	52,946	18,783
Twin Falls	17,315	15,994		2,047
Milner Low Lift	9,799		9,052	1,023
	279,410	171,963	86,163	31,748

R. Keith Higginson

83401

November 24, 1966

Mr. Burdell Curtis, Manager
Burley Irrigation District
223 E. Main Street
Burley, Idaho 83318

Dear Burdell:

Our storage computations are to the point that we can send you a summary of the season's operations. The attached tables show our computation of the charge for river transmission losses. When segregation is made between Minidoka and Burley districts this will likely be charged to the Minidoka District.

Summary for the Minidoka Canals is as follows:

Supply		Use	
American Falls	241,505 a.f.	Headgate diversions	529,674 a.f.
Jackson	186,030	River transmission loss	7,164
Palisades	63,812		
Walcott yield	57,600	Total	536,838 a.f.
Gain Neeley to Milner	113,000		
American Falls refill	1,016		
Total	662,963 a.f.		
Holdover	126,125 a.f.		

This holdover is in addition to storage left in Lake Walcott.

You will note that river gains were greater than usual. This was especially true towards end of season when your spills were large.

Very truly yours,

H. C. Eagle
Watermaster

cc: E. H. Neal
Glenn Simmons
Everett Walker

COMPUTATION OF LOWER VALLEY RIVER TRANSMISSION LOSSES - 1966

Storage in Acre-feet

Canal	Total Use	Lower Valley Supply	Used from Upper Valley	Percent
Fort Hall Michaud	29,498	83	29,498	5.488
Falls Irrigation	25,283	13,379	11,983	2.229
Minidoka Project	529,674	413,121	116,553	21.683
A & B Irrig. Dist.	55,841	47,858	7,983	1.485
Gooding Project	451,724	450,867	857	.159
North Side Canal	757,710	439,208	318,502	59.252
Twin Falls Canal	184,834	151,525	33,309	6.197
Milner Low Lift	64,538	45,687	18,851	3.507
Total			537,536	100.
American Falls Upper Valley storage to exchange				279,410
Upper reservoir water to lower valley				258,126

Canal	Share of American Falls Exchange	Upper Reservoir Storage Use		
		Jackson	Palisades	River Loss
Fort Hall Michaud	15,334		14,164	1,601
Falls Irrig. Dist.	6,228		5,755	650
Minidoka Project	60,584	55,969		7,164
A & B Irrig. Dist.	4,149		3,834	433
Gooding	445		412	47
North Side	165,556	100,000	52,946	18,783
Twin Falls	17,315	15,994		2,047
Milner Low Lift	9,799		9,052	1,023
	279,410	171,963	86,163	31,748

Exhibit 54

COPY

Idaho Falls, Idaho
June 4, 1968

Mr. Douglas Finkelnburg, Manager
North Side Canal Company
Jerome, Idaho 83338

Dear Doug:

Preliminary storage calculations for April and May 1968 are shown in the following tabulations:

American Falls Reservoir contents on Apr. 21	1,693,000 a.f.
American Falls storage in Palisades	7,000
Total for 100% allotment	1,700,000 a.f.
Palisades Reservoir usable contents on Apr. 18	1,074,000 a.f.
Less American Falls storage	-7,000
Total for Palisades allotment	1,067,000 a.f.
This is 88.92% of capacity.	
Supply Apr. 18 and 21 (1074 + 1,693)	2,767,000 a.f.
Contents May 28 and 31 (880 + 1,603)	2,483,000 a.f.
Total Used	284,000 a.f.

Storage Use in a.f.		Approximate Share of refill
Fort Hall Michaud Canal	2,860	360
Falls Irrigation Dist.	3,160	400
A & B Irrigation Dist.	10,200	1,300
American Falls Res. Dist. No. 2	94,800	12,000
Milner Low Lift	13,600	1,720
North Side Canal	87,500	11,000
Twin Falls Canal Co.	25,400	3,200
Minidoka Canals	61,700	8,000
Upper Valley canals	20,400	-
Total	319,640	37,980
Stored to American Falls refill	33,000	
	281,640	

The difference of 2,360 acre-feet between supply and use can be more than accounted for by river loss on water run from Palisades to American Falls.

US Canal

There has been no water storable to the Palisades 1939 right since April 18 (Palisades time). It appears that there will not be any runoff available for this right for the balance of the season. If that is the case the Palisades allotments will be 88.92% filled.

The American Falls 1921 storage right was being partly filled for period June 1-4. It appears that it may be in effect for most of the time until June 15 or later. This will make further water storable to the refill right and creditable to the above canals.

The above calculations have been made with no consideration being given to Jackson Lake. It has been storing water under its priority for all of the above period. It should fill and spill around June 20. The Jackson Lake rights will be 100% filled. Should it not fill physically while its rights are effective it will be credited with water now being released. This would reduce by a like amount the water available for the American Falls refill.

Further data will be furnished after the regular regulation season begins.

Very truly yours,

(Signed) H. C. Eagle

H. C. Eagle
Watermaster

cc: Fort Hall Project
Falls Irrigation Dist.
A & B Irrigation Dist.
American Falls Res. Dist. No. 2
Milner Low Lift
North Side Canal Co.
Twin Falls Canal Co.
Burley Irrigation Dist.
Minidoka Irrigation Dist.
Glenn Simmons
Ed Neal
William Burpee

Exhibit 55

SURFACE WATER BRANCH
Box 697, Idaho Falls, Idaho
December 14, 1956

Mr. Burton J. Gindler
Office of the Attorney General
909 S. Broadway--Room 600
Los Angeles 15, California

Dear Mr. Gindler:

Your reference: File 8340, State, 561211

In reply to yours of the 12th instant, I am enclosing copy of a mimeographed statement describing our system of river operation here on Snake River.

We have here ample water supply in all except a series of drought years such as occurred from 1931 to 1935. In ordinary years evaporation losses on the reservoirs are not of consequence as the storage owners do not use all of their stored water and the reservoirs fill again to capacity the following year.

However, in a period like the early thirties when American Falls Reservoir failed to fill to capacity for five consecutive years it became necessary to charge evaporation losses in years when such losses were in excess of bank storage return to the reservoir during the drawdown period. The principle is well established in Idaho that the creation and operation of reservoirs has to be on a basis that will not deprive earlier appropriators of water which they would otherwise receive. In fact it is so generally recognized that I never heard of any Idaho watermaster even trying to operate on any other basis.

The Bureau of Reclamation will soon complete Palisades reservoir on Snake River, which will principally be a holdover reservoir to supply water in dry years. The Palisades contracts between that Bureau and the Snake River waterusers provide for a charge of 1½% evaporation losses on water held over from October 1 of any year to the end of the storage period the following spring. Copy of the language in this contract is attached hereto. Additional evaporation losses would be charged if necessary after the end of the storage season to the end of the irrigation season.

At the high elevations evaporation losses during the winter months are almost negligible and even during the summer months are much less than on the lower Colorado. Our reservoirs mostly have around 4 to 5% bank storage in addition to the open water storage space and also there was considerable vegetation growing in the reservoir areas and consuming water prior to construction of the dams. The reservoir owners are only chargeable with the amount by which the reservoir evaporation exceeds the natural water losses that previously occurred in the reservoir area.

Jackson Lake is the only one of our reservoirs in which there is any difference of priority right. The capacity of that reservoir was doubled in 1915 and the bottom rights prior to that date are first entitled to enough of the current year's inflow to fully fill their space before any of such inflow becomes available for top right owners.

A number of these matters are covered in detail in the Palisades contracts. There are several types of these contracts to cover special situations but there are certain provisions common to all the contracts. If you would write to H. T. Nelson, Regional Director, Bureau of Reclamation, Boise, Idaho, and ask him for a copy of the Palisades contracts containing the general provisions applicable to all purchasers of Palisades space I imagine he would send you one as they had a number of mimeographed copies.

In view of the differences between our situation and that on the Colorado, I am inclined to believe that I would not be of any particular value to you as a witness in your controversy with Arizona. If, however, you believe otherwise it would be necessary for you to secure the prior approval of the Director of the Geological Survey for me to appear as a witness on account of my position as District Engineer of the Survey.

Very truly yours,

Lynn Crandall
District Engineer

cc: Chief Hydraulic Engineer,
Washington
(with copy of Gindler letter)

Exhibit 56

Robert E. Smylie

December 26, 1956

Mr. Burton J. Gindler
Office of the Attorney General
909 S. Broadway--Room 600
Los Angeles 15, California

Dear Mr. Gindler:

In reply to yours of the 17th instant relative to priority of storage rights in Jackson Lake:

Owing to the high elevation of this reservoir the matter of evaporation losses has not been too important. According to detailed studies in the past the bank-storage return during the reservoir drawdown, on a seasonal basis, about offsets the evaporation losses. When we first start drawing storage out of the reservoir each year we let the natural flow rights use about 400 second-feet of stored water until a total of 15,000 to 20,000 acre-feet is so used. Then as the reservoir level is lowered and bank storage drains into it we recover an equal amount for the storage owners, so that all the storage owners by the end of the season can draw the full amount of storage they had in the open reservoir space when storage draft started.

Any holdover water in the reservoir on September 30 has to stand 1½% evaporation loss from then to the end of the following storage period (usually around June 30) if the reservoir should fail to fill the following year. Any evaporation loss on the current year's inflow during the above period is automatically stood by the top right owners due to first having to fill the bottom rights in full actually in the reservoir before the top rights can get any water out of the current year's inflow.

After the end of the storage season, there is no more water available for storage under any of the reservoir priority rights, all the streamflow then going to prior natural flow rights. If it should develop in some year that the bank storage return flow

was insufficient to offset evaporation losses during the period of reservoir draw-down we would charge evaporation losses during such period on a prorata basis to all reservoir owners.

The basic principle underlying our reservoir operations on Snake River is that prior rights, either natural flow or reservoir rights, shall not be deprived, due to subsequent reservoir construction, of any water that they would otherwise have received. With continuing reservoir construction and a great number of more or less conflicting rights, the problems grow more complex but we endeavor as near as possible to attain the above stated objective.

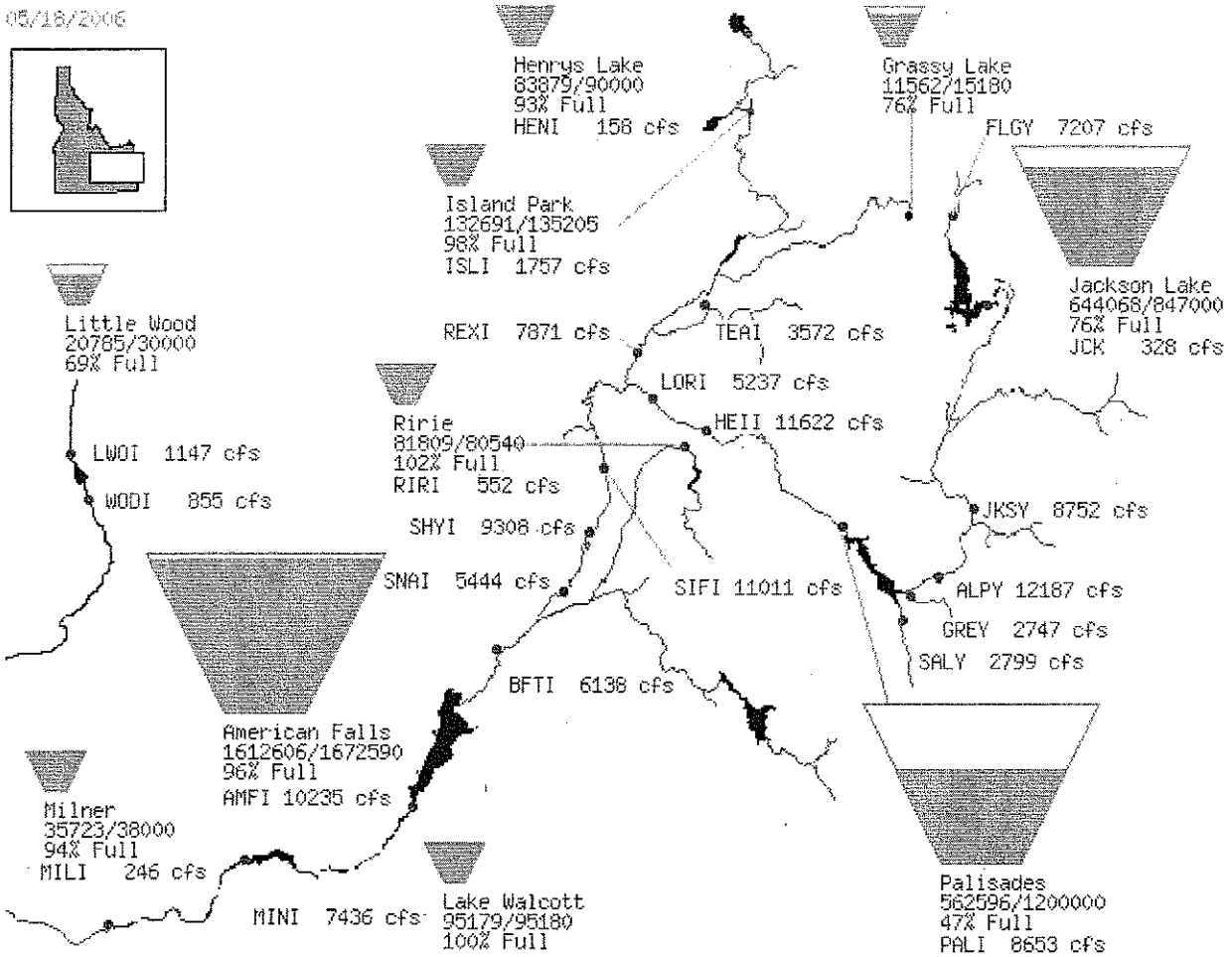
Very truly yours,

Lynn Crandall
Watermaster

Exhibit 57

Reorder No.
JULIUS BLUMBE
NYC 1007
@ 10% P.C.W

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Upper Snake River Basin

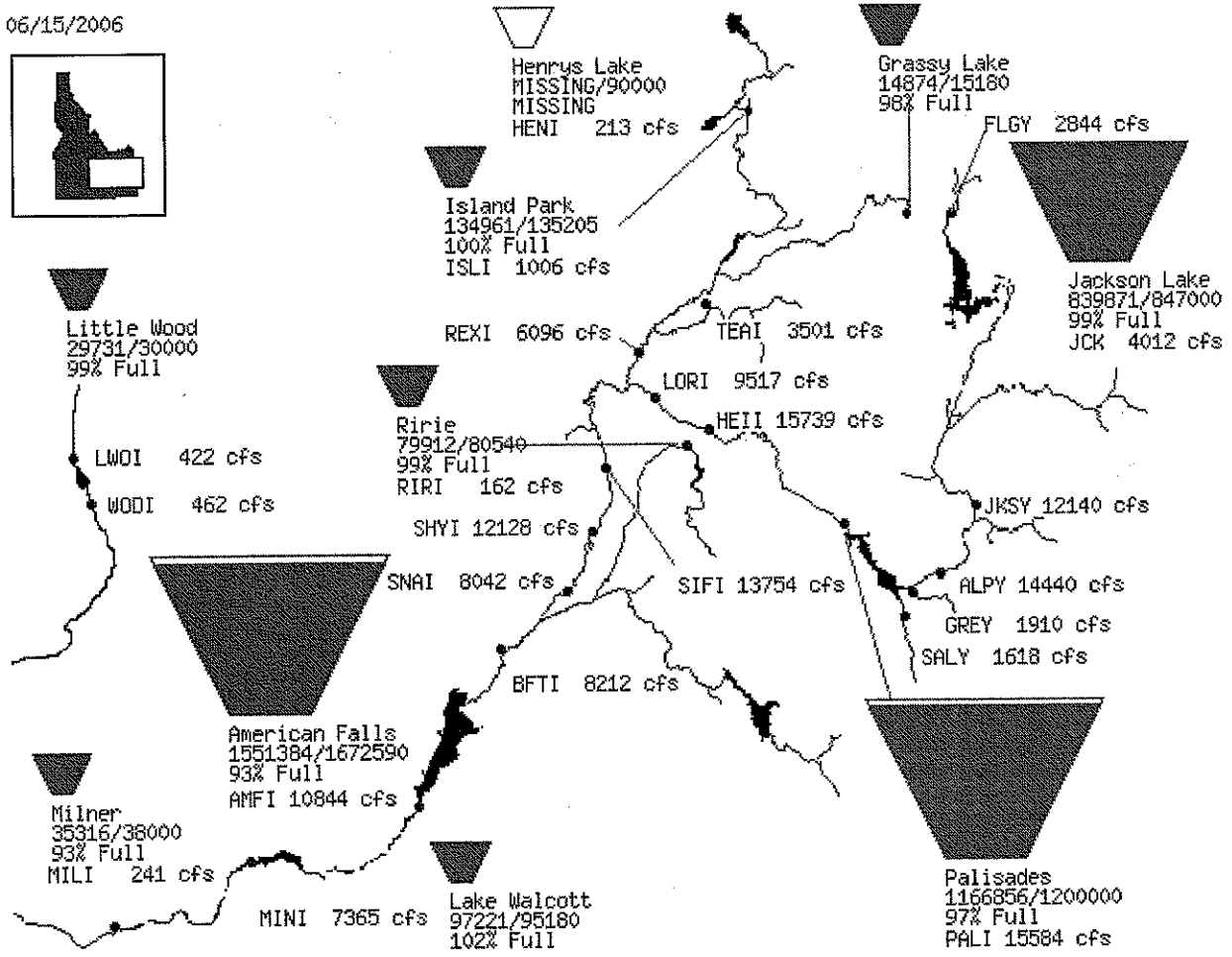


PROVISIONAL DATA - SUBJECT TO CHANGE!

Average daily streamflows indicated in cubic feet per second.
Reservoir levels current as of midnight on date indicated.
Click on gaging stations (red dots) for streamflow hydrographs.

```
Upper Snake River system (Jackson Lake,Palisades,
Grassy Lake,Island Park,Ririe,American Falls,LakeWalcott)
is at  78 % of capacity.
Total space available:        905180 AF
Total storage capacity:      4045695 AF
```

Bureau of Reclamation, Pacific Northwest Region
Major Storage Reservoirs in the Upper Snake River Basin



PROVISIONAL DATA - SUBJECT TO CHANGE!

Average daily streamflows indicated in cubic feet per second.
Reservoir levels current as of midnight on date indicated.
Click on gaging stations (red dots) for streamflow hydrographs.

```
Upper Snake River system (Jackson Lake,Palisades,
Grassy Lake,Island Park,Ririe,American Falls,LakeWalcott)
is at  96 % of capacity.
Total space available:        160612 AF
Total storage capacity:      4045695 AF
```

Exhibit 58

Duffin and Duff
ATTORNEYS AT LAW
FREMONT AND "G" STREETS
BOX 61
RUPERT, IDAHO 83350
TELEPHONE 436-4774

LAWRENCE H. DUFFIN
LARRY R. DUFF
ROGER D. LING

March 31, 1965

Mr. H. C. Eagle, Water Master
Department of Reclamation
Water District No. 36
P. O. Box 697
IdahoFalls, Idaho

Mr. David Crandall, Project Superintendent
Bureau of Reclamation
1359 Hansen Avenue
Burley, Idaho

Dear Gentlemen:

In accordance with Article 21(b) of our contract with the United States of America concerning storage capacity in American Falls, Jackson Lake and Palisades Reservoirs, and related matters, the Minidoka Irrigation District makes the following request:

The District requests that, to the extent of the District's use of Jackson Lake stored water in the year 1965, an exchange of Jackson Lake stored water be made for water stored to the credit of upper valley water users in American Falls Reservoir or out of any water in that reservoir that is available for exchange, to the extent there is water to effect such exchange.

Very truly yours,

DUFFIN & DUFF

By Roger D. Ling
Roger D. Ling, a Member of the Firm,
Attorneys for Minidoka Irrigation
District

M-D

March 10, 1966

Mr. Glenn Simmons, Supervisor
Bureau of Reclamation
Minidoka Project, Officer in Charge
Burley, Idaho

Mr. Henry Eagle
Snake River Watermaster
Engineer in Charge, U.S.G.S.
Idaho Falls, Idaho

Dear Sirs:

Request is hereby made under the provisions of paragraph 21 (b) of Draft B of the Contract of the United States Department of Interior, Bureau of Reclamation with the Minidoka Irrigation District, commonly known and designated as the "Palisades Contract", to effect an annual exchange of water out of the stored water that is exchangeable, not to exceed the extent of the Minidoka Irrigation District's use of Jackson Lake stored water in this year, out of water stored to the credit of upper valley water users in American Falls reservoir or out of any water in that reservoir that is available for exchange.

This request is made in writing for the irrigating season of 1966 and is directed to the officer in charge of the Minidoka Project and the Watermaster as required in said contract, on behalf of the Minidoka Irrigation District and upon resolution duly and regularly adopted by the Board of Directors of said District.

Very truly yours,

MINIDOKA IRRIGATION DISTRICT

Everett A. Walker
Manager

EW/as

Minidoka Irrigation District

319 F STREET
RUPERT, IDAHO

March 9, 1967

Mr. Henry Eagle
Snake River Watermaster
Engineer in Charge, U.S.G.S.
Idaho Falls, Idaho

Dear Sir:

Request is hereby made under the provisions of Paragraph 21 (b) of Draft B of the Contract of the United States Department of Interior, Bureau of Reclamation with the Minidoka Irrigation District, commonly known and designated as the "Palisades Contract", to effect an annual exchange of water out of the stored water that is exchangeable, not to exceed the extent of the Minidoka Irrigation District's use of Jackson Lake stored water in this year, out of water stored to the credit of upper valley water users in American Falls reservoir or out of any water in that reservoir that is available for exchange.

This request is made in writing for the irrigating season of 1967 and is directed to the officer in charge of the Minidoka Project and the Watermaster as required in said contract, on behalf of the Minidoka Irrigation District and upon resolution duly and regularly adopted by the Board of Directors of said District.

Very truly yours,

MINIDOKA IRRIGATION DISTRICT

Everett Walker
Manager

EW/ba