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# **USACE WATER CONTROL MANUAL FOR LITTLE WOOD RIVER RESERVOIR**



These Projects are considered authority of Section 7 for the U.S. Army Corps of Engineers. Little Wood River Reservoir is operated and owned by the U.S. Bureau of Reclamation.

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U.S. ARMY CORPS OF ENGINEERS, WALLA WALLA DISTRICT

DECEMBER 1988

WATER CONTROL MANUAL REVISIONS  
FOR LITTLE WOOD RIVER RESERVOIR

The following revisions are provided for the updating of this Water Control Manual. This Manual will be reviewed annually and updated if necessary. Major revisions pertaining to format and content in accordance with references ETL 110-2-251 and ER 1110-2-240 will be accomplished as time and manpower become available.

DECEMBER 1988 revisions include:

1. Table of Contents (Page ii, Pink sheet)
2. Table of Contents (Pages a, b, & c, Yellow sheets)
3. Section 5 - Data Collection (Pages 5-1 to 5-6)
4. Section 6 - Water Control Management (Pages 6-1 to 6-5)
5. Section 7 - Streamflow Forecast (Page 7-1)
6. Section 8 - Water Control Plan (Pages 8-1 to 8-4)
7. Appendix B - Forecasting Procedures:  
Corps of Engineers (Page B-2, 5 sheets)

JUNE 1988 revisions include:

1. Table of Contents (Page ii, Pink sheet)
2. Section 6 - Water Control Management (Pages 6-4, 6-5, & 6-6)

DECEMBER 1987 revisions include:

1. Table of Contents (Pg ii, Pink sheet)
2. SECTION 6 - WATER CONTROL MANAGEMENT:  
(1) Text (Pages 6-1 TO 6-2)  
(2) Section 6 - Water Control Management (Pages 6-3 to 6-5)  
(2) Section 6 - Water Control Management (Pages 6-1 to 6-5)

MARCH 1987 revisions include:

1. Notice To Users Of This Manual (Pg i)
2. Table of Contents (Pg ii, Pink sheet)
3. Table of Contents (Pgs a-b, Yellow sheets)
4. Pertinent Data (Pg A, Blue sheet)
5. SECTION 6 WATER CONTROL MANAGEMENT:  
(1) Text (Pgs 6-1 to 6-2)  
(1) Section 6 - Water Control Management (Pages 6-3 to 6-5)  
(2) Section 6 - Water Control Management (Pages 6-1 to 6-5)
6. Table 3 - Reservoir Storage Capacity Table (29 pages)
7. Table 4 - Discharge Rating, Little Wood River near Carey, Id. (5 pages)



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## 1985 revisions include:

1. (Pink Sheet, Pages i-ii)
2. (Pink Sheet, Page iii)
3. Hydrologic Forecasts (Appendix B):
  - (1) Bureau of Reclamation (5 sheets, Pg B-1)
4. SECTION 6 - :
  - (1) (Pg 6-3)

## 1984 revisions include:

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3. SECTION 6 - :
  - (1) (Page 6-1)
  - (2) (Pages 6-2 TO 6-3)

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RESERVOIR REGULATION MANUAL

LITTLE WOOD RIVER RESERVOIR

LITTLE WOOD RIVER, IDAHO

U. S. ARMY ENGINEER DISTRICT  
WALLA WALLA, WASHINGTON  
CORPS OF ENGINEERS

FEBRUARY 1963

## NOTICE TO USERS OF THIS MANUAL

Regulations specify that this Water Control Manual be published in looseleaf form, and only those sections, or parts thereof, requiring changes will be revised and printed. Therefore, this copy should be preserved in good condition so that inserts can be made to keep this Manual current.

As a continuing program it will be necessary to revise portions of this manual annually in order to keep it up to date. Revisions to this manual will be made by the Walla Walla District's Planning Division (Hydrology Branch). Changes in the plan of operation will be made for the purpose of improving regulation technique and project developments may occur which require revision of the information presented in this Manual. Whenever revisions are required, new pages containing the revised material will be printed with the date of revision and issued to each person having a copy of the manual so that substitution may be made.

ADDED AUG. 1984









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## Little Wood River Reservoir

### PERTINENT DATA

#### 1. GENERAL:

##### Location:

Approximately 9 miles north of Carey, Blaine County,  
south-central Idaho.

#### 2. RESERVOIR:

|   |                  |
|---|------------------|
| Total usable capacity below spillway crest          | 30,000 acre-feet |
| Joint use irrigation and flood control              | 28,000 acre-feet |
| Joint use fish and wildlife and flood control       | 2,000 acre-feet  |
| Surface area at normal water surface (elev. 5237.3) | 570 acres        |
| Length at normal water surface                      | 2.5 miles        |
| Maximum water surface elevation                     | 5243 m.s.l.      |

#### 3. DAM:

|  |                    |
|--|--------------------|
| Type   | rolled earthfilled |
| Maximum height   | 122 feet           |
| Crest elevation  | 5249 m.s.l.        |
| Crest length   | approx. 3100 feet  |
| Spillway crest elevation                                   | 5237.3 m.s.l.      |
| Spillway type  | uncontrolled       |
| Spillway capacity at maximum water surface<br>(elev. 5243) | 9,200 c.v.s.       |
| Outlet type  | gated tunnel       |
| Outlet capacity at normal pool (elev. 5237.3)              | 1,100 c.f.s.       |

#### 4. HYDROLOGY:

|   |                   |
|---|-------------------|
| Drainage area above Little Wood River Dam     | 279 sq. miles     |
| Drainage area above Carey gage                | 312 sq. miles     |
| Carey gage, Average annual runoff (1927-1960) | 97,700 acre-feet  |
| Carey gage, Maximum annual runoff (1938 W.Y.) | 211,000 acre-feet |
| Carey gage, Minimum annual runoff 1934 W.Y.)  | 33,000 acre-feet  |



## LITTLE WOOD RIVER RESERVOIR, IDAHO

### RESERVOIR REGULATION MANUAL

#### SECTION 1 - INTRODUCTION

##### 1-01. AUTHORITY

This manual is prepared under authority contained in Section 7 of the Flood Control Act of 1944 (58 Stat. 890) which reads in part as follows:

"Hereafter, it shall be the duty of the Secretary of War to prescribe regulations for the use of storage allocated for flood control or navigation at all reservoirs constructed wholly or in part with Federal funds provided on the basis of such purposes, and the operation of any such project shall be in accordance with such regulations."

Preparation of regulations for projects subject to the provisions of Section 7 is required by ER 1110-2-240, which stipulates that the proposed regulations presented to the Chief of Engineers for processing should be accompanied by a reservoir regulation manual for the project. General instructions regarding the preparation of the manual are contained in Chapter 6 of EM 1110-2-3600.

##### 1-02. PURPOSE AND SCOPE

This manual serves two main purposes: First, it contains a general description of the drainage basin and development. Second, it describes the plan of operation as agreed upon by the Bureau of Reclamation and the Corps of Engineers. It presents regulation schedules for flood control and examples of flood regulation. Comprehensive pertinent data are presented, including basin and flood plain maps, outlet and spillway discharge curves, storage allocations, discharge rating tables for

key stations, and climatological data. The organization and responsibilities of those concerned with proper operation of the project are also included.

#### 1-03. REVISIONS TO MANUAL

It will occasionally be necessary to revise portions of this manual to keep it up-to-date. Pertinent discharge rating tables must be revised when changes become evident in the stage-discharge relation; changes in the plan of operation may be made as a result of operational experience; and runoff forecasting procedures will probably be improved. Whenever revisions are necessary, new pages containing the revised material will be printed and issued to each person having a copy of the manual so that substitution may be made. Revised pages will show the date of revision.



## SECTION 2 - BASIN DESCRIPTION

### 2-01. TOPOGRAPHY AND STREAMS

Little Wood River Dam and Reservoir control the runoff from the upper 279 square miles of Little Wood River Basin in Blaine County, south-central Idaho. Plate 1 shows a basin map for Big Wood and Little Wood Rivers. The drainage area above Little Wood River Dam is a triangular-shaped, mountain and foothill area between Big Wood River drainage on the west and the Big Lost River drainage on the east. Little Wood River originates in the Pioneer Mountains and flows generally south to enter the Snake River plain near Carey, Idaho. Below Carey the river continues to flow south but gradually swings to the west to enter Big Wood River 11 miles above its confluence with Snake River. The only mountainous area of significance in the Little Wood River Basin is above Carey. Elevations in this area range from 4,775 feet at Carey to over 11,600 feet in the mountains to the north. With the exception of a few small areas the valleys are narrow and undeveloped. Stream gradients are quite steep in the upper reaches, becoming flat only in the lower sections of the main tributaries. The drainage pattern contains many individual tributaries that are relatively short in length.

About 3.5 miles above Carey the river leaves the mountain canyons and flows across an alluvial cone which is known as Carey Valley. Immediately below Carey the valley is about 3 miles wide but it gradually narrows to a few hundred feet about 8 miles below Carey as foothills to the west and lava beds to the east converge. Fish Creek drains a

foothill area east of Little Wood River and flows generally south to a reservoir of 13,700 acre-feet capacity near the lower end of the stream which controls practically all of the annual runoff. Any excess flow below Fish Creek Reservoir normally sinks into the lava fields east of Carey or is diverted to a small recreational lake called Carey Lake. Fish Creek is not now tributary to Little Wood River; however, water can be diverted from Fish Creek to Little Wood River by a canal which terminates in the East Canal north of Carey. Silver Creek is a principal tributary to Little Wood River, entering from the west some 9 miles downstream from Carey.

#### 2-02. DOWNSTREAM CHANNELS

Plate 2 shows the upper Little Wood River flood plain from Little Wood River Dam to the mouth of Silver Creek. As shown, three channels carry the flow of the Little Wood River through the Carey Valley. One of these channels, known locally as the West Branch, diverts to the right approximately 3 miles upstream from the town of Carey and flows southerly away from Carey along the foothills on the west side of the valley. In the town of Carey the main channel again divides into two channels, the East and Middle Branches. The East Branch flows in a southeasterly direction for about 2 miles through farm lands to the edge of the lava beds which form the left boundary of the valley and there, flanked generally on the left bank by lava beds and on the right bank by farm lands, the East Branch continues for a distance of 5 miles to where it again joins the West and Middle Branches at the lower end of the valley area. The Middle Branch flows generally through farm lands near the middle of the valley for a distance of 6 miles before joining the West Branch and East Branch.



## 2-03. ECONOMY

The economy of the Little Wood River area is almost entirely dependent upon an extensive type of agriculture. Raising of beef cattle and sheep and production of dairy products are the principal agricultural pursuits, with most of the 15,000 acres of irrigated land located in Carey Valley devoted to raising grain, hay, and pasture to support the livestock industry. These irrigated valley lands, as elsewhere in the Snake River Basin, provide winter feed for large numbers of livestock that graze on adjacent upland areas during the summer seasons.

Carey is the commercial center of the upper Little Wood area. Economic activity in Carey is mostly confined to retail trade commonly associated with a small, extensive agricultural area. There is a small cheese factory in Carey which processes the output from the dairy activity in the area. Carey is on a well-traveled tourist route and a minor amount of the area's income is derived from this source.

A single highway which serves as the routes for U. S. Highways 26, 20, and 93 Alternate passes through Carey. The area is served indirectly by a main line of the Union Pacific Railroad which passes through Shoshone, 30 miles south, and by the Ketchum branch line which passes 6 miles west of Carey.

## 2-04. POPULATION

Settlement of Carey Valley took place in the late 1800's. The principal occupation in the early days was livestock raising. Surrounding foothills and mountains to the north were used for summer

grazing, and the stock was wintered along the lower reaches of the river. Hay and grain produced by irrigating valley lands with Little Wood River water furnished the livestock feed needed during the winter time. Population of the valley has grown only slowly and remains relatively sparse. The 1960 population of the Bellevue-Carey census division is 1,714 and the Blaine County population is 4,600.

#### 2-05. IRRIGATION

Water from Little Wood River has been used to irrigate lands in the valley for the past 80 years or more. The earliest water rights have a priority date of 1880 and were granted to meet the individual needs of the early farm operators. The valley topography is excellent for irrigation and the soils are generally of high quality, free of salts and alkali problems. The soils have developed from alluvial fan materials ranging in texture from gravelly loams to clay loams. The dominant soils are deep, medium-textured, inherently fertile, and have excellent water-holding capacities. The remaining soils are shallow and in some locations have considerable gravel intermixed with silt loams and clay loams, conditions which are most pronounced near the apex of the fan. No seepage or drainage problems of importance have developed during the long period of irrigation.

Little Wood River above the mouth of Silver Creek has been decreed a "dry stream," which means that the relative priority and amount of water right applies to the use of water only among the users in this reach of stream. Downstream right-holders cannot require releases of water originating above the junction with Silver Creek. An analysis of water rights made by the Geological Survey in "Evaluation of Streamflow Records in



Big Wood River Basin, (Circular 192)" reported that rights granted for irrigation use above Little Wood River Reservoir total 143 cfs for use on 5,370 acres. Power rights in the same area total 28 cfs. These figures were derived from decrees and water right records and are not the results of an actual field survey. Irrigation use of the waters above Little Wood River Reservoir became stabilized before 1928. Water rights, both decreed and permits, total some 538 cfs on the lands served by the East and West Canals. The majority of these rights are cut off after the spring runoff, as the flow in the river after the first of July is usually less than 100 cfs. Rights are owned by the Little Wood River Canal Company in the amount of 340 cfs, rights for 157 cfs are owned by individuals, and a right to 41.02 cfs is of questionable ownership. The 41.02 cfs right was originally attached to lands to be served from Carey Lake by the Carey Lake Reservoir Company. In 1949 the Carey Lake Reservoir Company sold Carey Lake to the Idaho Fish and Game Department for fish and wildlife purposes. Lands to which the original right was attached are now being served by canals of the Little Wood River Canal Company. The State Fish and Game Department and the Little Wood River irrigators have different interpretations in the disposition of this water right.

Records have been kept of water delivered to the farms served by Little Wood River Canal Company since 1941. These records show the average farm delivery from 1942 to 1953 as follows:

| <u>Month</u> | <u>Farm Delivery</u><br><u>1000 acre-feet</u> |
|--------------|---|
| May          | 8.7   |
| June         | 10.5  |
| July         | 12.7  |
| August       | 8.6   |
| September    | 2.0   |
| Total        | 42.5  |

The irrigators have been inclined to make large applications of water in the early part of the season when streamflow was high, knowing that they would be short of water in the latter part of the irrigation season. Canal losses are estimated to be 20 percent of delivery, and this loss rate was verified by canal measurements made in July 1954. Future irrigation requirements are estimated in accordance with the following table:

| <u>Month</u> | <u>Percent</u> | <u>Diversion Requirement</u><br><u>1000 acre-feet</u> |
|--------------|----------------|---|
| May          | 17             | 11.2  |
| June         | 20             | 13.2  |
| July         | 24             | 15.9  |
| August       | 24             | 15.9  |
| September    | 15             | 10.0  |
| Total        | 100            | 66.2  |

During the major part of many irrigation seasons Little Wood River is dry below the diversion dam. Because of the nature of the underlying materials, excess water applied percolates underground and does not reappear in the river, providing no opportunity for irrigators to capture and re-use return flows.

## SECTION 3 - PROJECT DESCRIPTION

### 3-01. PROJECT PURPOSE

The primary purpose of Little Wood Dam and Reservoir is to supply supplemental irrigation water for about 9,550 acres in the Little Wood River valley near Carey. The reservoir is operated on a forecast basis to provide flood control benefits. Storage is also provided for fish and wildlife conservation. Operation and maintenance is by the Little Wood River Irrigation District.

### 3-02. PROJECT HISTORY

In 1893 the settlers formed a mutual association and constructed canals on both sides of Little Wood River. In 1899 the association incorporated under Idaho State law into the Little Wood River Canal Company with 600 shares of stock, each share being entitled to 16-2/3 inches of water, and by 1915 the company had 12 miles of canals in operation. Carey Lake Reservoir Company was formed in 1912 and obtained a license to divert and store water in Carey Lake for 2,051 acres of land lying below this small lake east of Carey, Idaho. It is reported that attempts to store water in the upper part of this lake resulted in heavy seepage losses. By about 1923 or 1924, no water was available for storage here, and since that time there has been no irrigation storage in Carey Lake. Construction of a concrete multiple-arch dam on Fish Creek was started in 1918 by the Carey Valley Reservoir Company. First storage was in 1921-22. The company issued 14,715.25 shares of stock, which was equivalent to the approximate capacity of the reservoir in acre-feet. Some of this stock was owned by landowners in the



Little Wood River valley, and Fish Creek storage water was first delivered to Little Wood River valley lands in 1923. The Reservoir Company experienced considerable financial difficulty in the early years and has been plagued by extremely short water supply ever since construction of Fish Creek Dam.

The drought of the early 1930's emphasized the need for storage on Little Wood River to conserve high spring flood flows for late season irrigation supplies. Surveys and investigations for a storage dam were begun in 1934, the Little Wood River Irrigation District was formed in 1935, and construction was started in 1936 by the Works Progress Administration. Construction activities by this agency were terminated in 1939 before completion. The dam was finished by contract in 1941 to a lesser height than originally planned.

The reservoir thus constructed did not provide sufficient regulation of the flows of Little Wood River for a full irrigation supply or control of floods. In 1947 the Board of Directors of the Little Wood River Irrigation District employed a private engineering firm to investigate the possibility of raising the dam, but the proposal was defeated at that time. Interest in the project continued and, later, under the provisions of Section 2(a) of the Reclamation Project Act of 1939 (53 Stat. 1187) the Bureau of Reclamation prepared a report, dated June 1955, recommending a plan for raising the height of the existing Little Wood River Dam 45 feet. Usable reservoir storage was increased from 12,100 to 30,000 acre-feet. Estimated cost was \$1,880,000 of which \$328,000 was allocated to the flood-control function as a nonreimbursable cost and the entire balance of



\$1,552,000 was allocated to irrigation. The degree of flood protection and corresponding benefits were determined from an analysis of flood record and historical data, with consideration given to present and future needs. The contract for enlargement of the dam was awarded in August 1958 and the work was substantially completed in 1960.

### 3-03. PHYSICAL FEATURES OF DAM

The existing enlarged dam is an earthfill structure with a height of 122 feet above the riverbed and a length of 2,900 feet. Water is released from storage through a concrete-lined tunnel in the right abutment controlled by two slide gates at the inlet. The tunnel is in two sections of 200 feet each. The upstream section is a 5-foot by 7-foot gallery type tunnel, and the downstream section is an 8-foot diameter horseshoe conduit. A concrete bridge provides access to the concrete intake gate structure for operation of the gate hoists.

The concrete spillway structure is uncontrolled and is on the left abutment upstream from the main portion of the dam. Spillway crest elevation is 5,237.3 feet m.s.l. and the spillway capacity is 9,200 cfs at the maximum design water surface elevation of 5,243 feet m.s.l. The concrete structure introduces the overflow into a rock channel which discharges over the rocky left canyon wall and into the river downstream from the dam. Plate 3 shows the general plan and sections of the dam, and Plate 4 shows details of the spillway. Plates 5 and 6 show spillway and outlet discharge curves.

The Diversion Dam, located about  $1\frac{1}{2}$  miles downstream from Little Wood River Dam, serves as a common diversion works for distribution of

flows in East Canal, West Canal, and main river. The distribution is made by adjustment of three slide gates on each of the East and West Canals. Main river flow results from overflow of Diversion Dam.

#### 3-04. CHANNEL IMPROVEMENTS

Flood control improvements to the downstream channels of Little Wood River are closely related to but not directly a part of the Bureau of Reclamation Little Wood River Dam enlargement project. The local people, as individuals and groups, have made improvements which provide some protection of lands and property from the more frequent and smaller floods. These works consist primarily of channel clearing and snagging, but a small amount of channel rectification has been accomplished. Some dumped stone revetment has been placed to stabilize embankments above Carey. Two concrete diversion structures have been constructed to control diversion of flows into the three separate channels traversing Carey Valley. In addition, considerable repair and construction work was performed in connection with the 1950 and 1952 flood fights. As a result of all work above the town, there is in existence about 17,000 lineal feet of levees, 8,000 feet of which has been reinforced with riprap.

#### 3-05. PROPOSED CHANNEL IMPROVEMENTS

Under authorization provided by Section 204, Public Law 516, of the 1950 Flood Control Act, the Corps of Engineers has established engineering feasibility and economic justification for additional major channel improvement work on Little Wood River in the vicinity of Carey, Idaho. The proposed improved channels would have a safe combined capacity of 1,200 cfs. A Design Memorandum No. 1 (Justification Report) dated 5 July 1957, was

prepared by the Walla Walla District of the Corps of Engineers. This report was approved by letter indorsement from the Office, Chief of Engineers, dated 23 May 1958. However, the Carey Flood Control District No. 2 was not able to complete the requirements for sponsorship of the proposed project. Public Law 228, 77th Congress, approved 18 August 1941, provides that authorization for any flood control project to be constructed by the Federal Government requiring local cooperation will expire 5 years from date of notification in the event local interests indicated they would not fulfill the requirements of sponsorship. The project was therefore placed in an "inactive" status for a period of 5 years from April 1960.



## SECTION 4 - HYDROLOGY

### 4-01. CLIMATE

The climate of the Little Wood River Basin is generally semiarid except for the higher mountainous areas, and is characterized by hot dry summers and cold winters. Topography and elevation are important climatic controls. In the lower part of the basin, monthly mean temperatures range from about 20 degrees in January to near 70 degrees in July. Extremes of 105 degrees and minus 40 degrees have been recorded at Richfield, which is located in the basin about 18 miles southwest of Carey. The average annual temperature at Richfield is 45 degrees. A summary of the climatological records for Richfield is shown on Table 1 along with the records for Hailey and Sun Valley, which are both located in the Big Wood River Basin to the west of Carey but are fairly representative of the climate in the Little Wood River Basin.

### 4-02. PRECIPITATION

Normal annual precipitation varies from about 10 inches at Richfield and 13 inches at Carey to near 30 inches in the high mountain area. Winter is normally the wet season, and summer the dry season. In each of the driest months of July and August the average precipitation is only about 3 percent of the annual. There are no long term precipitation records for stations in the drainage basin contributing to Little Wood River Reservoir. The most representative long term records are for the stations at Richfield and Hailey, both downstream of Carey.



A precipitation station was established 2.2 miles northwest of Carey in October 1962. Plans are underway to establish an additional precipitation station at Muldoon, located within the drainage basin tributary to Little Wood River Reservoir. Plate 1 shows location of precipitation gaging stations.

#### 4-03. SNOW COURSES

Much of the winter and spring precipitation occurs as snow, particularly at the high elevations and remains on the ground until melted by warmer spring temperatures. There were no snow courses in the Little Wood River Basin until 1953 at which time four courses were established. Three additional courses have since been established, of which the highest, Porcupine, elevation 8350, is an aerial observation course with the water equivalent estimated from the snow depth. In addition to the snow courses in the Little Wood River Basin, there are a number of courses in adjacent basins. Some of the adjacent courses are reasonably representative of snow conditions at similar elevations in the Little Wood River Basin. For this reason and because of their longer records, six adjacent courses are used in the seasonal runoff forecasting procedure developed by the Bureau of Reclamation and presented in Appendix B of this manual.

Most snow courses are measured monthly, January through May, and the data are collected and published by the Soil Conservation Service in Boise. Table 2 shows snow survey data for selected stations, for which the locations are shown on Plate 1. As indicated in the table, at the lower elevation courses the maximum snow water equivalent is often reached in early March but at the higher elevations the maximum is likely to be in early April.

#### 4-G4. HYDROLOGIC RECORDS

Records of Little Wood River Reservoir contents have been published by the U. S. Geological Survey since October 1955, based on staff gage readings and the elevation-storage relationship, Table 3. The longest discharge record on upper Little Wood River is for the station located 6 miles northwest of Carey and about 3 miles below the dam. Average discharge at this station for the 33-year period of record is 135 cfs or 97,700 acre-feet per year from the 312-square mile drainage area. A station on Little Wood River at Campbell Ranch, just above the flow line of the reservoir, gaged the discharge from the upper 267 square miles of the basin or 96 percent of the area tributary to the dam. No winter records are available at this station except for the 5-year period 1921-24, 1926, when the average discharge was 152 cfs or 110,000 acre-feet per year. In 1958 this station was discontinued and replaced by a new station designated Little Wood River above High Five Creek near Carey. Drainage area tributary to the new site is 248 square miles or 89 percent of the area above the dam. The complete all-season record for the new gage is published by the U. S. Geological Survey. A water-stage recorder was in operation immediately below the dam from 1955 to 1958. In addition, a station on Silver Creek near Picabo is of some indirect interest to the regulation of Little Wood River Reservoir. Plate 1 shows locations of the current gaging stations. Discharge rating tables for the gages near Carey and above High Five Creek are shown on Tables 4 and 5.



#### 4-05. STREAM FLOW CHARACTERISTICS

The high-flow period on the Little Wood River is during the melting of the accumulated snow pack in April, May and June. Flow during the remainder of the year is generally quite low. This characteristic runoff pattern is shown by a tabulation of monthly runoff volumes, Table 6.

Floods are generally the result of the melting of large snow packs sometimes augmented by rainfall. With the exception of the flood of December 1955, all past floods have occurred in April or May. The December 1955 flood was caused by a heavy rainstorm and exceptionally warm temperatures for that time of year, which allowed the precipitation to fall as rain at high elevations and melt considerable snow over most of the basin.

About 15 miles below Carey the Little Wood River flows across some lava beds and at high flows nearly all overflow from the channel is lost in the lava. Generally there is little flooding in the basin below this point from high flows originating above Carey.

#### 4-06. PAST FLOODS

Floods with discharges of 1,000 cfs or greater have occurred in 12 years during the period 1920-1961. The largest flood of record was in 1938 when three small reservoirs on Little Fish Creek and one on Muldoon Creek failed, causing a flash flood of 6,000 cfs at the gage near Carey. Under natural flow conditions it is estimated that the peak would have been 2,000 cfs. The peak discharge of the December 1955 flood above Little Wood River Reservoir was estimated at 3,110 cfs, which is the largest flow of record for this location. This flood contained a very small volume and Little Wood River Reservoir, which was filling for irrigation water,



held all the flood water. The largest known flood of natural flow in Carey Valley was 2,680 cfs on 27 April 1952. This flood had a maximum 30-day volume of about 90,000 acre-feet, and Little Wood River Reservoir filled about 8 days before the peak discharge. Hydrographs of computed natural daily discharge for Little Wood River near Carey are shown on Plate 11 for the flood period of the years having high discharges.

#### 4-07. CHANNEL CAPACITIES

The flood problem in the upper Little Wood River valley is divided into three areas, each of which has somewhat different characteristics. The first of the three segments of the river is that reach from the reservoir to about  $2\frac{1}{2}$  miles above Carey. Channel capacity is about 1,900 cfs. The second segment is that reach from  $2\frac{1}{2}$  miles above Carey to 1 mile below Carey. Channel capacities through this reach are now about 2,500 cfs. Since 1950 the Corps of Engineers and other agencies and local interests have expended about \$75,000 in channel work, levee construction, fighting floods, and in sequent improvement operations. As a result of this work, the capacities of Little Wood River in this reach are now considered adequate for flood flows equivalent or in excess of the capacity of the channel upstream of this segment. The third segment is from 1 mile below Carey to the lower limit of Carey Valley. The channel capacities in this reach total about 800 cfs before damages begin to occur, and appreciable damages may be sustained with 1,200 cfs flow. The East Branch carries the major portion of flows in this reach. In addition to the three channels of Little Wood River, there are two main irrigation canals, one

on either side of the river, which head at a common diversion works about 4 miles upstream from Carey. These are known as the East and West Canals and have a combined total capacity of about 400 cfs. However, the reliability of these canals to pass water during time of flood is questionable and flood control studies considered them to be unusable for this purpose. Most large floods of past record have occurred during the last half of April and the first half of May. Irrigation requirements during April are small but increase rapidly during May. The beginning date and volume of irrigation requirements in any season are dependent largely upon the prevailing weather conditions. The map of the Little Wood River flood plain, Plate 2, depicts the river channels and main irrigation canals.

#### 4-08. FLOOD FREQUENCIES

Frequencies of maximum annual discharges for Little Wood River near Carey have been analyzed in accordance with procedures outlined in Civil Works Engineering Bulletin 51-1. The period used in the studies was 1911 through 1954, but was adjusted to a long period record by use of the 1858-1956 record of discharges of Columbia River near The Dalles, Oregon. The actual record for the gage near Carey began in 1926; annual peaks prior to 1926 were estimated by correlations with the gage at Campbell Ranch and a downstream gage near Richfield, Idaho. Exceedence probabilities and indicated average exceedence intervals are summarized in the following tabulation:



| <u>Exceedence<br/>Probability<br/>Percent</u> | <u>Indicated Exceed-<br/>ence Interval<br/>Years</u> | <u>Peak Discharge<br/>cfs</u> |
|---|--|-------------------------------|
| 20  | 5  | 1,400                         |
| 10  | 10   | 1,840                         |
| 4   | 25   | 2,450                         |
| 2   | 50   | 2,950                         |
| 1   | 100  | 3,500                         |

#### 4-09. FLOOD DAMAGES

In the 20-mile reach of Little Wood River from Little Wood River Reservoir to Blaine-Lincoln County line, the present flood plain for a flow of 2,680 cfs (April 1952 flood) covers approximately 2,060 acres. The flood plain for a flow of 1,720 cfs (April 1950 flood) covers approximately 1,200 acres. Of the above acreages approximately 1,970 and 1,150 acres, respectively, lie within the reach below the diversion works for the Middle Fork at Carey. Those lands are used primarily for the production of hay, small grain, some raw crops, and pasture lands.

Total damages caused by the 1952 flood in the Carey Valley, including the community of Carey, on the basis of 1957 development and prices would amount to \$190,000. Damages to agricultural lands, crops, farmsteads and farm improvements are estimated at \$150,000. Damages to highways and bridges would amount to \$16,000. Other damages would result as follows: Commercial and residential \$5,000, irrigation works \$4,000, and flood control works \$8,000. An additional \$7,000 would be spent in flood fight and evacuation on the basis of the 1952 pattern. In 1952 five county bridges were destroyed in and adjacent to Carey, and several residences and two commercial establishments were inundated. The average annual damages to the valley under 1957 conditions are estimated to be \$22,300.



The following table shows damages based on 1957 assumed price level and economic development as related to discharges for the gage near Carey:

Discharge-Damage Table  
Little Wood River Reservoir to about 5 Miles below Carey

| <u>Discharge</u><br><u>cfs</u> | <u>Damages</u> | <u>Discharge</u><br><u>cfs</u> | <u>Damages</u> |
|--------------------------------|----------------|--------------------------------|----------------|
| 500                            | \$ 400         | 2,250                          | \$ 96,000      |
| 800                            | 2,000          | 2,500                          | 152,000        |
| 1,070                          | 8,000          | 2,680                          | 200,000        |
| 1,250                          | 12,300         | 3,000                          | 280,000        |
| 1,500                          | 20,000         | 3,500                          | 400,000        |
| 1,750                          | 32,000         | 4,000                          | 500,000        |
| 1,900                          | 44,000         | 4,500                          | 580,000        |

## SECTION 5 - PLAN OF OPERATION

### 5-01. GENERAL

The Corps of Engineers and Bureau of Reclamation, in cooperation with other Federal and State agencies and private organizations, have made studies of water supply, channel protection, and multiple purpose usage of Little Wood River water. The flood control plan set forth in this manual has been developed to provide the maximum degree of flood control protection which can be attained with existing facilities. It sets the ground rules for reservoir regulation by the exercise of prudent judgment in the practical integration of overall operating objectives.

The flood control objective is to minimize overall flood damage in Carey Valley to the maximum extent practicable under channel conditions existing at the time. Lacking specific improvements in the river channels to provide a total channel capacity of 1,200 cfs, some flood damage may occasionally occur in the river reach which extends from approximately 1 mile below Carey to the lower end of the valley. The operation of the enlarged Little Wood River Reservoir to consistently limit flows to less than 800 cfs, the estimated total safe channel capacity of this lower reach, is not practicable. Such regulation could seriously reduce irrigation storage supplies in some years and was not contemplated in the plan basic to the authorization for enlargement of the Little Wood River Reservoir.

### 5-02. FEATURES OF PLAN OF OPERATION

The plan of operation is as follows:

a. Storage space in Little Wood River Reservoir will be kept available for flood control purposes on a forecast basis in accordance with the flood control storage reservation schedule currently in force.

b. Releases from the Little Wood River Reservoir shall be restricted to quantities which will not cause downstream flows at the Carey gaging station to exceed 1,200 cfs, insofar as this control can be accomplished using the total active storage capacity (initially 30,000 acre-feet) in the Little Wood River Reservoir between elevations 5127.8 and 5237.3 feet.

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

d. The Bureau of Reclamation, acting through the Little Wood River Irrigation District, shall currently procure basic hydrological data, make determinations of required flood control space reservations from the flood control storage schedules currently in force, and make calculations of permissible releases from the reservoir as are required to accomplish the flood control objectives.

The essential features of this plan are contained in the Code of Federal Regulations, Title 33, Part 208. \_\_ as published in the Federal Register under Section 7 (58 Stat. 890, 33 U.S.C. 709), which is included as Appendix A of this manual.

#### 5-03. RUNOFF FORECASTS

Satisfactory results from the operating plan depend to a great extent on the adequacy of seasonal runoff forecasts. Since most of the runoff



into Little Wood River Reservoir is primarily from melting of the accumulated winter and spring snow pack, forecasts of runoff volume can be made with a reasonable degree of accuracy.

The Bureau of Reclamation, in consultation with the Corps of Engineers and State Watermaster for District No. 11-C, makes forecasts of seasonal runoff volume for operation of the reservoir. Forecasting equations developed by the Bureau are included as Appendix B of this manual. They consist of statistically derived relationships of past occurrences of runoff and snowfall, precipitation and other indexed factors. Forecasts are made monthly, usually starting 1 February, and kept current on a day-to-day basis. Snow water equivalent and precipitation data for previous years are shown on Tables B-1 and B-2. Results of the forecasts as would have been developed for past years are shown on Tables B-3 and B-4.

#### 5-04. FLOOD CONTROL STORAGE SPACE RESERVATION SCHEDULES

The space reservations for flood control are determined as the maximum requirement of three separate criteria as follows:

Item 1: On the basis of forecast seasonal runoff volume.

Item 2: On the basis of a reservoir filling schedule predicated upon assured refill.

Item 3: On the basis of minimum snowmelt recession volume.

Each of these three items is discussed separately in the following paragraphs.

#### 5-05. FORECAST SEASONAL RUNOFF VOLUME

This criterion is based on the general relationship between flood potential and seasonal runoff volumes from the beginning of the flood

through 30 September. A maximum envelope of the relationship between historical flood flow and seasonal runoff volumes was derived using all available data. This envelope line, which is controlled by the data for the flood years 1952 and 1957, indicates zero flood potential for seasonal (April-September) runoff volumes of less than 62,000 acre-feet. A maximum potential flood volume of 30,000 acre-feet (usable capacity for the reservoir) is indicated for a seasonal runoff volume of approximately 194,000 acre-feet. The indicated potential flood volumes were increased by adding a safety factor which varies with flood magnitude. In the general range of the large floods it is quite large, being in excess of 90 percent for some large floods. In order to avoid loss of irrigation storage, it was necessary to use a much smaller safety factor for the small floods. The development of the envelope relationship and the flood control space allocation curve is shown on Plate 10. The space allocation curve has been converted to tabular form as follows:

| Forecast Runoff<br>at Gage near Carey<br><u>through 30 Sept</u><br>(1000 acre-feet) | Flood Control<br><u>Space Allocation</u><br>(1000 acre-feet) |
|---|--|
| 60  | 0  |
| 80  | 5  |
| 90  | 10   |
| 100   | 15   |
| 110   | 20   |
| 120   | 25   |
| 130 or more   | 30   |

#### 5-06. RESERVOIR FILLING SCHEDULE

This criterion provides an exclusive reservation of space for control of possible winter floods, which cannot be forecast very far in advance. It was based on the recorded minimum storable reservoir inflow,



which occurred in 1931, and is designed to prevent unnecessary waste or loss of irrigation water storage. Studies show that this item will provide adequate space for control of all winter floods of record, including that of December 1955 which is the largest, to flows of 1,200 cfs or less at the Carey gage. In most years the irrigation draft of the preceding season will provide empty reservoir space far in excess of that called for in this item. The item is applicable only during the period 30 September through 15 April each year. The reservoir storage limitations based on Item 2 are as follows:

| <u>Date</u>  | <u>Maximum Allowable<br/>Storage Content<br/>(1000 acre-feet)</u> | <u>Minimum Flood Con-<br/>trol Space Allocation<br/>(1000 acre-feet)</u> |
|--------------|---|--|
| 30 September | 18.0  | 12.0   |
| 31 October   | 19.0  | 11.0   |
| 30 November  | 21.0  | 9.0  |
| 31 December  | 23.0  | 7.0  |
| 31 January   | 25.0  | 5.0  |
| 28 February  | 26.5  | 3.5  |
| 31 March     | 29.0  | 1.0  |
| 15 April     | 30.0  | 0  |

#### 5-07. MINIMUM SNOWMELT RECESSION VOLUME

This criterion is intended to prevent premature filling of the reservoir during the spring snowmelt period as a result of errors in runoff forecasts. Experience in developing forecast procedures indicates that rather large forecast errors will occasionally occur. The basic minimum snowmelt recession curve was developed from segments of the hydrographs for the years 1925, 1933, 1938, 1950 and 1952. Plate 9 shows the relation between discharge and the recession volume above 300 cfs. During the flood runoff period the downstream irrigation requirement is expected to average about 300 cfs much of the time;



consequently, this part of the flow probably will not be available for storage in the reservoir. Item 3 has the effect of delaying reservoir filling so long as there is assurance that sufficient storable flow will be available for filling the reservoir later. The flood control space requirement from Plate 9 is shown in tabular form as follows:

| <u>Mean Daily Inflow<br/>above Carey Gage<br/>(cfs)</u> | <u>Flood Control<br/>Space Allocation<br/>(1000 acre-feet)</u> |
|---|--|
| 2,000   | 7.19   |
| 1,800   | 6.10   |
| 1,600   | 5.05   |
| 1,400   | 4.05   |
| 1,200   | 3.11   |
| 1,000   | 2.28   |
| 800   | 1.52   |
| 600   | 0.86   |
| 400   | 0.27   |
| 300   | 0  |

#### 5-08. REGULATION OF PAST FLOODS

A reservoir regulation study was made applying the above criteria to past floods of record. The regulated discharges resulting at the Carey gage exceeded 800 cfs in 1938, 1942, 1943, 1947, 1952, 1956, 1957 and 1958, but in no case of record did they exceed 1,200 cfs. The largest flood volume of record occurred in 1952. Regulated discharges reached 1,200 cfs for 17 days in 1938, 1 day in 1956, 4 days in 1957, and 18 days in 1958. Plates 7 and 8 show expected regulation of the 1952 flood and standard project flood as would occur under the foregoing criteria. As indicated, the 1952 flood would be controlled to 1,200 cfs at the Carey gage, but the volume of the standard project flood is so great that it would not be controlled.

For purposes of regulation of the 1952 flood, it was assumed that the forecast based upon 1 March data could have been made on 5 March. On that date it would have become known that the entire reservoir capacity would be required to control the expected flood. The forecast was developed as shown in Appendix B. According to the operating criteria in paragraph 5-06, the reservoir could have contained a maximum of 26,500 acre-feet on 1 March. This critical assumption was also made to illustrate the ability to evacuate flood control space during March. Successful reservoir evacuation for flood control was attained even though reservoir releases were at times restricted by limited outlet capacity. Table 7 shows details of the regulation of the 1952 flood on a day-to-day basis.

#### 5-09. COLLECTION OF DATA

Reservoir storage and river discharge data are collected locally by the Watermaster for Idaho District 11-C, acting for the Little Wood River Irrigation District. These data are transmitted to the Minidoka Project Office of the Bureau of Reclamation in Burley by telephone. They are then transmitted to the Weather Bureau, Boise, and to the Regional Office, Bureau of Reclamation, Boise, by teletype. When teletype service is not available, the data will be transmitted to Boise by telephone. The data are put on teletype Service C by the Boise Weather Bureau Office, from which they are received by the Army Engineer District, Walla Walla. During the flood season, April through June, the reports will include current reservoir storage, current discharge for the Little Wood River near Carey, and average

discharge for the preceding 24 hours for the Little Wood River near Carey. Reports will also be made at other times if required by special circumstances.

#### 5-10. ADDITIONAL OPERATION STUDIES

In the interest of obtaining maximum benefits from the operation of the reservoir, a program of study of each current flood for possible improvements in the regulation schedules will be necessary. Some of the continuing and additional studies are enumerated as follows:

- a. Review of seasonal runoff forecasting techniques with a view toward gaining greater accuracy.
- b. Analysis of recent and current data to determine what additional data are required for improvement in forecasting.
- c. Surveillance of channel conditions to establish releases commensurate with maximum overall flood control benefits.



## SECTION 5 - DATA COLLECTION

### 5.01. HYDROLOGIC NETWORK FACILITIES.

#### a. General.

A network of facilities to collect data on weather, snow, streamflows, and reservoir storage is needed for regulation of streamflows. Plate 1 shows locations of existing facilities in the drainage area near and above Little Wood Reservoir.

#### b. Snow Courses.

The following tabulation list snow courses within the Little Wood and Big Lost River Basins, which provide snow water content data for forecasting spring runoff:

#### Little Wood River

| SCS<br>Station No. | Name          | Location |      |      | Elev(ft.msl) |
|--------------------|---------------|----------|------|------|--------------|
|                    |               | Sec.     | Twp. | Rge. |              |
| 1. 13F03S          | Bear Canyon   | 22       | 5N   | 21E  | 7900         |
| 2. 13F04S          | Garfield R.S. | 11       | 3N   | 21E  | 6560         |
| 3. 14F07           | Mascot Mine   | 8        | 4N   | 20E  | 7780         |
| 4. 13F05           | Muldoon       | 26       | 3N   | 21E  | 6320         |
| 5. 13F09S          | Swede Peak    | 4        | 3N   | 21E  | 7640         |
| 6. 14F05           | Graham Ranch  | 10       | 5N   | 17E  | 6270         |
| 7. 14F09           | Mount Baldy   | 23       | 4n   | 17E  | 8920         |

Locations and elevations of these snow courses are shown on Plate 1. These snow courses were located by consideration of topographic features and accessibility, but whether they yield representative data for forecasting spring runoff can only be determined by evaluation of the data collected and a longer period of record for data.

The Soil Conservation Service (SCS) collects manual snow course data (snow depths and water contents) at these courses and publishes the data in their monthly publication, Water Supply Outlook For Idaho. In addition, Bear Canyon, Garfield Ranger Station, and Swede Peak are automated SNOTEL stations, which provide real-time snow course data on a daily basis.

c. Climatological Station Facilities.

Daily climatological data is available through the Corps of Engineers, CROHMS system, for the following stations:

| CROHMS Station |                      | Location |         |              |
|----------------|----------------------|----------|---------|--------------|
| Identifier     | Name                 | Lat.     | Long.   | Elev(ft.msl) |
| 1. FFDI        | Fairfield R.S.       | 43-21    | 114-47W | 5065         |
| 2. GRSI        | Grouse               | 43-42    | 113-37W | 6100         |
| 3. HLSI        | Hailey R.S.          | 43-31    | 114-18W | 5328         |
| 4. KETI        | Ketchum R.S.         | 43-41    | 114-21W | 5890         |
| 5. WODI        | Little Wood nr Carey | 43-20    | 114-00W | 4991         |
| 6. PICI        | Picabo               | 43-18    | 114-04W | 4875         |

d. Project Gaging Facilities.

Little Wood Basin project gaging facilities include two river and one reservoir gages. The Bureau funds the operation and maintenance of all project gaging facilities in the Little Wood River Basin. Current storage and discharge rating tables for the above gage will be maintained at the project office. All remote reporting gages are incorporated into the Bureau's Hydromet system. (See 5.04.a)

5.02. REPORTING AND EXCHANGING BASIC DATA

a. Purpose.

To fully regulate winter and spring floods and assure sufficient storage of water for irrigation, a timely exchange of basic data between the Bureau of Reclamation and the Corps of Engineers is required. A list of key officials and telephone numbers is included on page ii (pink sheets) of this Manual for both normal regulation and emergency events. The exchange of data will be by telephone between these officials. On occasions of an emergency nature, the normal communication channels may be out of service and emergency action may have to be used. Under emergency conditions the Emergency Preparedness Plan summarized on page iii (pink sheets) will be used.

b. Frequency of Exchange.

The frequency of exchange of basic data pertinent to efficient operation of the dam and regulation of floods will be on a daily basis, except during unusual or rare conditions of weather or reservoir inflow when the frequency will be as requested or needed. Normally, data will be sent automatically to the Corps of Engineers CROHMS system hourly each day



from the Bureau of Reclamation (Bureau) Hydromet system located in Boise.

#### 5.03. CORPS OF ENGINEERS - CROHMS SYSTEM.

The Columbia River Operational Hydromet and Management system (CROHMS) is a real-time water resources data management system. A computer system is used for data reduction, system modeling, forecasting, and data base support functions. The data acquisition for these functions is supported through the CROHMS Automated Front End (CAFE). Figure 5-1 on page 5-6 shows the CROHMS network diagram.

The CAFE is a centralized computer facility consisting of a primary computer and a backup, communications interface, storage for data, and software capabilities. It functions as a central point of raw data collection for CROHMS, a source of raw data files, and a distribution center for reports processed by the CROHMS computer.

#### 5.04. AUTOMATED HYDROMET SYSTEMS.

##### a. Bureau Hydromet System.

The Pacific Northwest Regional Office of the Bureau of Reclamation has a hydromet system for the Little Wood River Basin as part of an extensive automated, real-time hydrometeorological data collection system throughout the upper and middle Snake River Basin. This system is composed of (1) a Direct Readout Ground Station (DRGS) located in Boise, (2) a Geostationary Operational Environmental Satellite (GOES), (3) a computerized network controller (referred to as the Central Computer Facility), and (4) remote stations.

The system is unique in that the Data Collection Platform (DCP) at each remote site is microprocessor-controlled and has the capability to transmit through two channels on the GOES system. One channel handles only self-timed mode, whereas the second channel is dedicated to only adaptive random transmissions. Operation in the self-timed mode is as follows. The DCP interrogates all sensor outputs at 15-minute intervals or another assigned interval and stores the values in its memory. At a preassigned time interval, every 4 hours, the DCP transmits all stored values from each sensor to the Central Computer Facility (CCF) through the DRGS in Boise. This produces a very complete detailed data base. Transmissions in the adaptive random reporting (R/R) mode are completely unscheduled with the decision to transmit being made by the DCP. This is accomplished by programming threshold values in the microprocessor which the DCP uses to compare with sensor outputs. If the threshold values are exceeded, the DCP computes a random transmission rate and begins to transmit randomly. The microprocessor also computes rates of change between sensor readings; if the rate of change exceeds the preprogrammed threshold values, this also



causes the DCP to compute a random transmission rate and begin transmitting. Each time a DCP transmits randomly, it only sends three values - the most current and the two preceding values. Also, once the DCP goes into random mode it will send at least three transmissions randomly before shutting down. However, if the threshold values are continually exceeded and/or the rates of change increase, the DCP will continue in the random mode until the situation returns to normal. It is important to note that as the rate of change of the sensor value increases, the random transmission interval is shortened, thereby transmitting more data as the event becomes more serious.

The following tabulation summarizes real-time project data which are available from the Bureau's hydromet system.

| STATION   | PARAMETERS MEASURED 1/   |
|---|--|
| <u>Dam and Reservoir:</u>   |  |
| Little Wood Dam (WOD)<br>and Reservoir                                      | AF, FB   |
| Little Wood River (WODI)<br>near Carey, Idaho                               | GH,Q,OB,PC   |
| Little Wood River above (LWOI)<br>High Five Creek                           | GH,Q   |
| 1/ AF - Reservoir content<br>PC - Cumulative precipitation<br>Q - Discharge | FB - Reservoir forebay elevation<br>GH - Gage height<br>OB - Air temperature |

All data received by the CCF is immediately processed and stored in the short-term data file where it is available to users through time-share terminals. At 6:00 a.m. each morning, the CCF compiles data from the previous day's short-term file readings to be put into the long-term file. The long-term file is composed of such things as midnight reservoir elevation contents, maximum and minimum temperatures, and mean daily flows, etc. This long-term file data is then also available to users through time-share terminals.

Real-time data from all of the above stations are transmitted from the Bureau's hydromet system in Boise to the Corps of Engineers - CROHMS system on a hourly basis via the Federal Telephone System (FTS).

b. SCS SNOTEL System.

The Soil Conservation Service owns and operates a hydromet system for the Powder River Basin as part of its western states Snow Telemetry (SNOTEL) program. This system uses (1) two master polling stations located at Boise, Idaho and Ogden, Utah, (2) meteor burst radio communications, and (3) remote stations. The system collects remote data once per day during a nominal polling period (5:00 a.m. to 8:00 a.m. Pacific time) and has capability of additional interrogations (ad hoc polls) as needed. A total of three parameters can be retrieved from each remote data site, with ultimate plans for retrieving a total of 16 parameters. The following tabulation summarizes real-time data which are available from the SNOTEL system.

| STATION       | ELEVATION | BASIN       | PARAMETERS |    |
|---------------|-----------|-------------|------------|----|
|               |           |             | MEASURED   | 1/ |
| Bear Canyon   | 7,900     | Big Lost    | SP, PC, OB |    |
| Garfield R.S. | 6,560     | Little Wood | SP, PC, OB |    |
| Swede Peak    | 7,640     | Little Wood | SP, PC, OB |    |

- 1/ SP - Snow water content from snow pillow.  
PC - Cumulative precipitation.  
OB - Air temperature.

Real-time data is retrieved from the SCS SNOTEL system's data base in Portland, Oregon into the Corps of Engineers CROHMS system on a daily basis via the Federal telephone system (FTS).

5.05. USE OF REAL-TIME DATA.

The real-time data are used for runoff volume forecasting and in the Streamflow Synthesis And Reservoir Regulation (SSARR) model and thus form the basis for decisions and resultant reservoir regulation. All regulating agencies plan continued support for data collection program.



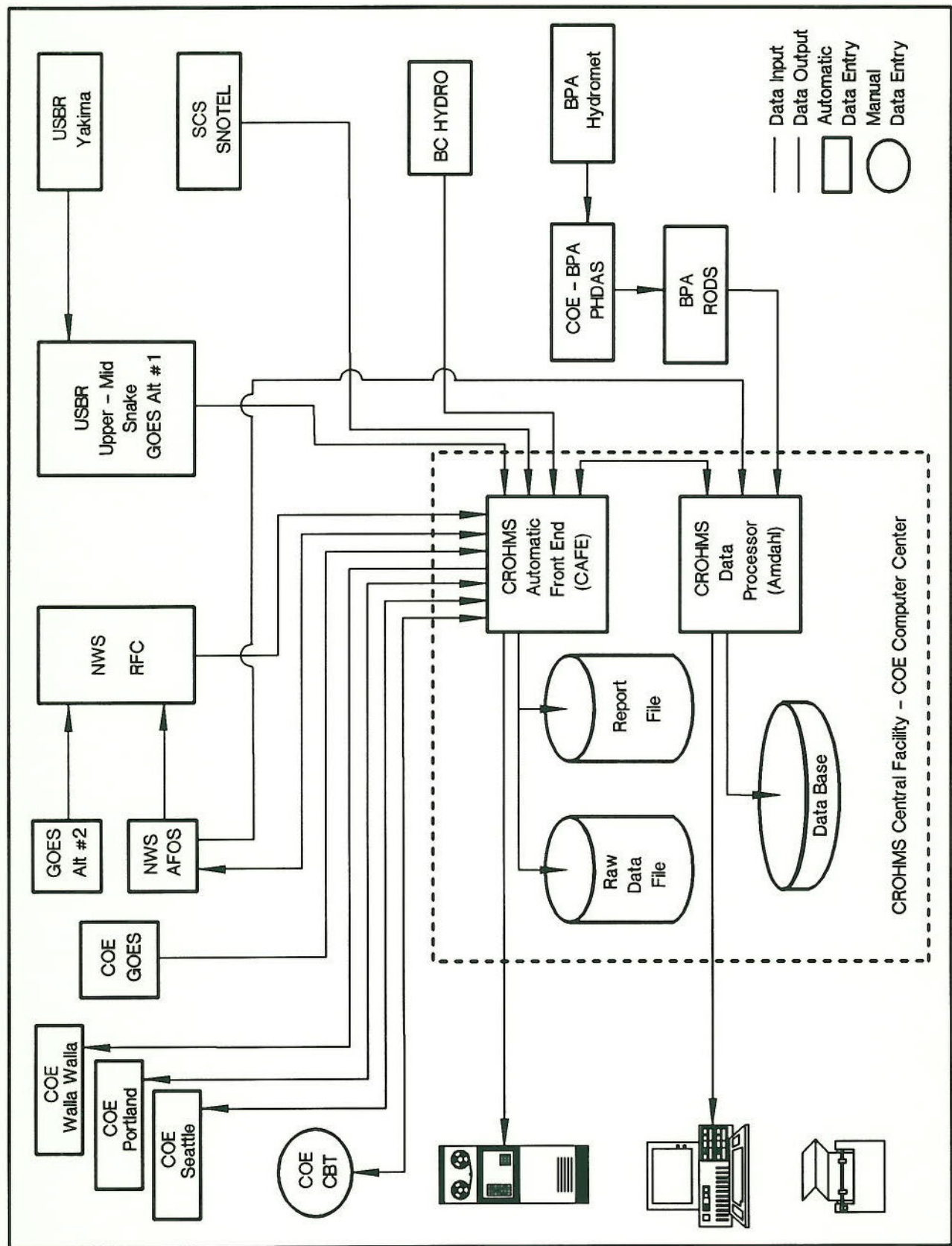


FIGURE 5-1 CROHMS Data Collection System



## SECTION 6 - WATER CONTROL MANAGEMENT

6-01. General. The flood control and irrigation interests affected by the Water Control Plan for the Little Wood River Dam will require close cooperation and coordination between the Corps of Engineers, Bureau of Reclamation, Idaho Department of Water Resources, Water District 11-C Watermaster, and the local flood control and irrigation interests. The administration of the Water Control Plan covered in Section 5 of this Manual will at all times reflect full and due consideration for these interests. Telephone numbers of the persons concerned with operation of the project are listed on page ii (pink page) in the front part of this Manual. Organization charts for the key entities involved with the regulation of Little Wood River Dam are shown on page 6-3 and corresponding personnel names and telephone numbers are listed on pages 6-4 to 6-5. Responsibilities of the key agencies are discussed in the following paragraphs.

6-02. Corps of Engineers. The Army Engineer District, Walla Walla, Corps of Engineers, has the responsibility of prescribing flood control regulations in accordance with Section 7 of the Flood Control Act of 1944. The Planning Division's Hydrology Branch is responsible for monitoring project operation and checks with the Bureau of Reclamation to assure conformance with flood control criteria and procedures in this Manual. The organization of the Walla Walla District, as it pertains to flood control regulation, is shown on page 6-3 and the names and telephone numbers of key personnel are listed on page 6-5. The Corps of Engineers and the Bureau of Reclamation will monitor meteorologic and hydrologic conditions which may affect the regulation of the Little Wood River Reservoir.

6-03. Bureau Of Reclamation. The Regional Office, Pacific Northwest Region, Bureau of Reclamation, Boise, Idaho, is directly responsible for the operation of Little Wood River Reservoir to accomplish the flood control objectives. The objectives will at all times be in accordance with regulations set forth in Appendix A of this manual. The organization of the Bureau of Reclamation, as it pertains to the operation of Little Wood River Dam, is shown on page 6-3 and the names and telephone numbers of key personnel are listed on page 6-4. The River Operations Coordinator of the Water Resources and Operations Branch is responsible for the coordination of flood control and refill regulation for all Bureau reservoirs in Pacific Northwest Region.

Responsibilities of the Bureau of reclamation include:

1. Maintenance of adequate hydrologic reporting network.
2. Collection and dissemination of hydrologic and reservoir data.



3. Preparation of periodic forecasts of runoff for the period February through July, and consultations with the Corps of Engineers and District Watermaster to coordinate forecasts and details of the flood control evacuation and refill operations.

4. Execution of releases from Little Wood River Reservoir as required to conform with current flood control storage space reservation schedule or as may be modified by agreement between the Corps of Engineers and Bureau of Reclamation.

5. Performance of studies for refinement of forecasting and regulation techniques.

6. The Bureau of Reclamation will issue public notices, if necessary, when there is either a planned departure from normal operations or unusual developments.

6-04. State of Idaho - Department of Water Resources. The Department of Water Resources is responsible for ensuring that Idaho water is regulated, stored, conserved, distributed, and used in an effective manner consistent with State of Idaho laws and policies. Maintaining these interests for the State of Idaho is the responsibility of the Director and specific staff personnel. The organization of the Department of Water Resources is shown on page 6-3 and the names and telephone numbers of key personnel are listed on page 6-5.

For Little Wood River Dam, the Department of Water Resources oversees the duties of the Watermaster for District 11-C. As a result, the Department of Water Resources is able to protect the water control management interests of the State of Idaho which pertain to the Little Wood River Basin.

6-05. Watermaster For District 11-C. The Watermaster for Water District 11-C is the representative for the locality of the Idaho State Reclamation Engineer. He is elected by the water users holding adjudicated rights and is responsible for the distribution of the waters of Little Wood River in accordance with established water rights. Regulation of Little Wood River Reservoir will be coordinated with the Watermaster by the Bureau of Reclamation.

6-06. Little Wood River Irrigation District. The Little Wood River Irrigation District, Carey, Idaho, is responsible for the operation and maintenance of the Little Wood River Dam and Reservoir under the terms of Contract No. 14-06-100-1549 between the United States (acting through the Regional Director, Pacific Northwest Region, Bureau of Reclamation) and the Little Wood River Irrigation District. This contract is dated 18 June 1958.









## SECTION 7 - STREAMFLOW FORECASTS

7-01. Runoff Forecasts. Satisfactory results from the operating plan depend to a great extent on the adequacy of seasonal runoff forecasts. Since most of the runoff into Little Wood River Reservoir is primarily from melting of the accumulated winter and spring snow pack, forecasts of runoff volume can be made with a reasonable degree of accuracy.

The Bureau of Reclamation and the Corps of Engineers make forecasts of seasonal runoff volume for operation of the reservoir. Forecasting equations developed by the Bureau (see B-1) and the Corps (see B-2) are included as Appendix B of this manual. They consist of statistically derived relationships of past occurrences of runoff and snowfall, precipitation and other indexed factors. Forecasts are made on a monthly basis, usually starting 1 January, and kept current on a monthly basis.



## SECTION 8 - WATER CONTROL PLAN

8-01. General. The Corps of Engineers and Bureau of Reclamation, in cooperation with other Federal and State agencies and private organizations, have made studies of water supply, channel protection, and multiple purpose usage of Little Wood River water. The flood control plan set forth in this manual has been developed to provide the maximum degree of flood control protection which can be attained with existing facilities. It sets the ground rules for reservoir regulation by the exercise of prudent judgment in the practical integration of overall operating objectives.

The flood control objective is to minimize overall flood damage in Carey Valley to the maximum extent practicable under channel conditions existing at the time. Lacking specific improvements in the river channels to provide a total channel capacity of 1,200 cfs, some flood damage may occasionally occur in the river reach which extends from approximately 1 mile below Carey to the lower end of the valley. The operation of the enlarged Little Wood River Reservoir to limit flows to less than 800 cfs consistently, the estimated total safe channel capacity of this lower reach, is not practicable. Such regulation could seriously reduce irrigation storage supplies in some years and was not contemplated in the plan basic to the authorization for enlargement of the Little Wood River Reservoir.

8-02. Features Of Plan Of Operation. The plan of operation is as follows:

- a. Storage space in Little Wood River Reservoir will be kept available for flood control purposes on a forecast basis in accordance with the flood control storage reservation schedule currently in force.
- b. Releases from the Little Wood River Reservoir shall be restricted to quantities which will not cause downstream flows at the Carey gaging station to exceed 1,200 cfs, insofar as this control can be accomplished using the total active storage capacity (initially 30,000 acre-feet) in the Little Wood River Reservoir between elevations 5127.8 and 5237.3 feet.
- c. The flood control regulations are subject to temporary modification by the District Engineer, Corps of Engineers, if found necessary in time of emergency.
- d. The Bureau of Reclamation, acting through the Little Wood River Irrigation District, shall currently procure basic hydrological data, make determinations of required flood control space reservations from the the flood control storage schedules currently in force, and make



calculations of permissible releases from the reservoir as are required to accomplish the flood control objectives.

The essential features of this plan are contained in the Code of Federal Regulations, Title 33, Part 208. as published in the Federal Register under Section 7 (58 Stat. 890, 33 U.S.C. 709), which is included as Appendix A of this manual.

8-03. Flood Control Storage Space Reservation Schedules. The space reservations for flood control are determined as the maximum requirement of three separate criteria as follows:

Item 1: On the basis of forecast seasonal runoff volume.

Item 2: On the basis of a reservoir filling schedule predicated upon assured refill.

Item 3: On the basis of minimum snowmelt recession volume.

Each of these three items is discussed separately in the following paragraphs.

8-04. Flood Control Space Reservation Curve. This criterion is based on the general relationship between flood potential and seasonal runoff volumes from the beginning of the flood through 30 September. A maximum envelope of the relationship between historical flood flow and seasonal runoff volumes was derived using all available data. This envelope line, which is controlled by the data for the flood years 1952 and 1957, indicates zero flood potential for seasonal (April-September) runoff volumes of less than 62,000 acre-feet. A maximum potential flood volume of 30,000 acre-feet (usable capacity for the reservoir) is indicated for a seasonal runoff volume of approximately 194,000 acre-feet. The indicated potential flood volumes were increased by adding a safety factor which varies with flood magnitude. In the general range of the large floods it is quite large, being in excess of 90 percent for some large floods. In order to avoid loss of irrigation storage, it was necessary to use a much smaller safety factor for the small floods. The development of the envelope relationship and the flood control space allocation curve is shown on Plate 10. The space allocation curve has been converted to tabular form as follows:

| Forecast Runoff<br>at Gage near Carey<br><u>through 30 Sept</u><br>(1000 acre-feet) | Flood Control<br><u>Space Allocation</u><br>(1000 acre-feet) |
|---|--|
| 60  | 0  |
| 80  | 5  |
| 90  | 10   |
| 100   | 15   |
| 110   | 20   |
| 120   | 25   |
| 130 or more   | 30   |

8-05. Reservoir Filling Schedule. This criterion provides an exclusive reservation of space for control of possible winter floods, which cannot be forecast very far in advance. It was based on the recorded minimum storable reservoir inflow, which occurred in 1931, and is designed to prevent unnecessary waste or loss of irrigation water storage. Studies show that this item will provide adequate space for control of all winter floods of record, including that of December 1955 which is the largest, to flows of 1,200 cfs or less at the Carey gage. In most years the irrigation draft of the preceding season will provide empty reservoir space far in excess of that called for in this item. The item is applicable only during the period 30 September through 15 April each year. The reservoir storage limitations based on Item 2 are as follows:

| <u>Date</u>  | Maximum Allowable<br><u>Storage Content</u><br>(1000 acre-feet) | Minimum Flood Con-<br><u>trol Space Allocation</u><br>(1000 acre-feet) |
|--------------|---|--|
| 30 September | 18.0  | 12.0   |
| 31 October   | 19.0  | 11.0   |
| 30 November  | 21.0  | 9.0  |
| 31 December  | 23.0  | 7.0  |
| 31 January   | 25.0  | 5.0  |
| 28 February  | 26.0  | 3.5  |
| 31 March     | 29.0  | 1.0  |
| 15 April     | 30.0  | 0.0  |

8-06. Minimum Snowmelt Recession Volume. This criterion is intended to prevent premature filling of the reservoir during the spring snowmelt period as a result of errors in runoff forecasts. Experience in developing forecast procedures indicates that large forecast errors will occasionally occur. The basic minimum snowmelt recession curve was developed from segments of the hydrographs for the years 1925, 1933, 1938, 1950 and 1952. Plate 9 shows the relation between discharge and the recession volume above 300 cfs. During the flood runoff period the downstream irrigation



requirement is expected to average about 300 cfs much of the time; consequently, this part of the flow probably will not be available for storage in the reservoir. Item 3 has the effect of delaying reservoir filling so long as there is assurance that sufficient storable flow will be available for filling the reservoir later. The flood control space requirement from Plate 9 is shown in tabular form as follows:

| <u>Mean Daily Inflow</u><br><u>above Carey Gage</u><br>cfs | <u>Flood Control</u><br><u>space Allocation</u><br>(1000 acre-feet) |
|--|---|
| 2,000  | 7.19  |
| 1,800  | 6.10  |
| 1,600  | 5.05  |
| 1,400  | 4.05  |
| 1,200  | 3.11  |
| 1,000  | 2.28  |
| 800  | 1.52  |
| 600  | 0.86  |
| 400  | 0.27  |
| 300  | 0.00  |

8-07. Regulation of Past Floods. A reservoir regulation study was made applying the above criteria to past floods of record. The regulated discharges resulting at the Carey gage exceeded 800 cfs in 1938, 1942, 1943, 1947, 1952, 1956, 1957 and 1958, but in no case of record did they exceed 1,200 cfs. The largest flood volume of record occurred in 1952. Regulated discharges reached 1,200 cfs for 17 days in 1938, 1 day in 1956, 4 days in 1957, and 18 days in 1958. Plates 7 and 8 show expected regulation of the 1952 flood and standard project flood as would occur under the foregoing criteria. As indicated, the 1952 flood would be controlled to 1,200 cfs at the Carey gage, but the volume of the standard project flood is so great that it would not be controlled.

For purposes of regulation of the 1952 flood, it was assumed that the forecast based upon 1 March data could have been made on 5 March. On the date it would have become known that the entire reservoir capacity would be required to control the expected flood. The forecast was developed as shown in Appendix B. According to the operating criteria in paragraph 8-05, the reservoir could have contained a maximum of 26,500 acre-feet on 1 March. This critical assumption was also made to illustrate the ability to evacuate flood control space during March. Successful reservoir evacuation for flood control was attained even though reservoir releases were at times restricted by limited outlet capacity. Table 7 shows details of the regulation of the 1952 flood on a day-to-day basis.



## APPENDIX A

### TITLE 33--NAVIGATION AND NAVIGABLE WATERS Chapter II--Corps of Engineers Department of the Army

#### PART 208--FLOOD CONTROL REGULATIONS

##### LITTLE WOOD RIVER DAM AND RESERVOIR, LITTLE WOOD RIVER, IDAHO

Pursuant to the provisions of Section 7 of the Act of Congress approved December 22, 1944 (58 Stat. 890; 33 U.S.C. 709) the following #208.92 is hereby prescribed to govern the use and operation of Little Wood River Dam and Reservoir on the Little Wood River, Idaho, for flood control purposes.

#208.92 Little Wood River Dam and Reservoir, Little Wood River, Idaho. The Bureau of Reclamation, acting through the Little Wood River Irrigation District, shall operate the Little Wood River Dam and Reservoir in the interest of flood control as follows:

(a) Storage space in Little Wood River Reservoir will be kept available for flood control purposes in accordance with the Flood Control Storage Space Reservation Schedule currently in force.

(b) Releases from the Little Wood River Reservoir shall be restricted to quantities which will not cause downstream flows at the Carey gaging station to exceed 1,200 cubic feet per second, insofar as this control can be accomplished using the total active storage capacity (initially 30,000 acre-feet) in the Little Wood River Reservoir between elevations 5127.8 and 5237.3 feet.

(c) The flood control regulations of this section are subject to temporary modification by the District Engineer, Corps of Engineers, if found necessary in time of emergency. Requests for and action on such modification may be made by any available means of communication, and the action taken by the District Engineer shall be confirmed in writing under date of the same day to the office of the Regional Director of the Bureau of Reclamation in charge of the locality.

(d) The Flood Control Storage Space Reservation Schedule currently in force as of the promulgation of this section is that dated August 13, 1963, and is on file in the Office of the Chief of Engineers, Department of the Army, Washington, D.C., and in the office of the Commissioner, Bureau of Reclamation, Washington, D.C. Revisions of the Flood Control Storage Space Reservation Schedule may be developed from time to time as necessary by the Corps of Engineers and the Bureau of Reclamation. Each such revision shall be effective upon the date specified in the approval thereof by the Chief of Engineers and the Commissioner of Reclamation, and from

that date until replaced shall be considered as currently in force for purposes of this section. Copies of the Flood Control Storage Space Reservation Schedule currently in force shall be kept on file in, and may be obtained from, the office of the District Engineer, Corps of Engineers, and the Regional Director, Bureau of Reclamation, in charge of the locality.

(e) Nothing in the regulations in this section shall be construed to require dangerously rapid changes in magnitude of releases, or that releases be made at rates or in a manner that would be inconsistent with requirements for protecting the dam and the reservoir from major damage.

(f) The Bureau of Reclamation, acting through the Little Wood River Irrigation District, shall currently procure basic hydrological data, making determinations of required flood control space reservations from the Flood Control Storage Space Reservation Schedule currently in force, and make calculations of permissible releases from the reservoir as are required to accomplish the flood control objectives prescribed in this section.

(g) The Bureau of Reclamation shall keep the District Engineer, Corps of Engineers, advised of hydrological data and other operating criteria which affect the schedule of operation. Also, the Bureau of Reclamation shall keep the Watermaster, Water District 11-C, acting under the control and supervision of the Department of Reclamation, State of Idaho, currently advised of reservoir releases.

(Regs., August 13, 1963 ENGCW-EY) (Sec. 7, 58 Stat. 890; 33 U.S.C. 709)

J. C. LAMBERT,  
Major General, U.S. Army,  
The Adjutant General

(F.R. Doc. 63-9458; filed, Sept. 4, 1963; 8:45 a.m.)



FLOOD CONTROL REGULATIONS (33 CFR 208)  
FLOOD CONTROL STORAGE SPACE RESERVATION SCHEDULE  
LITTLE WOOD RIVER RESERVOIR, IDAHO

The controlling flood control storage space reservation at any time is the maximum space requirement as determined from any one of the applicable parts of this schedule. Reservoir releases shall be planned so as to provide flood control storage space in amounts at least equal to the current flood control space reservation requirement and so as to accomplish this with minimum practical rates and fluctuations in discharge. (The maximum discharge through the outlet works is restricted to 1,100 cubic feet per second.) The flood control space reservation requirement is the maximum as determined by the following three parts.

Part 1. - Flood control storage space reservation based on forecast runoff. This reservation applies during the spring snowmelt flood runoff period beginning on April 1 each year. Releases for necessary evacuation of flood control space will be scheduled in advance on the basis of preliminary runoff forecasts in February and March in order to assure that the required flood control space will be available at the beginning of the flood season about April 1. Forecast to be used is that for total inflow to Little Wood River above the gaging station near Carey, Idaho, from the current date through the following September 30.

| <u>Forecast Runoff</u><br><u>at Gage near Carey</u><br><u>through September 30</u><br><u>(1,000 acre-feet)</u> | <u>Flood Control</u><br><u>Space Allocation</u><br><u>(1,000 acre-feet)</u> |
|--|---|
| 60   | 0   |
| 80   | 5   |
| 90   | 10  |
| 100  | 15  |
| 110  | 20  |
| 120  | 25  |
| 130 or more  | 30  |

Part 2. - Reservoir filling schedule based on assured refill.

| <u>Date</u>  | <u>Maximum Allowable</u><br><u>Storage Content</u><br><u>(1,000 acre-feet)</u> | <u>Minimum Flood Control</u><br><u>Space Allocation</u><br><u>(1,000 acre-feet)</u> |
|--------------|--|---|
| September 30 | 18.0   | 12.0  |
| October 31   | 19.0   | 11.0  |
| November 30  | 21.0   | 9.0   |
| December 31  | 23.0   | 7.0   |
| January 31   | 25.0   | 5.0   |
| February 28  | 26.5   | 3.5   |
| March 31     | 29.0   | 1.0   |
| April 15     | 30.0   | 0   |

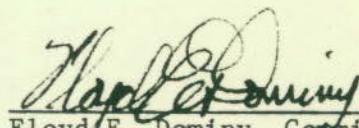
Part 3. - Flood control storage space reservation based on minimum snowmelt recession volumes above 300 cubic feet per second. Applicable for period March 1 through July 31.

| <u>Mean Daily<br/>Inflow above<br/>Carey Gage<br/>cfs</u> | <u>Flood Control<br/>Space Allocation<br/>(1000 acre-feet)</u> |
|---|--|
| 2,000   | 7.19   |
| 1,800   | 6.10   |
| 1,600   | 5.05   |
| 1,400   | 4.05   |
| 1,200   | 3.11   |
| 1,000   | 2.28   |
| 800   | 1.52   |
| 600   | 0.86   |
| 400   | 0.27   |
| 300   | 0  |

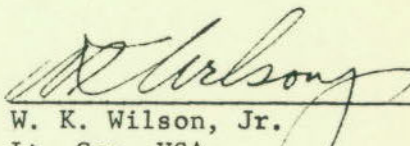
The Watermaster will divide flood flows at each division structure to make full use of all downstream channel capacities.

Prepared pursuant to flood control regulations for Little Wood River Dam and Reservoir (33 CFR 208).

APPROVED:

  
Floyd E. Dominy, Commissioner  
Bureau of Reclamation

APPROVED:

  
W. K. Wilson, Jr.  
Lt. Gen., USA  
Chief of Engineers

Effective Date: August 13, 1963



LITTLE WOOD RIVER NEAR CAREY UNREGULATED FLOW  
VOLUME FORECAST PROCEDURE  
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
PACIFIC NORTHWEST REGION

THE BUREAU OF RECLAMATION FORECAST PROCEDURE CONSISTS OF A MULTIPLE REGRESSION EQUATION OF THE FOLLOWING FORM:

$$Y = K + C1(X1) + C2(X2) + C3(X3) + C4(X4)$$

WHERE,

Y = FORECASTED RUNOFF VOLUME FOR THE PERIOD 1 OCTOBER THROUGH 31 JULY IN 1000'S OF ACRE FEET (KAF).

X1 = INDEX OF OBSERVED RUNOFF VOLUME FOR THE PERIOD 1 OCTOBER THROUGH 31 DECEMBER IN KAF.

X2 = X2A + X2B

X2A = INDEX OF OBSERVED/EXPECTED TOTAL MONTHLY PRECIPITATION IN INCHES FOR THE 1 OCTOBER THROUGH 31 MARCH TIME PERIOD.

X2B = INDEX OF OBSERVED/EXPECTED 1 APRIL SNOW WATER CONTENT IN INCHES.

X3 = INDEX OF OBSERVED/EXPECTED TOTAL MONTHLY PRECIPITATION FOR THE PERIOD 1 APRIL THROUGH 30 APRIL IN INCHES.

C1, C2, C3, C4, K = COEFFICIENTS OF REGRESSION.

THE REGRESSION EQUATION IS FOR THE 1 OCTOBER THROUGH 31 JULY FORECAST PERIOD ONLY. TO FORECAST OTHER TIME PERIODS, SUBTRACT OBSERVED RUNOFF, 1 OCTOBER THROUGH DATE, FROM THE EQUATION RESULT. THE VARIABLES X1 THROUGH X3 ARE COMPUTED USING PROCEDURES ON PAGE B-1 SHEETS 2, AND 3.



# 1985 LITTLE WOOD RIVER NEAR CAREY UNREGULATED FLOW VOLUME FORECAST PROCEDURE

**X1 = OCT.-DEC. ANTECEDENT RUNOFF (KAF):**

OCT NOV DEC

-----

X1 = TOTAL OCT.-DEC. R.O. = \_\_\_\_\_ (KAF)  
(ENTER X1 ON PAGE B-1, SHEET 5)

**X2 = X2A + X2B**

**X2A = OCT.-MARCH PRECIPITATION (INCHES) (1):**

| STATION                    | WGHT | OCT | NOV | DEC | JAN | FEB | MAR |
|----------------------------|------|-----|-----|-----|-----|-----|-----|
| CRATERS OF THE MOON (CRMI) | 1.00 |     |     |     |     |     |     |
| GROUSE (GRSI)              | 1.00 |     |     |     |     |     |     |
| HAILEY R.S. (HLSI)         | 1.00 |     |     |     |     |     |     |
| KETCHUM (KETI)             | 2.00 |     |     |     |     |     |     |
| PICABO (PICI)              | 1.00 |     |     |     |     |     |     |

(A)=TOTALS

(B)=WEIGHT (WGHT)

1.00 1.00 1.00 1.00 1.00 1.00

(A\*B)=WGHT TOTALS

-----

X2A = TOTAL WGHT OCT.-MAR. PRECIPITATION = \_\_\_\_\_ INCHES  
(ENTER X2A IN EQUATION BELOW)

(1) REFER TO TABLE 2, PAGE B-1, SHEET 4

**X2B = APR. 1 SNOW (INCHES):**

| STATION              | WGHT<br>(A) | OBSERVED<br>WATER<br>CONTENT<br>(INCHES)<br>(B) | NORMAL SNOW<br>WATER<br>ACCUM. (2)<br>DATE-1 APR<br>(C) | EXPECTED<br>1 APRIL<br>TOTAL<br>WATER<br>CONTENT<br>(D)=(B)*(C) | WGHT 1 APRIL<br>WATER CONTENT<br>(INCHES)<br>(D)*(A) |
|----------------------|-------------|---|---|---|--|
| BEAR CANYON (BECI)   | 1.00        |   |   |   |  |
| GARFIELD R.S. (GARI) | 1.00        |   |   |   |  |
| MASCOT MINE (MAMI)   | 1.00        |   |   |   |  |
| MULDOON (MULI)       | 1.00        |   |   |   |  |
| SWEDE PEAK (SWPI)    | 1.00        |   |   |   |  |

X2B = TOTAL WGHT 1 APR. WATER CONTENT = \_\_\_\_\_ INCHES  
(ENTER X2B IN EQUATION BELOW)

(2) REFER TO TABLE 1, PAGE B-1, SHEET 4

X2 = X2A + X2B = \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ INCHES  
(ENTER X2 ON PAGE B-1 SHEET 5)

# 1985 LITTLE WOOD RIVER NEAR CAREY UNREGULATED FLOW VOLUME FORECAST PROCEDURE

## X3 = APR.-JUNE PRECIPITATION (INCHES) (3)

| STATION                    | WGHT | APR |
|----------------------------|------|-----|
| CRATERS OF THE MOON (CRMI) | 1.00 |     |
| GROUSE (GRSI)              | 1.00 |     |
| HAILEY R.S. (HLSI)         | 1.00 |     |
| KETCHUM R.S. (KETI)        | 2.00 |     |
| PICABO (PICI)              | 1.00 |     |

(A)=TOTALS

(B)=WGHT 1.00

(A)\*(B)=WGHT TOTALS -----

X3 = TOTAL WGHT APR. PRECIPITATION =  INCHES  
(ENTER X3 ON PAGE B-1, SHEET 4)

(3) REFER TO TABLE 2, PAGE B-1, SHEET 4

## OBSERVED RUNOFF 1 OCT.-DATE

| MONTH | RUNOFF | SUM R.O. (4) |
|-------|--------|--------------|
| OCT   |        |              |
| NOV   |        |              |
| DEC   |        |              |
| JAN   |        |              |
| APR   |        |              |
| MAY   |        |              |

(4) ENTER SUM R.O. 1 OCT-DATE FROM PAGE B-1, SHEET 5



## 1985 LITTLE WOOD RIVER NEAR CAREY UNREGULATED FLOW VOLUME FORECAST PROCEDURE

TABLE 1

| STATION              | NORMAL SNOW WATER ACCUMULATION<br>(DATE-1 APRIL) (INCHES) |       |       |
|----------------------|---|-------|-------|
|                      | 1 JAN   | 1 FEB | 1 MAR |
| BEAR CANYON (BECI)   | 9.5   | 5.7   | 2.9   |
| GARFIELD R.S. (GARI) | 6.0   | 2.6   | 0.5   |
| MASCOT MINE (MAMI)   | 7.0   | 3.5   | 1.9   |
| MULDOON (MULI)       | 4.0   | 1.3   | -0.3  |
| SWEDE PEAK (SWPI)    | 9.4   | 5.5   | 2.6   |

TABLE 2

| STATION                    | EXPECTED MONTHLY PRECIPITATION (INCHES) |      |      |      |      |
|----------------------------|---|------|------|------|------|
|                            | JAN                                     | FEB  | MAR  | APR  | MAY  |
| CRATERS OF THE MOON (CRMI) | 2.37                                    | 1.55 | 1.38 | 1.26 | 1.66 |
| GROUSE (GRSI)              | 1.57                                    | 1.00 | 0.74 | 1.07 | 1.49 |
| HAILEY R.S. (HLSI)         | 2.45                                    | 2.00 | 1.42 | 1.10 | 1.31 |
| KETCHUM R.S. (KETI)        | 2.36                                    | 1.83 | 1.65 | 1.23 | 1.42 |
| PICABO (PICI)              | 1.81                                    | 1.31 | 1.25 | 0.97 | 1.11 |

1985 LITTLE WOOD RIVER NEAR CAREY UNREGULATED FLOW VOLUME FORECAST PROCEDURE

FORECAST PERIOD \_\_\_\_\_

FORECAST DATE \_\_\_\_\_

1 OCTOBER THROUGH 31 JULY VOLUME FORECAST

$$Y1 = (-65.37) + (3.8333)X1 + (0.7259)X2 + (0.6005)X3 +$$

$$Y1 = (-65.37) + (3.8333) \quad + (0.7259) \quad + (0.6005)$$

$$Y1 = \quad KAF$$

NOTE: X1, X2, AND X3 VALUES FOR INSERTION INTO THE ABOVE EQUATION ARE COMPUTED ON SHEETS 2 AND 3.

FORECAST DATE THROUGH 31 JULY VOLUME FORECAST

$$Y \text{ (DATE-31 JULY)} = Y1 \text{ (1 OCT. - 31 JULY)} - \text{OBSERVED RUNOFF IN KAF (1 OCT. - DATE)}$$

$$Y \text{ (DATE-31 JULY)} = \quad - \quad$$

$$Y \text{ (DATE-31 JULY)} = \quad KAF$$

# U.S. ARMY CORPS OF ENGINEERS WALLA WALLA DISTRICT

LITTLE WOOD VOLUME FORECAST  
(Unregulated Little Wood Inflow)

FORECAST DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

## 1. SNOW WATER CONTENT (SWC) FORECAST

| SNOW COURSE   | ELEV.<br>(FEET) | A <sub>0</sub><br>(TABLE 1) | A <sub>1</sub><br>(TABLE 2) | X <sub>1</sub><br>MEASURED<br>WATER CONTENT<br>(INCHES) | FORECASTED RUNOFF<br>Y = A <sub>0</sub> + (A <sub>1</sub> ) (X <sub>1</sub> )<br>(INCHES) |
|---------------|-----------------|-----------------------------|-----------------------------|---|---|
| GARFIELD R.S. | 6560            |                             |                             |   |   |
| GRAHAM RANCH  | 6270            |                             |                             |   |   |
| MOUNT BALDY   | 8920            |                             |                             |   |   |
| MULDOON       | 6320            |                             |                             |   |   |

SUM = \_\_\_\_\_  
Y<sub>WC</sub> = AVERAGE FORECAST = \_\_\_\_\_

FORECASTED RUNOFF VOLUME = Y<sub>WC</sub>(INCHES) = \_\_\_\_\_  
(DATE - JULY 31)

Y<sub>WC</sub>(ACRE-FEET) = (14,880) (Y<sub>WC</sub> INCHES)

Y<sub>WC</sub>(ACRE-FEET) = \_\_\_\_\_



# U.S. ARMY CORPS OF ENGINEERS WALLA WALLA DISTRICT

LITTLE WOOD VOLUME FORECAST  
(Unregulated Little Wood Inflow)

FORECAST DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

## 2. PRECIPITATION (PRECIP) FORECAST

| PRECIPITATION<br>STATION | ELEV.<br>(FEET) | B <sub>0</sub><br>(TABLE 3) | B <sub>1</sub><br>(TABLE 4) | X <sub>2</sub><br>MEASURED<br>PRECIPITATION<br>(INCHES)<br>(OCT - FCST DATE) | FORECASTED RUNOFF<br>$Y = B_0 + (B_1)(X_2)$<br>(INCHES) |
|--------------------------|-----------------|-----------------------------|-----------------------------|--|---|
| FAIRFIELD R.S.           | 5065            |                             |                             |  |   |
| HAILEY AP                | 5306            |                             |                             |  |   |
| KETCHUM R.S.             | 5809            |                             |                             |  |   |
| PICABO                   | 4875            |                             |                             |  |   |

SUM = \_\_\_\_\_  
 $Y_{\text{PRECIP}} = \text{AVERAGE FORECAST} =$  \_\_\_\_\_

FORECASTED RUNOFF VOLUME =  $Y_{\text{PRECIP}}$ (INCHES) = \_\_\_\_\_  
(DATE - JULY 31)

$Y_{\text{PRECIP}}$  (ACRE-FEET) = (14,880) ( $Y_{\text{PRECIP}}$  INCHES)

$Y_{\text{PRECIP}}$  (ACRE-FEET) = \_\_\_\_\_

**U.S. ARMY CORPS OF ENGINEERS  
WALLA WALLA DISTRICT**

**LITTLE WOOD VOLUME FORECAST  
(Unregulated Little Wood Inflow)**

FORECAST DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

**3. COMBINED RUNOFF VOLUME FORECAST (DATE - 31 JULY)**

$Y_{WC}$  (Page 1) = \_\_\_\_\_ ACRE-FEET

$Y_{PRECIP}$  (Page 2) = \_\_\_\_\_ ACRE-FEET

SUM = \_\_\_\_\_ ACRE-FEET

$Y_{COMB}$  = Average = \_\_\_\_\_ ACRE-FEET

**NOTE:** If forecast is after 1 April, then runoff volume forecast (Date - 31 July)  
is computed by the following equation:

**Date - 31 July Forecast = (1 April to 31 July Forecast) - (1 April to date,  
Unregulated Little Wood Inflow)**

**U.S. ARMY CORPS OF ENGINEERS  
WALLA WALLA DISTRICT**

**LITTLE WOOD VOLUME FORECAST**

$$Y_{WC} = A_0 + (A_1)(X_1)$$

**TABLE 1. REGRESSION EQUATION INTERCEPT  $A_0$ (INCHES)**

| <u>Snow Course</u> | <u>Elevation</u> | <u>1 Jan</u> | <u>1 Feb</u> | <u>1 Mar</u> | <u>1 Apr</u> |
|--------------------|------------------|--------------|--------------|--------------|--------------|
| Garfield R.S.      | 6560             | +4.165       | +1.881       | +0.008       | -1.250       |
| Graham Ranch       | 6270             | +2.723       | +0.897       | -2.330       | -2.865       |
| Mount Baldy        | 8920             | +1.854       | -0.057       | -2.151       | -3.285       |
| Muldoon            | 6320             | +3.916       | +2.176       | +1.143       | +1.781       |

**TABLE 2. REGRESSION EQUATION COEFFICIENT  $A_1$**

| <u>Snow Course</u> | <u>Elevation</u> | <u>1 Jan</u> | <u>1 Feb</u> | <u>1 Mar</u> | <u>1 Apr</u> |
|--------------------|------------------|--------------|--------------|--------------|--------------|
| Garfield R.S.      | 6560             | 0.721        | 0.750        | 0.718        | 0.754        |
| Graham Ranch       | 6270             | 0.841        | 0.672        | 0.756        | 0.648        |
| Mount Baldy        | 8920             | 0.635        | 0.525        | 0.512        | 0.450        |
| Muldoon            | 6320             | 1.044        | 0.935        | 0.821        | 0.726        |

**NOTE: 30 Years of record (1958 - 1987) used to compute regression equations.**



# **U.S. ARMY CORPS OF ENGINEERS WALLA WALLA DISTRICT**

## **LITTLE WOOD VOLUME FORECAST**

$$Y_{WC} = B_0 + (B_1) (X_2)$$

**TABLE 3. REGRESSION EQUATION INTERCEPT  $B_0$  (INCHES)**

| <u>Snow Course</u> | <u>Elevation</u> | <u>1 Jan</u> | <u>1 Feb</u> | <u>1 Mar</u> | <u>1 Apr</u> |
|--------------------|------------------|--------------|--------------|--------------|--------------|
| Fairfield R.S.     | 5065             | +2.133       | +0.219       | -2.173       | -3.039       |
| Hailey AP          | 5306             | +2.805       | +0.814       | -1.505       | -2.566       |
| Ketchum R.S.       | 5809             | +2.401       | +0.851       | -1.727       | -2.586       |
| Picabo             | 4875             | +2.297       | +0.714       | -1.837       | -3.106       |

**TABLE 4. REGRESSION EQUATION COEFFICIENT  $B_1$**

| <u>Snow Course</u> | <u>Elevation</u> | <u>1 Jan</u> | <u>1 Feb</u> | <u>1 Mar</u> | <u>1 Apr</u> |
|--------------------|------------------|--------------|--------------|--------------|--------------|
| Fairfield R.S.     | 5065             | 1.021        | 0.921        | 0.967        | 0.878        |
| Hailey AP          | 5306             | 0.933        | 0.814        | 0.889        | 0.820        |
| Ketchum R.S.       | 5809             | 0.968        | 0.851        | 0.915        | 0.806        |
| Picabo             | 4875             | 1.265        | 1.113        | 1.206        | 1.116        |

**NOTE: 30 Years of record (1958 - 1987) used to compute regression equations.**

TABLE 1  
Representative Climatological Data  
LITTLE WOOD RIVER

| Station     | Jan.  | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year  |
|-------------|---|------|------|------|------|------|------|------|-------|------|------|------|-------|
|             | Mean Temperatures - Degrees Fahrenheit          |      |      |      |      |      |      |      |       |      |      |      |       |
| Hailey A.P. | 19.5  | 23.6 | 31.2 | 42.9 | 52.0 | 59.0 | 67.9 | 66.3 | 56.6  | 46.8 | 33.4 | 22.3 | 43.5  |
| Richfield   | 20.2  | 24.3 | 34.2 | 45.0 | 53.4 | 60.6 | 69.5 | 67.2 | 58.1  | 47.9 | 34.4 | 24.7 | 45.0  |
| Sun Valley  | 15.3  | 19.6 | 25.6 | 37.8 | 45.5 | 50.6 | 59.0 | 57.7 | 50.0  | 41.5 | 27.1 | 21.0 | 37.6  |
|             | Mean Precipitation - Inches                     |      |      |      |      |      |      |      |       |      |      |      |       |
| Hailey A.P. | 2.23  | 1.98 | 1.29 | 1.15 | 1.33 | 1.04 | 0.53 | 0.50 | 0.70  | 1.11 | 1.35 | 2.08 | 15.33 |
| Richfield   | 1.29  | 1.01 | 0.72 | 0.90 | 0.94 | 0.76 | 0.30 | 0.25 | 0.46  | 0.84 | 1.07 | 1.19 | 9.73  |
| Sun Valley  | 2.11  | 2.75 | 1.72 | 1.09 | 1.43 | 1.70 | 0.73 | 0.71 | 0.93  | 1.44 | 1.89 | 2.40 | 18.88 |
|             | Maximum Recorded 24-Hour Precipitation - Inches |      |      |      |      |      |      |      |       |      |      |      |       |
| Hailey A.P. | 2.78  | 1.84 | 1.65 | 1.10 | 1.42 | 1.48 | 1.26 | 1.50 | 1.42  | 1.31 | 1.67 | 2.56 | 2.78  |
| Richfield   | 1.10  | 0.96 | 0.99 | 1.01 | 1.10 | 1.17 | 0.76 | 0.84 | 1.21  | 1.44 | 1.08 | 1.52 | 1.52  |
| Sun Valley  | 1.86  | 1.56 | 1.15 | 0.95 | 1.05 | 1.17 | 0.75 | 0.90 | 1.30  | 1.13 | 2.30 | 2.55 | 2.55  |

Station Description

Lengths of Records

| Station     | Latitude  | Location | Elevation<br>Feet m.s.l. | Mean<br>Temperatures<br>Years | Mean<br>Precipitation<br>Years | Maximum<br>Precipitation<br>Years |
|-------------|-----------|----------|--------------------------|-------------------------------|--------------------------------|-----------------------------------|
| Hailey A.P. | 43° - 31' |          | 5,322                    | 46                            | 47                             | 46                                |
| Richfield   | 43° - 04' |          | 4,306                    | 31                            | 32                             | 36                                |
| Sun Valley  | 43° - 41' |          | 5,821                    | 16                            | 18                             | 14                                |

TABLE 2  
REPRESENTATIVE SNOW COURSE DATA

| SNOW COURSE   | MAP<br>NUMBER | ELEVATION | Years of Record and Average Water Equivalent - Inches |      |              |      |           |      |           |      |         |      |  |  |
|---------------|---------------|-----------|---|------|--------------|------|-----------|------|-----------|------|---------|------|--|--|
|               |               |           | January 1st   |      | February 1st |      | March 1st |      | April 1st |      | May 1st |      |  |  |
|               |               |           | Years   | W.E. | Years        | W.E. | Years     | W.E. | Years     | W.E. | Years   | W.E. |  |  |
| Mascot Mine   | 1             | 7900      | -   | -    | -            | -    | 22        | 14.3 | 24        | 16.9 | -       | -    |  |  |
| Copper Basin  | 2             | 8000      | -   | -    | -            | -    | 18        | 9.0  | 24        | 10.0 | -       | -    |  |  |
| Stickney Mill | 3             | 7500      | -   | -    | -            | -    | 18        | 8.8  | 24        | 10.1 | -       | -    |  |  |
| Graham Ranch  | 4             | 6200      | 24  | 6.5  | 24           | 10.1 | 24        | 12.9 | 24        | 14.0 | -       | -    |  |  |
| Mt. Baldy     | 5             | 9000      | 11  | 9.1  | 11           | 14.8 | 11        | 19.3 | 11        | 23.5 | 9       | 23.2 |  |  |
| White Knob    | 6             | 7700      | 19  | 3.0  | 22           | 5.7  | 24        | 7.8  | 24        | 9.5  | 7       | 7.2  |  |  |
| Garfield R.S. | 7             | 6554      | 7   | 3.8  | 7            | 6.6  | 7         | 9.1  | 7         | 9.2  | 3       | 0.0  |  |  |
| Laidlaw Ranch | 8             | 5600      | 7   | 1.9  | 7            | 4.2  | 7         | 5.6  | 7         | 4.4  | 3       | 0.0  |  |  |
| Muldoon       | 9             | 6300      | 7   | 2.6  | 7            | 5.1  | 7         | 7.0  | 7         | 6.2  | 3       | 0.0  |  |  |
| Telfer Ranch  | 10            | 6000      | -   | -    | -            | -    | 7         | 6.7  | 6         | 4.6  | 3       | 0.0  |  |  |



TABLE 3

## LITTLE WOOD RIVER RESERVOIR, IDAHO

| GAGE<br>HEIGHT<br>IN FEET | Storage Capacity in Acre Feet |      |      |      |      |      |      |      |      |      | AREA<br>(ACRES) |
|---------------------------|-------------------------------|------|------|------|------|------|------|------|------|------|-----------------|
|                           | 0.00                          | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |                 |
| 5127.40                   |                               |      |      |      | 1.   | 1.   | 1.   | 1.   | 1.   | 1.   | 20.0            |
| 5127.50                   | 1.                            | 1.   | 1.   | 1.   | 1.   | 1.   | 1.   | 1.   | 1.   | 1.   |                 |
| 5127.60                   | 1.                            | 2.   | 2.   | 2.   | 2.   | 2.   | 2.   | 2.   | 2.   | 2.   |                 |
| 5127.70                   | 2.                            | 2.   | 2.   | 2.   | 2.   | 2.   | 2.   | 2.   | 2.   | 2.   |                 |
| 5127.80                   | 2.                            | 2.   | 2.   | 2.   | 3.   | 3.   | 3.   | 3.   | 3.   | 3.   |                 |
| 5127.90                   | 3.                            | 3.   | 3.   | 3.   | 3.   | 3.   | 3.   | 3.   | 3.   | 4.   |                 |
| 5128.00                   | 4.                            | 4.   | 4.   | 4.   | 4.   | 4.   | 4.   | 4.   | 4.   | 4.   | 21.7            |
| 5128.10                   | 5.                            | 5.   | 5.   | 5.   | 5.   | 5.   | 5.   | 5.   | 5.   | 6.   |                 |
| 5128.20                   | 6.                            | 6.   | 6.   | 6.   | 6.   | 6.   | 7.   | 7.   | 7.   | 7.   |                 |
| 5128.30                   | 7.                            | 7.   | 7.   | 8.   | 8.   | 8.   | 8.   | 8.   | 9.   | 9.   |                 |
| 5128.40                   | 9.                            | 9.   | 9.   | 10.  | 10.  | 10.  | 10.  | 11.  | 11.  | 11.  |                 |
| 5128.50                   | 11.                           | 12.  | 12.  | 12.  | 12.  | 13.  | 13.  | 13.  | 14.  | 14.  |                 |
| 5128.60                   | 14.                           | 14.  | 15.  | 15.  | 15.  | 16.  | 16.  | 17.  | 17.  | 17.  |                 |
| 5128.70                   | 18.                           | 18.  | 19.  | 19.  | 19.  | 20.  | 20.  | 21.  | 21.  | 22.  |                 |
| 5128.80                   | 22.                           | 23.  | 23.  | 24.  | 24.  | 25.  | 25.  | 26.  | 27.  | 27.  |                 |
| 5128.90                   | 28.                           | 29.  | 29.  | 30.  | 31.  | 31.  | 32.  | 33.  | 33.  | 34.  |                 |
| 5129.00                   | 35.                           | 35.  | 35.  | 35.  | 36.  | 36.  | 36.  | 36.  | 36.  | 37.  | 24.4            |
| 5129.10                   | 37.                           | 37.  | 37.  | 37.  | 37.  | 38.  | 38.  | 38.  | 38.  | 38.  |                 |
| 5129.20                   | 38.                           | 39.  | 39.  | 39.  | 39.  | 39.  | 40.  | 40.  | 40.  | 40.  |                 |
| 5129.30                   | 40.                           | 41.  | 41.  | 41.  | 41.  | 41.  | 41.  | 42.  | 42.  | 42.  |                 |
| 5129.40                   | 42.                           | 42.  | 43.  | 43.  | 43.  | 43.  | 43.  | 44.  | 44.  | 44.  |                 |
| 5129.50                   | 44.                           | 45.  | 45.  | 45.  | 45.  | 45.  | 46.  | 46.  | 46.  | 46.  |                 |
| 5129.60                   | 46.                           | 47.  | 47.  | 47.  | 47.  | 48.  | 48.  | 48.  | 48.  | 48.  |                 |
| 5129.70                   | 49.                           | 49.  | 49.  | 49.  | 50.  | 50.  | 50.  | 50.  | 51.  | 51.  |                 |
| 5129.80                   | 51.                           | 51.  | 52.  | 52.  | 52.  | 52.  | 53.  | 53.  | 53.  | 53.  |                 |
| 5129.90                   | 54.                           | 54.  | 54.  | 54.  | 55.  | 55.  | 55.  | 55.  | 56.  | 56.  |                 |
| 5130.00                   | 56.                           | 56.  | 57.  | 57.  | 57.  | 57.  | 58.  | 58.  | 58.  | 59.  | 27.2            |
| 5130.10                   | 59.                           | 59.  | 59.  | 60.  | 60.  | 60.  | 61.  | 61.  | 61.  | 61.  |                 |
| 5130.20                   | 62.                           | 62.  | 62.  | 63.  | 63.  | 63.  | 63.  | 64.  | 64.  | 64.  |                 |
| 5130.30                   | 65.                           | 65.  | 65.  | 66.  | 66.  | 66.  | 67.  | 67.  | 67.  | 67.  |                 |
| 5130.40                   | 68.                           | 68.  | 68.  | 69.  | 69.  | 69.  | 70.  | 70.  | 70.  | 71.  |                 |
| 5130.50                   | 71.                           | 71.  | 72.  | 72.  | 72.  | 73.  | 73.  | 73.  | 74.  | 74.  |                 |
| 5130.60                   | 74.                           | 75.  | 75.  | 76.  | 76.  | 76.  | 77.  | 77.  | 77.  | 78.  |                 |
| 5130.70                   | 78.                           | 78.  | 79.  | 79.  | 80.  | 80.  | 80.  | 81.  | 81.  | 81.  |                 |
| 5130.80                   | 82.                           | 82.  | 83.  | 83.  | 83.  | 84.  | 84.  | 85.  | 85.  | 85.  |                 |
| 5130.90                   | 86.                           | 86.  | 87.  | 87.  | 87.  | 88.  | 88.  | 89.  | 89.  | 90.  |                 |
| 5131.00                   | 90.                           | 90.  | 90.  | 91.  | 91.  | 91.  | 92.  | 92.  | 92.  | 92.  | 30.6            |
| 5131.10                   | 93.                           | 93.  | 93.  | 93.  | 94.  | 94.  | 94.  | 94.  | 95.  | 95.  |                 |
| 5131.20                   | 95.                           | 95.  | 96.  | 96.  | 96.  | 97.  | 97.  | 97.  | 97.  | 98.  |                 |
| 5131.30                   | 98.                           | 98.  | 98.  | 99.  | 99.  | 99.  | 100. | 100. | 100. | 100. |                 |
| 5131.40                   | 101.                          | 101. | 101. | 102. | 102. | 102. | 102. | 103. | 103. | 103. |                 |

TABLE 3 (CONT.)

| LITTLE WOOD RIVER RESERVOIR, IDAHO |                               |      |      |      |      |      |      |      |      |      |                 |
|------------------------------------|-------------------------------|------|------|------|------|------|------|------|------|------|-----------------|
| GAGE<br>HEIGHT<br>IN FEET          | Storage Capacity in Acre Feet |      |      |      |      |      |      |      |      |      | AREA<br>(ACRES) |
|                                    | 0.00                          | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |                 |
| 5131.50                            | 104.                          | 104. | 104. | 104. | 105. | 105. | 105. | 106. | 106. | 106. |                 |
| 5131.60                            | 107.                          | 107. | 107. | 107. | 108. | 108. | 108. | 109. | 109. | 109. |                 |
| 5131.70                            | 110.                          | 110. | 110. | 111. | 111. | 111. | 111. | 112. | 112. | 112. |                 |
| 5131.80                            | 113.                          | 113. | 113. | 114. | 114. | 114. | 115. | 115. | 115. | 116. |                 |
| 5131.90                            | 116.                          | 116. | 117. | 117. | 117. | 118. | 118. | 118. | 119. | 119. |                 |
| 5132.00                            | 119.                          | 120. | 120. | 120. | 121. | 121. | 121. | 122. | 122. | 122. | 31.0            |
| 5132.10                            | 123.                          | 123. | 123. | 124. | 124. | 124. | 125. | 125. | 125. | 126. |                 |
| 5132.20                            | 126.                          | 127. | 127. | 127. | 128. | 128. | 128. | 129. | 129. | 129. |                 |
| 5132.30                            | 130.                          | 130. | 130. | 131. | 131. | 132. | 132. | 132. | 133. | 133. |                 |
| 5132.40                            | 133.                          | 134. | 134. | 135. | 135. | 135. | 136. | 136. | 136. | 137. |                 |
| 5132.50                            | 137.                          | 138. | 138. | 138. | 139. | 139. | 140. | 140. | 140. | 141. |                 |
| 5132.60                            | 141.                          | 142. | 142. | 142. | 143. | 143. | 144. | 144. | 144. | 145. |                 |
| 5132.70                            | 145.                          | 146. | 146. | 146. | 147. | 147. | 148. | 148. | 149. | 149. |                 |
| 5132.80                            | 149.                          | 150. | 150. | 151. | 151. | 151. | 152. | 152. | 153. | 153. |                 |
| 5132.90                            | 154.                          | 154. | 154. | 155. | 155. | 156. | 156. | 157. | 157. | 158. |                 |
| 5133.00                            | 158.                          | 158. | 159. | 159. | 159. | 160. | 160. | 160. | 161. | 161. | 37.5            |
| 5133.10                            | 161.                          | 162. | 162. | 162. | 163. | 163. | 163. | 164. | 164. | 164. |                 |
| 5133.20                            | 165.                          | 165. | 165. | 166. | 166. | 166. | 167. | 167. | 168. | 168. |                 |
| 5133.30                            | 168.                          | 169. | 169. | 169. | 170. | 170. | 170. | 171. | 171. | 171. |                 |
| 5133.40                            | 172.                          | 172. | 172. | 173. | 173. | 174. | 174. | 174. | 175. | 175. |                 |
| 5133.50                            | 175.                          | 176. | 176. | 177. | 177. | 177. | 178. | 178. | 178. | 179. |                 |
| 5133.60                            | 179.                          | 179. | 180. | 180. | 181. | 181. | 181. | 182. | 182. | 183. |                 |
| 5133.70                            | 183.                          | 183. | 184. | 184. | 184. | 185. | 185. | 186. | 186. | 186. |                 |
| 5133.80                            | 187.                          | 187. | 188. | 188. | 188. | 189. | 189. | 189. | 190. | 190. |                 |
| 5133.90                            | 191.                          | 191. | 191. | 192. | 192. | 193. | 193. | 194. | 194. | 194. |                 |
| 5134.00                            | 195.                          | 195. | 196. | 196. | 196. | 197. | 197. | 198. | 198. | 198. | 40.9            |
| 5134.10                            | 199.                          | 199. | 200. | 200. | 200. | 201. | 201. | 202. | 202. | 203. |                 |
| 5134.20                            | 203.                          | 203. | 204. | 204. | 205. | 205. | 206. | 206. | 206. | 207. |                 |
| 5134.30                            | 207.                          | 208. | 208. | 209. | 209. | 209. | 210. | 210. | 211. | 211. |                 |
| 5134.40                            | 212.                          | 212. | 213. | 213. | 213. | 214. | 214. | 215. | 215. | 216. |                 |
| 5134.50                            | 216.                          | 217. | 217. | 218. | 218. | 218. | 219. | 219. | 220. | 220. |                 |
| 5134.60                            | 221.                          | 221. | 222. | 222. | 223. | 223. | 224. | 224. | 224. | 225. |                 |
| 5134.70                            | 225.                          | 226. | 226. | 227. | 227. | 228. | 228. | 229. | 229. | 230. |                 |
| 5134.80                            | 230.                          | 231. | 231. | 232. | 232. | 233. | 233. | 234. | 234. | 235. |                 |
| 5134.90                            | 235.                          | 236. | 236. | 236. | 237. | 237. | 238. | 238. | 239. | 239. |                 |
| 5135.00                            | 240.                          | 240. | 241. | 241. | 242. | 242. | 242. | 243. | 243. | 244. | 44.3            |
| 5135.10                            | 244.                          | 244. | 245. | 245. | 246. | 246. | 246. | 247. | 247. | 248. |                 |
| 5135.20                            | 248.                          | 249. | 249. | 249. | 250. | 250. | 251. | 251. | 251. | 252. |                 |
| 5135.30                            | 252.                          | 253. | 253. | 254. | 254. | 254. | 255. | 255. | 256. | 256. |                 |
| 5135.40                            | 257.                          | 257. | 257. | 258. | 258. | 259. | 259. | 260. | 260. | 260. |                 |



TABLE 3 (CONT.)

| LITTLE WOOD RIVER RESERVOIR, IDAHO |                               |      |      |      |      |      |      |      |      |      |                 |
|------------------------------------|-------------------------------|------|------|------|------|------|------|------|------|------|-----------------|
| GAGE<br>HEIGHT<br>IN FEET          | Storage Capacity in Acre Feet |      |      |      |      |      |      |      |      |      | AREA<br>(ACRES) |
|                                    | 0.00                          | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |                 |
| 5135.50                            | 261.                          | 261. | 262. | 262. | 263. | 263. | 263. | 264. | 264. | 265. |                 |
| 5135.60                            | 265.                          | 266. | 266. | 267. | 267. | 267. | 268. | 268. | 269. | 269. |                 |
| 5135.70                            | 270.                          | 270. | 271. | 271. | 272. | 272. | 272. | 273. | 273. | 274. |                 |
| 5135.80                            | 274.                          | 275. | 275. | 276. | 276. | 277. | 277. | 277. | 278. | 278. |                 |
| 5135.90                            | 279.                          | 279. | 280. | 280. | 281. | 281. | 282. | 282. | 283. | 283. |                 |
| 5136.00                            | 284.                          | 284. | 284. | 285. | 285. | 286. | 286. | 287. | 287. | 288. | 47.7            |
| 5136.10                            | 288.                          | 289. | 289. | 290. | 290. | 291. | 291. | 292. | 292. | 293. |                 |
| 5136.20                            | 293.                          | 294. | 294. | 295. | 295. | 296. | 296. | 297. | 297. | 298. |                 |
| 5136.30                            | 298.                          | 299. | 299. | 300. | 300. | 301. | 301. | 302. | 302. | 303. |                 |
| 5136.40                            | 303.                          | 304. | 304. | 305. | 305. | 306. | 306. | 307. | 307. | 308. |                 |
| 5136.50                            | 308.                          | 309. | 309. | 310. | 310. | 311. | 311. | 312. | 312. | 313. |                 |
| 5136.60                            | 313.                          | 314. | 314. | 315. | 315. | 316. | 317. | 317. | 318. | 318. |                 |
| 5136.70                            | 319.                          | 319. | 320. | 320. | 321. | 321. | 322. | 322. | 323. | 323. |                 |
| 5136.80                            | 324.                          | 325. | 325. | 326. | 326. | 327. | 327. | 328. | 328. | 329. |                 |
| 5136.90                            | 329.                          | 330. | 331. | 331. | 332. | 332. | 333. | 333. | 334. | 334. |                 |
| 5137.00                            | 335.                          | 335. | 336. | 336. | 337. | 337. | 338. | 338. | 339. | 339. | 51.1            |
| 5137.10                            | 340.                          | 340. | 341. | 341. | 342. | 342. | 343. | 343. | 344. | 344. |                 |
| 5137.20                            | 345.                          | 345. | 346. | 346. | 347. | 347. | 347. | 348. | 348. | 349. |                 |
| 5137.30                            | 349.                          | 350. | 350. | 351. | 351. | 352. | 352. | 353. | 353. | 354. |                 |
| 5137.40                            | 354.                          | 355. | 355. | 356. | 356. | 357. | 357. | 358. | 358. | 359. |                 |
| 5137.50                            | 359.                          | 360. | 360. | 361. | 361. | 362. | 362. | 363. | 363. | 364. |                 |
| 5137.60                            | 365.                          | 365. | 366. | 366. | 367. | 367. | 368. | 368. | 369. | 369. |                 |
| 5137.70                            | 370.                          | 370. | 371. | 371. | 372. | 372. | 373. | 373. | 374. | 374. |                 |
| 5137.80                            | 375.                          | 375. | 376. | 377. | 377. | 378. | 378. | 379. | 379. | 380. |                 |
| 5137.90                            | 380.                          | 381. | 381. | 382. | 382. | 383. | 383. | 384. | 385. | 385. |                 |
| 5138.00                            | 386.                          | 386. | 387. | 387. | 388. | 388. | 389. | 389. | 390. | 391. | 54.6            |
| 5138.10                            | 391.                          | 392. | 392. | 393. | 393. | 394. | 394. | 395. | 396. | 396. |                 |
| 5138.20                            | 397.                          | 397. | 398. | 398. | 399. | 399. | 400. | 401. | 401. | 402. |                 |
| 5138.30                            | 402.                          | 403. | 403. | 404. | 405. | 405. | 406. | 406. | 407. | 407. |                 |
| 5138.40                            | 408.                          | 409. | 409. | 410. | 410. | 411. | 411. | 412. | 413. | 413. |                 |
| 5138.50                            | 414.                          | 414. | 415. | 416. | 416. | 417. | 417. | 418. | 418. | 419. |                 |
| 5138.60                            | 420.                          | 420. | 421. | 421. | 422. | 423. | 423. | 424. | 424. | 425. |                 |
| 5138.70                            | 426.                          | 426. | 427. | 427. | 428. | 429. | 429. | 430. | 430. | 431. |                 |
| 5138.80                            | 432.                          | 432. | 433. | 433. | 434. | 435. | 435. | 436. | 437. | 437. |                 |
| 5138.90                            | 438.                          | 438. | 439. | 440. | 440. | 441. | 442. | 442. | 443. | 443. |                 |
| 5139.00                            | 444.                          | 445. | 445. | 446. | 446. | 447. | 447. | 448. | 448. | 449. | 58.0            |
| 5139.10                            | 449.                          | 450. | 451. | 451. | 452. | 452. | 453. | 453. | 454. | 454. |                 |
| 5139.20                            | 455.                          | 456. | 456. | 457. | 457. | 458. | 458. | 459. | 459. | 460. |                 |
| 5139.30                            | 461.                          | 461. | 462. | 462. | 463. | 463. | 464. | 465. | 465. | 466. |                 |
| 5139.40                            | 466.                          | 467. | 467. | 468. | 469. | 469. | 470. | 470. | 471. | 471. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |      |      |      |      |      |      |      |      |      | AREA<br>(ACRES) |
|---------------------------|------------------------------------|------|------|------|------|------|------|------|------|------|-----------------|
|                           | Storage Capacity in Acre Feet      |      |      |      |      |      |      |      |      |      |                 |
|                           | 0.00                               | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |                 |
| 5139.50                   | 472.                               | 473. | 473. | 474. | 474. | 475. | 475. | 476. | 477. | 477. | 61.4            |
| 5139.60                   | 478.                               | 478. | 479. | 480. | 480. | 481. | 481. | 482. | 482. | 483. |                 |
| 5139.70                   | 484.                               | 484. | 485. | 485. | 486. | 487. | 487. | 488. | 488. | 489. |                 |
| 5139.80                   | 490.                               | 490. | 491. | 491. | 492. | 493. | 493. | 494. | 494. | 495. |                 |
| 5139.90                   | 496.                               | 496. | 497. | 497. | 498. | 499. | 499. | 500. | 501. | 501. |                 |
| 5140.00                   | 502.                               | 502. | 503. | 504. | 504. | 505. | 505. | 506. | 507. | 507. | 61.4            |
| 5140.10                   | 508.                               | 509. | 509. | 510. | 510. | 511. | 512. | 512. | 513. | 514. |                 |
| 5140.20                   | 514.                               | 515. | 515. | 516. | 517. | 517. | 518. | 519. | 519. | 520. |                 |
| 5140.30                   | 520.                               | 521. | 522. | 522. | 523. | 524. | 524. | 525. | 526. | 526. |                 |
| 5140.40                   | 527.                               | 528. | 528. | 529. | 529. | 530. | 531. | 531. | 532. | 533. |                 |
| 5140.50                   | 533.                               | 534. | 535. | 535. | 536. | 537. | 537. | 538. | 539. | 539. | 65.1            |
| 5140.60                   | 540.                               | 541. | 541. | 542. | 543. | 543. | 544. | 545. | 545. | 546. |                 |
| 5140.70                   | 547.                               | 547. | 548. | 549. | 549. | 550. | 551. | 551. | 552. | 553. |                 |
| 5140.80                   | 553.                               | 554. | 555. | 555. | 556. | 557. | 557. | 558. | 559. | 559. |                 |
| 5140.90                   | 560.                               | 561. | 561. | 562. | 563. | 564. | 564. | 565. | 566. | 566. |                 |
| 5141.00                   | 567.                               | 568. | 568. | 569. | 569. | 570. | 571. | 571. | 572. | 573. | 65.1            |
| 5141.10                   | 573.                               | 574. | 574. | 575. | 576. | 576. | 577. | 578. | 578. | 579. |                 |
| 5141.20                   | 579.                               | 580. | 581. | 581. | 582. | 583. | 583. | 584. | 585. | 585. |                 |
| 5141.30                   | 586.                               | 586. | 587. | 588. | 588. | 589. | 590. | 590. | 591. | 592. |                 |
| 5141.40                   | 592.                               | 593. | 594. | 594. | 595. | 595. | 596. | 597. | 597. | 598. |                 |
| 5141.50                   | 599.                               | 599. | 600. | 601. | 601. | 602. | 603. | 603. | 604. | 605. | 68.8            |
| 5141.60                   | 605.                               | 606. | 607. | 607. | 608. | 609. | 609. | 610. | 611. | 611. |                 |
| 5141.70                   | 612.                               | 613. | 613. | 614. | 615. | 615. | 616. | 617. | 617. | 618. |                 |
| 5141.80                   | 619.                               | 619. | 620. | 621. | 621. | 622. | 623. | 623. | 624. | 625. |                 |
| 5141.90                   | 625.                               | 626. | 627. | 627. | 628. | 629. | 629. | 630. | 631. | 632. |                 |
| 5142.00                   | 632.                               | 633. | 634. | 634. | 635. | 636. | 636. | 637. | 638. | 638. | 68.8            |
| 5142.10                   | 639.                               | 640. | 641. | 641. | 642. | 643. | 643. | 644. | 645. | 645. |                 |
| 5142.20                   | 646.                               | 647. | 648. | 648. | 649. | 650. | 650. | 651. | 652. | 653. |                 |
| 5142.30                   | 653.                               | 654. | 655. | 655. | 656. | 657. | 658. | 658. | 659. | 660. |                 |
| 5142.40                   | 660.                               | 661. | 662. | 663. | 663. | 664. | 665. | 665. | 666. | 667. |                 |
| 5142.50                   | 668.                               | 668. | 669. | 670. | 671. | 671. | 672. | 673. | 673. | 674. | 72.5            |
| 5142.60                   | 675.                               | 676. | 676. | 677. | 678. | 679. | 679. | 680. | 681. | 682. |                 |
| 5142.70                   | 682.                               | 683. | 684. | 685. | 685. | 686. | 687. | 688. | 688. | 689. |                 |
| 5142.80                   | 690.                               | 691. | 691. | 692. | 693. | 694. | 694. | 695. | 696. | 697. |                 |
| 5142.90                   | 697.                               | 698. | 699. | 700. | 700. | 701. | 702. | 703. | 703. | 704. |                 |
| 5143.00                   | 705.                               | 706. | 706. | 707. | 708. | 708. | 709. | 710. | 710. | 711. | 72.5            |
| 5143.10                   | 712.                               | 713. | 713. | 714. | 715. | 715. | 716. | 717. | 717. | 718. |                 |
| 5143.20                   | 719.                               | 720. | 720. | 721. | 722. | 722. | 723. | 724. | 725. | 725. |                 |
| 5143.30                   | 726.                               | 727. | 727. | 728. | 729. | 729. | 730. | 731. | 732. | 732. |                 |
| 5143.40                   | 733.                               | 734. | 735. | 735. | 736. | 737. | 737. | 738. | 739. | 740. |                 |

TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | Storage Capacity in Acre Feet      |       |       |       |       |       |       |       |       |       |                 |
|                           | 0.00                               | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5143.50                   | 740.                               | 741.  | 742.  | 742.  | 743.  | 744.  | 745.  | 745.  | 746.  | 747.  | 76.2            |
| 5143.60                   | 747.                               | 748.  | 749.  | 750.  | 750.  | 751.  | 752.  | 753.  | 753.  | 754.  |                 |
| 5143.70                   | 755.                               | 756.  | 756.  | 757.  | 758.  | 759.  | 759.  | 760.  | 761.  | 761.  |                 |
| 5143.80                   | 762.                               | 763.  | 764.  | 764.  | 765.  | 766.  | 767.  | 767.  | 768.  | 769.  |                 |
| 5143.90                   | 770.                               | 770.  | 771.  | 772.  | 773.  | 773.  | 774.  | 775.  | 776.  | 777.  |                 |
| 5144.00                   | 777.                               | 778.  | 779.  | 780.  | 780.  | 781.  | 782.  | 783.  | 783.  | 784.  | 79.8            |
| 5144.10                   | 785.                               | 786.  | 786.  | 787.  | 788.  | 789.  | 790.  | 790.  | 791.  | 792.  |                 |
| 5144.20                   | 793.                               | 793.  | 794.  | 795.  | 796.  | 796.  | 797.  | 798.  | 799.  | 800.  |                 |
| 5144.30                   | 800.                               | 801.  | 802.  | 803.  | 804.  | 804.  | 805.  | 806.  | 807.  | 807.  |                 |
| 5144.40                   | 808.                               | 809.  | 810.  | 811.  | 811.  | 812.  | 813.  | 814.  | 815.  | 815.  |                 |
| 5144.50                   | 816.                               | 817.  | 818.  | 819.  | 819.  | 820.  | 821.  | 822.  | 823.  | 823.  | 83.5            |
| 5144.60                   | 824.                               | 825.  | 826.  | 827.  | 827.  | 828.  | 829.  | 830.  | 831.  | 831.  |                 |
| 5144.70                   | 832.                               | 833.  | 834.  | 835.  | 836.  | 836.  | 837.  | 838.  | 839.  | 840.  |                 |
| 5144.80                   | 840.                               | 841.  | 842.  | 843.  | 844.  | 845.  | 845.  | 846.  | 847.  | 848.  |                 |
| 5144.90                   | 849.                               | 849.  | 850.  | 851.  | 852.  | 853.  | 854.  | 854.  | 855.  | 856.  |                 |
| 5145.00                   | 857.                               | 858.  | 858.  | 859.  | 860.  | 861.  | 862.  | 862.  | 863.  | 864.  | 87.2            |
| 5145.10                   | 865.                               | 865.  | 866.  | 867.  | 868.  | 869.  | 869.  | 870.  | 871.  | 872.  |                 |
| 5145.20                   | 872.                               | 873.  | 874.  | 875.  | 875.  | 876.  | 877.  | 878.  | 879.  | 879.  |                 |
| 5145.30                   | 880.                               | 881.  | 882.  | 883.  | 883.  | 884.  | 885.  | 886.  | 886.  | 887.  |                 |
| 5145.40                   | 888.                               | 889.  | 890.  | 890.  | 891.  | 892.  | 893.  | 894.  | 894.  | 895.  |                 |
| 5145.50                   | 896.                               | 897.  | 898.  | 898.  | 899.  | 900.  | 901.  | 902.  | 902.  | 903.  | 91.0            |
| 5145.60                   | 904.                               | 905.  | 906.  | 906.  | 907.  | 908.  | 909.  | 910.  | 910.  | 911.  |                 |
| 5145.70                   | 912.                               | 913.  | 914.  | 915.  | 915.  | 916.  | 917.  | 918.  | 919.  | 919.  |                 |
| 5145.80                   | 920.                               | 921.  | 922.  | 923.  | 924.  | 924.  | 925.  | 926.  | 927.  | 928.  |                 |
| 5145.90                   | 928.                               | 929.  | 930.  | 931.  | 932.  | 933.  | 933.  | 934.  | 935.  | 936.  |                 |
| 5146.00                   | 937.                               | 938.  | 938.  | 939.  | 940.  | 941.  | 942.  | 943.  | 943.  | 944.  | 94.8            |
| 5146.10                   | 945.                               | 946.  | 947.  | 948.  | 949.  | 949.  | 950.  | 951.  | 952.  | 953.  |                 |
| 5146.20                   | 954.                               | 954.  | 955.  | 956.  | 957.  | 958.  | 959.  | 960.  | 960.  | 961.  |                 |
| 5146.30                   | 962.                               | 963.  | 964.  | 965.  | 966.  | 966.  | 967.  | 968.  | 969.  | 970.  |                 |
| 5146.40                   | 971.                               | 972.  | 972.  | 973.  | 974.  | 975.  | 976.  | 977.  | 978.  | 979.  |                 |
| 5146.50                   | 979.                               | 980.  | 981.  | 982.  | 983.  | 984.  | 985.  | 986.  | 986.  | 987.  | 98.6            |
| 5146.60                   | 988.                               | 989.  | 990.  | 991.  | 992.  | 993.  | 993.  | 994.  | 995.  | 996.  |                 |
| 5146.70                   | 997.                               | 998.  | 999.  | 1000. | 1001. | 1001. | 1002. | 1003. | 1004. | 1005. |                 |
| 5146.80                   | 1006.                              | 1007. | 1008. | 1009. | 1010. | 1010. | 1011. | 1012. | 1013. | 1014. |                 |
| 5146.90                   | 1015.                              | 1016. | 1017. | 1018. | 1019. | 1019. | 1020. | 1021. | 1022. | 1023. |                 |
| 5147.00                   | 1024.                              | 1025. | 1026. | 1026. | 1027. | 1028. | 1029. | 1030. | 1031. | 1032. | 102.4           |
| 5147.10                   | 1032.                              | 1033. | 1034. | 1035. | 1036. | 1037. | 1037. | 1038. | 1039. | 1040. |                 |
| 5147.20                   | 1041.                              | 1042. | 1043. | 1043. | 1044. | 1045. | 1046. | 1047. | 1048. | 1049. |                 |
| 5147.30                   | 1049.                              | 1050. | 1051. | 1052. | 1053. | 1054. | 1055. | 1055. | 1056. | 1057. |                 |
| 5147.40                   | 1058.                              | 1059. | 1060. | 1061. | 1062. | 1062. | 1063. | 1064. | 1065. | 1066. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | Storage Capacity in Acre Feet      |       |       |       |       |       |       |       |       |       |                 |
|                           | 0.00                               | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5147.50                   | 1067.                              | 1068. | 1068. | 1069. | 1070. | 1071. | 1072. | 1073. | 1074. | 1075. |                 |
| 5147.60                   | 1075.                              | 1076. | 1077. | 1078. | 1079. | 1080. | 1081. | 1082. | 1083. | 1083. |                 |
| 5147.70                   | 1084.                              | 1085. | 1086. | 1087. | 1088. | 1089. | 1090. | 1091. | 1091. | 1092. |                 |
| 5147.80                   | 1093.                              | 1094. | 1095. | 1096. | 1097. | 1098. | 1099. | 1099. | 1100. | 1101. |                 |
| 5147.90                   | 1102.                              | 1103. | 1104. | 1105. | 1106. | 1107. | 1108. | 1109. | 1109. | 1110. |                 |
| 5148.00                   | 1111.                              | 1112. | 1113. | 1114. | 1115. | 1116. | 1117. | 1118. | 1119. | 1119. | 90.9            |
| 5148.10                   | 1120.                              | 1121. | 1122. | 1123. | 1124. | 1125. | 1126. | 1127. | 1128. | 1129. |                 |
| 5148.20                   | 1130.                              | 1131. | 1131. | 1132. | 1133. | 1134. | 1135. | 1136. | 1137. | 1138. |                 |
| 5148.30                   | 1139.                              | 1140. | 1141. | 1142. | 1143. | 1144. | 1144. | 1145. | 1146. | 1147. |                 |
| 5148.40                   | 1148.                              | 1149. | 1150. | 1151. | 1152. | 1153. | 1154. | 1155. | 1156. | 1157. |                 |
| 5148.50                   | 1158.                              | 1159. | 1160. | 1160. | 1161. | 1162. | 1163. | 1164. | 1165. | 1166. |                 |
| 5148.60                   | 1167.                              | 1168. | 1169. | 1170. | 1171. | 1172. | 1173. | 1174. | 1175. | 1176. |                 |
| 5148.70                   | 1177.                              | 1178. | 1179. | 1180. | 1181. | 1182. | 1183. | 1183. | 1184. | 1185. |                 |
| 5148.80                   | 1186.                              | 1187. | 1188. | 1189. | 1190. | 1191. | 1192. | 1193. | 1194. | 1195. |                 |
| 5148.90                   | 1196.                              | 1197. | 1198. | 1199. | 1200. | 1201. | 1202. | 1203. | 1204. | 1205. |                 |
| 5149.00                   | 1206.                              | 1207. | 1208. | 1209. | 1210. | 1211. | 1211. | 1212. | 1213. | 1214. | 94.6            |
| 5149.10                   | 1215.                              | 1216. | 1217. | 1218. | 1219. | 1220. | 1221. | 1222. | 1222. | 1223. |                 |
| 5149.20                   | 1224.                              | 1225. | 1226. | 1227. | 1228. | 1229. | 1230. | 1231. | 1232. | 1233. |                 |
| 5149.30                   | 1234.                              | 1234. | 1235. | 1236. | 1237. | 1238. | 1239. | 1240. | 1241. | 1242. |                 |
| 5149.40                   | 1243.                              | 1244. | 1245. | 1246. | 1247. | 1248. | 1248. | 1249. | 1250. | 1251. |                 |
| 5149.50                   | 1252.                              | 1253. | 1254. | 1255. | 1256. | 1257. | 1258. | 1259. | 1260. | 1261. |                 |
| 5149.60                   | 1262.                              | 1263. | 1264. | 1265. | 1266. | 1266. | 1267. | 1268. | 1269. | 1270. |                 |
| 5149.70                   | 1271.                              | 1272. | 1273. | 1274. | 1275. | 1276. | 1277. | 1278. | 1279. | 1280. |                 |
| 5149.80                   | 1281.                              | 1282. | 1283. | 1284. | 1285. | 1286. | 1287. | 1288. | 1289. | 1290. |                 |
| 5149.90                   | 1291.                              | 1291. | 1292. | 1293. | 1294. | 1295. | 1296. | 1297. | 1298. | 1299. |                 |
| 5150.00                   | 1300.                              | 1301. | 1302. | 1303. | 1304. | 1305. | 1306. | 1307. | 1308. | 1309. | 98.3            |
| 5150.10                   | 1310.                              | 1311. | 1312. | 1313. | 1314. | 1315. | 1316. | 1317. | 1318. | 1319. |                 |
| 5150.20                   | 1320.                              | 1321. | 1322. | 1323. | 1324. | 1325. | 1326. | 1327. | 1328. | 1329. |                 |
| 5150.30                   | 1330.                              | 1331. | 1332. | 1333. | 1334. | 1335. | 1336. | 1337. | 1338. | 1339. |                 |
| 5150.40                   | 1340.                              | 1341. | 1342. | 1343. | 1344. | 1345. | 1346. | 1347. | 1348. | 1349. |                 |
| 5150.50                   | 1350.                              | 1351. | 1352. | 1353. | 1354. | 1355. | 1356. | 1357. | 1358. | 1359. |                 |
| 5150.60                   | 1360.                              | 1361. | 1362. | 1363. | 1364. | 1366. | 1367. | 1368. | 1369. | 1370. |                 |
| 5150.70                   | 1371.                              | 1372. | 1373. | 1374. | 1375. | 1376. | 1377. | 1378. | 1379. | 1380. |                 |
| 5150.80                   | 1381.                              | 1382. | 1383. | 1384. | 1385. | 1386. | 1387. | 1388. | 1389. | 1390. |                 |
| 5150.90                   | 1391.                              | 1392. | 1394. | 1395. | 1396. | 1397. | 1398. | 1399. | 1400. | 1401. |                 |
| 5151.00                   | 1402.                              | 1403. | 1404. | 1405. | 1406. | 1407. | 1408. | 1409. | 1410. | 1411. | 102.4           |
| 5151.10                   | 1412.                              | 1413. | 1414. | 1415. | 1416. | 1417. | 1418. | 1419. | 1420. | 1421. |                 |
| 5151.20                   | 1422.                              | 1423. | 1424. | 1425. | 1426. | 1427. | 1428. | 1429. | 1430. | 1431. |                 |
| 5151.30                   | 1432.                              | 1433. | 1434. | 1435. | 1436. | 1437. | 1438. | 1439. | 1440. | 1441. |                 |
| 5151.40                   | 1442.                              | 1443. | 1444. | 1445. | 1447. | 1448. | 1449. | 1450. | 1451. | 1452. |                 |



TABLE 3 (CONT.)

## LITTLE WOOD RIVER RESERVOIR, IDAHO

| GAGE<br>HEIGHT<br>IN FEET | Storage Capacity in Acre Feet |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | 0.00                          | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5151.50                   | 1453.                         | 1454. | 1455. | 1456. | 1457. | 1458. | 1459. | 1460. | 1461. | 1462. |                 |
| 5151.60                   | 1463.                         | 1464. | 1465. | 1466. | 1467. | 1468. | 1469. | 1470. | 1471. | 1472. |                 |
| 5151.70                   | 1473.                         | 1475. | 1476. | 1477. | 1478. | 1479. | 1480. | 1481. | 1482. | 1483. |                 |
| 5151.80                   | 1484.                         | 1485. | 1486. | 1487. | 1488. | 1489. | 1490. | 1491. | 1492. | 1493. |                 |
| 5151.90                   | 1495.                         | 1496. | 1497. | 1498. | 1499. | 1500. | 1501. | 1502. | 1503. | 1504. |                 |
| 5152.00                   | 1505.                         | 1506. | 1507. | 1508. | 1509. | 1511. | 1512. | 1513. | 1514. | 1515. | 106.6           |
| 5152.10                   | 1516.                         | 1517. | 1518. | 1519. | 1520. | 1521. | 1522. | 1523. | 1525. | 1526. |                 |
| 5152.20                   | 1527.                         | 1528. | 1529. | 1530. | 1531. | 1532. | 1533. | 1534. | 1535. | 1536. |                 |
| 5152.30                   | 1538.                         | 1539. | 1540. | 1541. | 1542. | 1543. | 1544. | 1545. | 1546. | 1547. |                 |
| 5152.40                   | 1549.                         | 1550. | 1551. | 1552. | 1553. | 1554. | 1555. | 1556. | 1557. | 1558. |                 |
| 5152.50                   | 1560.                         | 1561. | 1562. | 1563. | 1564. | 1565. | 1566. | 1567. | 1568. | 1570. |                 |
| 5152.60                   | 1571.                         | 1572. | 1573. | 1574. | 1575. | 1576. | 1577. | 1579. | 1580. | 1581. |                 |
| 5152.70                   | 1582.                         | 1583. | 1584. | 1585. | 1586. | 1588. | 1589. | 1590. | 1591. | 1592. |                 |
| 5152.80                   | 1593.                         | 1594. | 1595. | 1597. | 1598. | 1599. | 1600. | 1601. | 1602. | 1603. |                 |
| 5152.90                   | 1605.                         | 1606. | 1607. | 1608. | 1609. | 1610. | 1611. | 1613. | 1614. | 1615. |                 |
| 5153.00                   | 1616.                         | 1617. | 1618. | 1619. | 1620. | 1621. | 1622. | 1624. | 1625. | 1626. | 110.7           |
| 5153.10                   | 1627.                         | 1628. | 1629. | 1630. | 1631. | 1632. | 1633. | 1634. | 1635. | 1637. |                 |
| 5153.20                   | 1638.                         | 1639. | 1640. | 1641. | 1642. | 1643. | 1644. | 1645. | 1646. | 1647. |                 |
| 5153.30                   | 1649.                         | 1650. | 1651. | 1652. | 1653. | 1654. | 1655. | 1656. | 1657. | 1658. |                 |
| 5153.40                   | 1660.                         | 1661. | 1662. | 1663. | 1664. | 1665. | 1666. | 1667. | 1668. | 1670. |                 |
| 5153.50                   | 1671.                         | 1672. | 1673. | 1674. | 1675. | 1676. | 1677. | 1678. | 1680. | 1681. |                 |
| 5153.60                   | 1682.                         | 1683. | 1684. | 1685. | 1686. | 1687. | 1689. | 1690. | 1691. | 1692. |                 |
| 5153.70                   | 1693.                         | 1694. | 1695. | 1696. | 1698. | 1699. | 1700. | 1701. | 1702. | 1703. |                 |
| 5153.80                   | 1704.                         | 1705. | 1707. | 1708. | 1709. | 1710. | 1711. | 1712. | 1713. | 1715. |                 |
| 5153.90                   | 1716.                         | 1717. | 1718. | 1719. | 1720. | 1721. | 1723. | 1724. | 1725. | 1726. |                 |
| 5154.00                   | 1727.                         | 1728. | 1729. | 1731. | 1732. | 1733. | 1734. | 1735. | 1736. | 1738. | 114.8           |
| 5154.10                   | 1739.                         | 1740. | 1741. | 1742. | 1743. | 1744. | 1746. | 1747. | 1748. | 1749. |                 |
| 5154.20                   | 1750.                         | 1751. | 1753. | 1754. | 1755. | 1756. | 1757. | 1758. | 1760. | 1761. |                 |
| 5154.30                   | 1762.                         | 1763. | 1764. | 1765. | 1767. | 1768. | 1769. | 1770. | 1771. | 1773. |                 |
| 5154.40                   | 1774.                         | 1775. | 1776. | 1777. | 1778. | 1780. | 1781. | 1782. | 1783. | 1784. |                 |
| 5154.50                   | 1786.                         | 1787. | 1788. | 1789. | 1790. | 1792. | 1793. | 1794. | 1795. | 1796. |                 |
| 5154.60                   | 1797.                         | 1799. | 1800. | 1801. | 1802. | 1803. | 1805. | 1806. | 1807. | 1808. |                 |
| 5154.70                   | 1809.                         | 1811. | 1812. | 1813. | 1814. | 1815. | 1817. | 1818. | 1819. | 1820. |                 |
| 5154.80                   | 1822.                         | 1823. | 1824. | 1825. | 1826. | 1828. | 1829. | 1830. | 1831. | 1832. |                 |
| 5154.90                   | 1834.                         | 1835. | 1836. | 1837. | 1839. | 1840. | 1841. | 1842. | 1844. | 1845. |                 |
| 5155.00                   | 1846.                         | 1847. | 1848. | 1849. | 1851. | 1852. | 1853. | 1854. | 1855. | 1856. | 119.0           |
| 5155.10                   | 1858.                         | 1859. | 1860. | 1861. | 1862. | 1863. | 1865. | 1866. | 1867. | 1868. |                 |
| 5155.20                   | 1869.                         | 1870. | 1872. | 1873. | 1874. | 1875. | 1876. | 1877. | 1879. | 1880. |                 |
| 5155.30                   | 1881.                         | 1882. | 1883. | 1884. | 1886. | 1887. | 1888. | 1889. | 1890. | 1892. |                 |
| 5155.40                   | 1893.                         | 1894. | 1895. | 1896. | 1898. | 1899. | 1900. | 1901. | 1902. | 1903. |                 |

TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |       |       |                               |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|------------------------------------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | 0.00                               | 0.01  | 0.02  | Storage Capacity in Acre Feet |       |       |       | 0.07  | 0.08  | 0.09  |                 |
|                           | 0.03                               | 0.04  | 0.05  | 0.06                          |       |       |       |       |       |       |                 |
| 5155.50                   | 1905.                              | 1906. | 1907. | 1908.                         | 1909. | 1911. | 1912. | 1913. | 1914. | 1915. |                 |
| 5155.60                   | 1917.                              | 1918. | 1919. | 1920.                         | 1921. | 1923. | 1924. | 1925. | 1926. | 1927. |                 |
| 5155.70                   | 1929.                              | 1930. | 1931. | 1932.                         | 1933. | 1935. | 1936. | 1937. | 1938. | 1939. |                 |
| 5155.80                   | 1941.                              | 1942. | 1943. | 1944.                         | 1946. | 1947. | 1948. | 1949. | 1950. | 1952. |                 |
| 5155.90                   | 1953.                              | 1954. | 1955. | 1957.                         | 1958. | 1959. | 1960. | 1961. | 1963. | 1964. |                 |
| 5156.00                   | 1965.                              | 1966. | 1968. | 1969.                         | 1970. | 1971. | 1972. | 1974. | 1975. | 1976. | 123.1           |
| 5156.10                   | 1977.                              | 1979. | 1980. | 1981.                         | 1982. | 1984. | 1985. | 1986. | 1987. | 1989. |                 |
| 5156.20                   | 1990.                              | 1991. | 1992. | 1994.                         | 1995. | 1996. | 1997. | 1999. | 2000. | 2001. |                 |
| 5156.30                   | 2002.                              | 2004. | 2005. | 2006.                         | 2007. | 2009. | 2010. | 2011. | 2012. | 2014. |                 |
| 5156.40                   | 2015.                              | 2016. | 2017. | 2019.                         | 2020. | 2021. | 2023. | 2024. | 2025. | 2026. |                 |
| 5156.50                   | 2028.                              | 2029. | 2030. | 2031.                         | 2033. | 2034. | 2035. | 2036. | 2038. | 2039. |                 |
| 5156.60                   | 2040.                              | 2042. | 2043. | 2044.                         | 2045. | 2047. | 2048. | 2049. | 2051. | 2052. |                 |
| 5156.70                   | 2053.                              | 2054. | 2056. | 2057.                         | 2058. | 2059. | 2061. | 2062. | 2063. | 2065. |                 |
| 5156.80                   | 2066.                              | 2067. | 2069. | 2070.                         | 2071. | 2072. | 2074. | 2075. | 2076. | 2078. |                 |
| 5156.90                   | 2079.                              | 2080. | 2082. | 2083.                         | 2084. | 2085. | 2087. | 2088. | 2089. | 2091. |                 |
| 5157.00                   | 2092.                              | 2093. | 2094. | 2096.                         | 2097. | 2098. | 2099. | 2101. | 2102. | 2103. | 127.2           |
| 5157.10                   | 2104.                              | 2106. | 2107. | 2108.                         | 2109. | 2111. | 2112. | 2113. | 2114. | 2116. |                 |
| 5157.20                   | 2117.                              | 2118. | 2119. | 2121.                         | 2122. | 2123. | 2124. | 2126. | 2127. | 2128. |                 |
| 5157.30                   | 2129.                              | 2131. | 2132. | 2133.                         | 2134. | 2136. | 2137. | 2138. | 2139. | 2141. |                 |
| 5157.40                   | 2142.                              | 2143. | 2144. | 2146.                         | 2147. | 2148. | 2150. | 2151. | 2152. | 2153. |                 |
| 5157.50                   | 2155.                              | 2156. | 2157. | 2158.                         | 2160. | 2161. | 2162. | 2164. | 2165. | 2166. |                 |
| 5157.60                   | 2167.                              | 2169. | 2170. | 2171.                         | 2172. | 2174. | 2175. | 2176. | 2178. | 2179. |                 |
| 5157.70                   | 2180.                              | 2181. | 2183. | 2184.                         | 2185. | 2187. | 2188. | 2189. | 2190. | 2192. |                 |
| 5157.80                   | 2193.                              | 2194. | 2196. | 2197.                         | 2198. | 2200. | 2201. | 2202. | 2203. | 2205. |                 |
| 5157.90                   | 2206.                              | 2207. | 2209. | 2210.                         | 2211. | 2213. | 2214. | 2215. | 2217. | 2218. |                 |
| 5158.00                   | 2219.                              | 2220. | 2222. | 2223.                         | 2224. | 2226. | 2227. | 2228. | 2230. | 2231. | 131.3           |
| 5158.10                   | 2232.                              | 2234. | 2235. | 2236.                         | 2237. | 2239. | 2240. | 2241. | 2243. | 2244. |                 |
| 5158.20                   | 2245.                              | 2247. | 2248. | 2249.                         | 2251. | 2252. | 2253. | 2255. | 2256. | 2257. |                 |
| 5158.30                   | 2259.                              | 2260. | 2261. | 2263.                         | 2264. | 2265. | 2267. | 2268. | 2269. | 2271. |                 |
| 5158.40                   | 2272.                              | 2273. | 2275. | 2276.                         | 2277. | 2279. | 2280. | 2281. | 2283. | 2284. |                 |
| 5158.50                   | 2286.                              | 2287. | 2288. | 2290.                         | 2291. | 2292. | 2294. | 2295. | 2296. | 2298. |                 |
| 5158.60                   | 2299.                              | 2300. | 2302. | 2303.                         | 2304. | 2306. | 2307. | 2309. | 2310. | 2311. |                 |
| 5158.70                   | 2313.                              | 2314. | 2315. | 2317.                         | 2318. | 2319. | 2321. | 2322. | 2324. | 2325. |                 |
| 5158.80                   | 2326.                              | 2328. | 2329. | 2330.                         | 2332. | 2333. | 2335. | 2336. | 2337. | 2339. |                 |
| 5158.90                   | 2340.                              | 2341. | 2343. | 2344.                         | 2346. | 2347. | 2348. | 2350. | 2351. | 2353. |                 |
| 5159.00                   | 2354.                              | 2355. | 2357. | 2358.                         | 2359. | 2361. | 2362. | 2363. | 2365. | 2366. | 135.5           |
| 5159.10                   | 2367.                              | 2369. | 2370. | 2371.                         | 2373. | 2374. | 2375. | 2377. | 2378. | 2379. |                 |
| 5159.20                   | 2381.                              | 2382. | 2383. | 2385.                         | 2386. | 2387. | 2389. | 2390. | 2391. | 2393. |                 |
| 5159.30                   | 2394.                              | 2395. | 2397. | 2398.                         | 2399. | 2401. | 2402. | 2403. | 2405. | 2406. |                 |
| 5159.40                   | 2407.                              | 2409. | 2410. | 2412.                         | 2413. | 2414. | 2416. | 2417. | 2418. | 2420. |                 |



TABLE 3 (CONT.)

| LITTLE WOOD RIVER RESERVOIR, IDAHO |                               |       |       |       |       |       |       |       |       |       |                 |
|------------------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| GAGE<br>HEIGHT<br>IN FEET          | Storage Capacity in Acre Feet |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|                                    | 0.00                          | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5159.50                            | 2421.                         | 2422. | 2424. | 2425. | 2426. | 2428. | 2429. | 2431. | 2432. | 2433. |                 |
| 5159.60                            | 2435.                         | 2436. | 2437. | 2439. | 2440. | 2442. | 2443. | 2444. | 2446. | 2447. |                 |
| 5159.70                            | 2448.                         | 2450. | 2451. | 2453. | 2454. | 2455. | 2457. | 2458. | 2459. | 2461. |                 |
| 5159.80                            | 2462.                         | 2464. | 2465. | 2466. | 2468. | 2469. | 2471. | 2472. | 2473. | 2475. |                 |
| 5159.90                            | 2476.                         | 2477. | 2479. | 2480. | 2482. | 2483. | 2484. | 2486. | 2487. | 2489. |                 |
| 5160.00                            | 2490.                         | 2491. | 2493. | 2494. | 2496. | 2497. | 2498. | 2500. | 2501. | 2503. | 139.6           |
| 5160.10                            | 2504.                         | 2505. | 2507. | 2508. | 2510. | 2511. | 2513. | 2514. | 2515. | 2517. |                 |
| 5160.20                            | 2518.                         | 2520. | 2521. | 2522. | 2524. | 2525. | 2527. | 2528. | 2530. | 2531. |                 |
| 5160.30                            | 2532.                         | 2534. | 2535. | 2537. | 2538. | 2539. | 2541. | 2542. | 2544. | 2545. |                 |
| 5160.40                            | 2547.                         | 2548. | 2550. | 2551. | 2552. | 2554. | 2555. | 2557. | 2558. | 2560. |                 |
| 5160.50                            | 2561.                         | 2562. | 2564. | 2565. | 2567. | 2568. | 2570. | 2571. | 2573. | 2574. |                 |
| 5160.60                            | 2575.                         | 2577. | 2578. | 2580. | 2581. | 2583. | 2584. | 2586. | 2587. | 2589. |                 |
| 5160.70                            | 2590.                         | 2591. | 2593. | 2594. | 2596. | 2597. | 2599. | 2600. | 2602. | 2603. |                 |
| 5160.80                            | 2605.                         | 2606. | 2607. | 2609. | 2610. | 2612. | 2613. | 2615. | 2616. | 2618. |                 |
| 5160.90                            | 2619.                         | 2621. | 2622. | 2624. | 2625. | 2627. | 2628. | 2630. | 2631. | 2632. |                 |
| 5161.00                            | 2634.                         | 2635. | 2637. | 2638. | 2640. | 2641. | 2642. | 2644. | 2645. | 2647. | 144.8           |
| 5161.10                            | 2648.                         | 2650. | 2651. | 2653. | 2654. | 2655. | 2657. | 2658. | 2660. | 2661. |                 |
| 5161.20                            | 2663.                         | 2664. | 2665. | 2667. | 2668. | 2670. | 2671. | 2673. | 2674. | 2675. |                 |
| 5161.30                            | 2677.                         | 2678. | 2680. | 2681. | 2683. | 2684. | 2686. | 2687. | 2689. | 2690. |                 |
| 5161.40                            | 2691.                         | 2693. | 2694. | 2696. | 2697. | 2699. | 2700. | 2702. | 2703. | 2704. |                 |
| 5161.50                            | 2706.                         | 2707. | 2709. | 2710. | 2712. | 2713. | 2715. | 2716. | 2718. | 2719. |                 |
| 5161.60                            | 2721.                         | 2722. | 2724. | 2725. | 2726. | 2728. | 2729. | 2731. | 2732. | 2734. |                 |
| 5161.70                            | 2735.                         | 2737. | 2738. | 2740. | 2741. | 2743. | 2744. | 2746. | 2747. | 2749. |                 |
| 5161.80                            | 2750.                         | 2752. | 2753. | 2755. | 2756. | 2758. | 2759. | 2760. | 2762. | 2763. |                 |
| 5161.90                            | 2765.                         | 2766. | 2768. | 2769. | 2771. | 2772. | 2774. | 2775. | 2777. | 2778. |                 |
| 5162.00                            | 2780.                         | 2781. | 2783. | 2784. | 2786. | 2787. | 2789. | 2790. | 2792. | 2793. | 150.0           |
| 5162.10                            | 2795.                         | 2796. | 2798. | 2799. | 2801. | 2803. | 2804. | 2806. | 2807. | 2809. |                 |
| 5162.20                            | 2810.                         | 2812. | 2813. | 2815. | 2816. | 2818. | 2819. | 2821. | 2822. | 2824. |                 |
| 5162.30                            | 2825.                         | 2827. | 2828. | 2830. | 2831. | 2833. | 2834. | 2836. | 2837. | 2839. |                 |
| 5162.40                            | 2841.                         | 2842. | 2844. | 2845. | 2847. | 2848. | 2850. | 2851. | 2853. | 2854. |                 |
| 5162.50                            | 2856.                         | 2857. | 2859. | 2861. | 2862. | 2864. | 2865. | 2867. | 2868. | 2870. |                 |
| 5162.60                            | 2871.                         | 2873. | 2874. | 2876. | 2878. | 2879. | 2881. | 2882. | 2884. | 2885. |                 |
| 5162.70                            | 2887.                         | 2888. | 2890. | 2892. | 2893. | 2895. | 2896. | 2898. | 2899. | 2901. |                 |
| 5162.80                            | 2902.                         | 2904. | 2906. | 2907. | 2909. | 2910. | 2912. | 2913. | 2915. | 2917. |                 |
| 5162.90                            | 2918.                         | 2920. | 2921. | 2923. | 2925. | 2926. | 2928. | 2929. | 2931. | 2932. |                 |
| 5163.00                            | 2934.                         | 2935. | 2937. | 2939. | 2940. | 2942. | 2943. | 2945. | 2946. | 2948. | 155.1           |
| 5163.10                            | 2949.                         | 2951. | 2952. | 2954. | 2955. | 2957. | 2958. | 2960. | 2961. | 2963. |                 |
| 5163.20                            | 2965.                         | 2966. | 2968. | 2969. | 2971. | 2972. | 2974. | 2975. | 2977. | 2978. |                 |
| 5163.30                            | 2980.                         | 2982. | 2983. | 2985. | 2986. | 2988. | 2989. | 2991. | 2992. | 2994. |                 |
| 5163.40                            | 2996.                         | 2997. | 2999. | 3000. | 3002. | 3003. | 3005. | 3006. | 3008. | 3010. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | Storage Capacity in Acre Feet      |       |       |       |       |       |       |       |       |       |                 |
|                           | 0.00                               | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5163.50                   | 3011.                              | 3013. | 3014. | 3016. | 3017. | 3019. | 3020. | 3022. | 3024. | 3025. | 160.3           |
| 5163.60                   | 3027.                              | 3028. | 3030. | 3032. | 3033. | 3035. | 3036. | 3038. | 3039. | 3041. |                 |
| 5163.70                   | 3043.                              | 3044. | 3046. | 3047. | 3049. | 3050. | 3052. | 3054. | 3055. | 3057. |                 |
| 5163.80                   | 3058.                              | 3060. | 3062. | 3063. | 3065. | 3066. | 3068. | 3069. | 3071. | 3073. |                 |
| 5163.90                   | 3074.                              | 3076. | 3078. | 3079. | 3081. | 3082. | 3084. | 3085. | 3087. | 3089. |                 |
| 5164.00                   | 3090.                              | 3092. | 3093. | 3095. | 3097. | 3098. | 3100. | 3102. | 3103. | 3105. | 160.3           |
| 5164.10                   | 3106.                              | 3108. | 3110. | 3111. | 3113. | 3114. | 3116. | 3118. | 3119. | 3121. |                 |
| 5164.20                   | 3123.                              | 3124. | 3126. | 3127. | 3129. | 3131. | 3132. | 3134. | 3136. | 3137. |                 |
| 5164.30                   | 3139.                              | 3140. | 3142. | 3144. | 3145. | 3147. | 3149. | 3150. | 3152. | 3153. |                 |
| 5164.40                   | 3155.                              | 3157. | 3158. | 3160. | 3162. | 3163. | 3165. | 3167. | 3168. | 3170. |                 |
| 5164.50                   | 3172.                              | 3173. | 3175. | 3177. | 3178. | 3180. | 3181. | 3183. | 3185. | 3186. | 165.5           |
| 5164.60                   | 3188.                              | 3190. | 3191. | 3193. | 3195. | 3196. | 3198. | 3200. | 3201. | 3203. |                 |
| 5164.70                   | 3205.                              | 3206. | 3208. | 3210. | 3211. | 3213. | 3215. | 3216. | 3218. | 3220. |                 |
| 5164.80                   | 3221.                              | 3223. | 3225. | 3226. | 3228. | 3230. | 3231. | 3233. | 3235. | 3236. |                 |
| 5164.90                   | 3238.                              | 3240. | 3241. | 3243. | 3245. | 3247. | 3248. | 3250. | 3252. | 3253. |                 |
| 5165.00                   | 3255.                              | 3257. | 3258. | 3260. | 3261. | 3263. | 3265. | 3266. | 3268. | 3270. | 165.5           |
| 5165.10                   | 3271.                              | 3273. | 3274. | 3276. | 3278. | 3279. | 3281. | 3283. | 3284. | 3286. |                 |
| 5165.20                   | 3288.                              | 3289. | 3291. | 3293. | 3294. | 3296. | 3297. | 3299. | 3301. | 3302. |                 |
| 5165.30                   | 3304.                              | 3306. | 3307. | 3309. | 3311. | 3312. | 3314. | 3315. | 3317. | 3319. |                 |
| 5165.40                   | 3320.                              | 3322. | 3324. | 3325. | 3327. | 3329. | 3330. | 3332. | 3334. | 3335. |                 |
| 5165.50                   | 3337.                              | 3339. | 3340. | 3342. | 3344. | 3345. | 3347. | 3349. | 3350. | 3352. | 170.7           |
| 5165.60                   | 3354.                              | 3355. | 3357. | 3359. | 3360. | 3362. | 3364. | 3365. | 3367. | 3369. |                 |
| 5165.70                   | 3370.                              | 3372. | 3374. | 3376. | 3377. | 3379. | 3381. | 3382. | 3384. | 3386. |                 |
| 5165.80                   | 3387.                              | 3389. | 3391. | 3392. | 3394. | 3396. | 3397. | 3399. | 3401. | 3403. |                 |
| 5165.90                   | 3404.                              | 3406. | 3408. | 3409. | 3411. | 3413. | 3414. | 3416. | 3418. | 3420. |                 |
| 5166.00                   | 3421.                              | 3423. | 3425. | 3426. | 3428. | 3430. | 3431. | 3433. | 3435. | 3437. | 170.7           |
| 5166.10                   | 3438.                              | 3440. | 3442. | 3443. | 3445. | 3447. | 3449. | 3450. | 3452. | 3454. |                 |
| 5166.20                   | 3455.                              | 3457. | 3459. | 3461. | 3462. | 3464. | 3466. | 3468. | 3469. | 3471. |                 |
| 5166.30                   | 3473.                              | 3474. | 3476. | 3478. | 3480. | 3481. | 3483. | 3485. | 3487. | 3488. |                 |
| 5166.40                   | 3490.                              | 3492. | 3494. | 3495. | 3497. | 3499. | 3501. | 3502. | 3504. | 3506. |                 |
| 5166.50                   | 3507.                              | 3509. | 3511. | 3513. | 3514. | 3516. | 3518. | 3520. | 3521. | 3523. | 175.9           |
| 5166.60                   | 3525.                              | 3527. | 3529. | 3530. | 3532. | 3534. | 3536. | 3537. | 3539. | 3541. |                 |
| 5166.70                   | 3543.                              | 3544. | 3546. | 3548. | 3550. | 3551. | 3553. | 3555. | 3557. | 3558. |                 |
| 5166.80                   | 3560.                              | 3562. | 3564. | 3566. | 3567. | 3569. | 3571. | 3573. | 3575. | 3576. |                 |
| 5166.90                   | 3578.                              | 3580. | 3582. | 3583. | 3585. | 3587. | 3589. | 3591. | 3592. | 3594. |                 |
| 5167.00                   | 3596.                              | 3598. | 3599. | 3601. | 3603. | 3605. | 3606. | 3608. | 3610. | 3612. | 175.9           |
| 5167.10                   | 3613.                              | 3615. | 3617. | 3618. | 3620. | 3622. | 3624. | 3625. | 3627. | 3629. |                 |
| 5167.20                   | 3631.                              | 3632. | 3634. | 3636. | 3638. | 3639. | 3641. | 3643. | 3645. | 3646. |                 |
| 5167.30                   | 3648.                              | 3650. | 3652. | 3653. | 3655. | 3657. | 3659. | 3660. | 3662. | 3664. |                 |
| 5167.40                   | 3666.                              | 3667. | 3669. | 3671. | 3673. | 3674. | 3676. | 3678. | 3680. | 3681. |                 |

TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | Storage Capacity in Acre Feet      |       |       |       |       |       |       |       |       |       |                 |
|                           | 0.00                               | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5167.50                   | 3683.                              | 3685. | 3687. | 3689. | 3690. | 3692. | 3694. | 3696. | 3697. | 3699. |                 |
| 5167.60                   | 3701.                              | 3703. | 3704. | 3706. | 3708. | 3710. | 3712. | 3713. | 3715. | 3717. |                 |
| 5167.70                   | 3719.                              | 3721. | 3722. | 3724. | 3726. | 3728. | 3729. | 3731. | 3733. | 3735. |                 |
| 5167.80                   | 3737.                              | 3738. | 3740. | 3742. | 3744. | 3746. | 3747. | 3749. | 3751. | 3753. |                 |
| 5167.90                   | 3755.                              | 3756. | 3758. | 3760. | 3762. | 3764. | 3765. | 3767. | 3769. | 3771. |                 |
| 5168.00                   | 3773.                              | 3774. | 3776. | 3778. | 3780. | 3782. | 3783. | 3785. | 3787. | 3789. | 181.0           |
| 5168.10                   | 3791.                              | 3793. | 3794. | 3796. | 3798. | 3800. | 3802. | 3804. | 3805. | 3807. |                 |
| 5168.20                   | 3809.                              | 3811. | 3813. | 3815. | 3816. | 3818. | 3820. | 3822. | 3824. | 3825. |                 |
| 5168.30                   | 3827.                              | 3829. | 3831. | 3833. | 3835. | 3836. | 3838. | 3840. | 3842. | 3844. |                 |
| 5168.40                   | 3846.                              | 3848. | 3849. | 3851. | 3853. | 3855. | 3857. | 3859. | 3861. | 3862. |                 |
| 5168.50                   | 3864.                              | 3866. | 3868. | 3870. | 3872. | 3873. | 3875. | 3877. | 3879. | 3881. |                 |
| 5168.60                   | 3883.                              | 3885. | 3886. | 3888. | 3890. | 3892. | 3894. | 3896. | 3898. | 3900. |                 |
| 5168.70                   | 3901.                              | 3903. | 3905. | 3907. | 3909. | 3911. | 3913. | 3914. | 3916. | 3918. |                 |
| 5168.80                   | 3920.                              | 3922. | 3924. | 3926. | 3928. | 3930. | 3931. | 3933. | 3935. | 3937. |                 |
| 5168.90                   | 3939.                              | 3941. | 3943. | 3945. | 3947. | 3948. | 3950. | 3952. | 3954. | 3956. |                 |
| 5169.00                   | 3958.                              | 3960. | 3962. | 3963. | 3965. | 3967. | 3969. | 3971. | 3973. | 3974. | 186.2           |
| 5169.10                   | 3976.                              | 3978. | 3980. | 3982. | 3984. | 3985. | 3987. | 3989. | 3991. | 3993. |                 |
| 5169.20                   | 3995.                              | 3997. | 3998. | 4000. | 4002. | 4004. | 4006. | 4008. | 4009. | 4011. |                 |
| 5169.30                   | 4013.                              | 4015. | 4017. | 4019. | 4021. | 4022. | 4024. | 4026. | 4028. | 4030. |                 |
| 5169.40                   | 4032.                              | 4034. | 4036. | 4037. | 4039. | 4041. | 4043. | 4045. | 4047. | 4049. |                 |
| 5169.50                   | 4050.                              | 4052. | 4054. | 4056. | 4058. | 4060. | 4062. | 4064. | 4065. | 4067. |                 |
| 5169.60                   | 4069.                              | 4071. | 4073. | 4075. | 4077. | 4079. | 4080. | 4082. | 4084. | 4086. |                 |
| 5169.70                   | 4088.                              | 4090. | 4092. | 4094. | 4096. | 4097. | 4099. | 4101. | 4103. | 4105. |                 |
| 5169.80                   | 4107.                              | 4109. | 4111. | 4113. | 4115. | 4116. | 4118. | 4120. | 4122. | 4124. |                 |
| 5169.90                   | 4126.                              | 4128. | 4130. | 4132. | 4134. | 4135. | 4137. | 4139. | 4141. | 4143. |                 |
| 5170.00                   | 4145.                              | 4147. | 4149. | 4151. | 4153. | 4155. | 4156. | 4158. | 4160. | 4162. | 191.4           |
| 5170.10                   | 4164.                              | 4166. | 4168. | 4170. | 4172. | 4174. | 4176. | 4178. | 4180. | 4182. |                 |
| 5170.20                   | 4183.                              | 4185. | 4187. | 4189. | 4191. | 4193. | 4195. | 4197. | 4199. | 4201. |                 |
| 5170.30                   | 4203.                              | 4205. | 4207. | 4209. | 4211. | 4213. | 4215. | 4216. | 4218. | 4220. |                 |
| 5170.40                   | 4222.                              | 4224. | 4226. | 4228. | 4230. | 4232. | 4234. | 4236. | 4238. | 4240. |                 |
| 5170.50                   | 4242.                              | 4244. | 4246. | 4248. | 4250. | 4252. | 4254. | 4256. | 4258. | 4260. |                 |
| 5170.60                   | 4261.                              | 4263. | 4265. | 4267. | 4269. | 4271. | 4273. | 4275. | 4277. | 4279. |                 |
| 5170.70                   | 4281.                              | 4283. | 4285. | 4287. | 4289. | 4291. | 4293. | 4295. | 4297. | 4299. |                 |
| 5170.80                   | 4301.                              | 4303. | 4305. | 4307. | 4309. | 4311. | 4313. | 4315. | 4317. | 4319. |                 |
| 5170.90                   | 4321.                              | 4323. | 4325. | 4327. | 4329. | 4331. | 4333. | 4335. | 4337. | 4339. |                 |
| 5171.00                   | 4341.                              | 4343. | 4345. | 4347. | 4349. | 4351. | 4353. | 4355. | 4357. | 4359. | 197.5           |
| 5171.10                   | 4360.                              | 4362. | 4364. | 4366. | 4368. | 4370. | 4372. | 4374. | 4376. | 4378. |                 |
| 5171.20                   | 4380.                              | 4382. | 4384. | 4386. | 4388. | 4390. | 4392. | 4394. | 4396. | 4398. |                 |
| 5171.30                   | 4400.                              | 4402. | 4404. | 4406. | 4408. | 4410. | 4412. | 4414. | 4416. | 4418. |                 |
| 5171.40                   | 4420.                              | 4422. | 4424. | 4426. | 4428. | 4430. | 4432. | 4434. | 4436. | 4438. |                 |



TABLE 3 (CONT.)

| LITTLE WOOD RIVER RESERVOIR, IDAHO |                               |       |       |       |       |       |       |       |       |       |                 |
|------------------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| GAGE<br>HEIGHT<br>IN FEET          | Storage Capacity in Acre Feet |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|                                    | 0.00                          | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5171.50                            | 4439.                         | 4442. | 4443. | 4446. | 4447. | 4450. | 4451. | 4454. | 4455. | 4458. |                 |
| 5171.60                            | 4459.                         | 4462. | 4464. | 4466. | 4468. | 4470. | 4472. | 4474. | 4476. | 4478. |                 |
| 5171.70                            | 4480.                         | 4482. | 4484. | 4486. | 4488. | 4490. | 4492. | 4494. | 4496. | 4498. |                 |
| 5171.80                            | 4500.                         | 4502. | 4504. | 4506. | 4508. | 4510. | 4512. | 4514. | 4516. | 4518. |                 |
| 5171.90                            | 4520.                         | 4522. | 4524. | 4526. | 4528. | 4530. | 4532. | 4534. | 4536. | 4538. |                 |
| 5172.00                            | 4540.                         | 4542. | 4544. | 4546. | 4548. | 4551. | 4553. | 4555. | 4557. | 4559. | 203.7           |
| 5172.10                            | 4561.                         | 4563. | 4565. | 4567. | 4569. | 4571. | 4573. | 4575. | 4577. | 4579. |                 |
| 5172.20                            | 4581.                         | 4583. | 4585. | 4588. | 4590. | 4592. | 4594. | 4596. | 4598. | 4600. |                 |
| 5172.30                            | 4602.                         | 4604. | 4606. | 4608. | 4610. | 4612. | 4614. | 4616. | 4619. | 4621. |                 |
| 5172.40                            | 4623.                         | 4625. | 4627. | 4629. | 4631. | 4633. | 4635. | 4637. | 4639. | 4641. |                 |
| 5172.50                            | 4643.                         | 4646. | 4648. | 4650. | 4652. | 4654. | 4656. | 4658. | 4660. | 4662. |                 |
| 5172.60                            | 4664.                         | 4667. | 4669. | 4671. | 4673. | 4675. | 4677. | 4679. | 4681. | 4683. |                 |
| 5172.70                            | 4685.                         | 4688. | 4690. | 4692. | 4694. | 4696. | 4698. | 4700. | 4702. | 4704. |                 |
| 5172.80                            | 4706.                         | 4709. | 4711. | 4713. | 4715. | 4717. | 4719. | 4721. | 4723. | 4726. |                 |
| 5172.90                            | 4728.                         | 4730. | 4732. | 4734. | 4736. | 4738. | 4740. | 4743. | 4745. | 4747. |                 |
| 5173.00                            | 4749.                         | 4751. | 4753. | 4755. | 4757. | 4759. | 4761. | 4763. | 4765. | 4768. | 209.8           |
| 5173.10                            | 4770.                         | 4772. | 4774. | 4776. | 4778. | 4780. | 4782. | 4784. | 4786. | 4788. |                 |
| 5173.20                            | 4790.                         | 4793. | 4795. | 4797. | 4799. | 4801. | 4803. | 4805. | 4807. | 4809. |                 |
| 5173.30                            | 4811.                         | 4813. | 4816. | 4818. | 4820. | 4822. | 4824. | 4826. | 4828. | 4830. |                 |
| 5173.40                            | 4832.                         | 4834. | 4837. | 4839. | 4841. | 4843. | 4845. | 4847. | 4849. | 4851. |                 |
| 5173.50                            | 4853.                         | 4856. | 4858. | 4860. | 4862. | 4864. | 4866. | 4868. | 4870. | 4873. |                 |
| 5173.60                            | 4875.                         | 4877. | 4879. | 4881. | 4883. | 4885. | 4887. | 4890. | 4892. | 4894. |                 |
| 5173.70                            | 4896.                         | 4898. | 4900. | 4902. | 4904. | 4907. | 4909. | 4911. | 4913. | 4915. |                 |
| 5173.80                            | 4917.                         | 4919. | 4922. | 4924. | 4926. | 4928. | 4930. | 4932. | 4934. | 4937. |                 |
| 5173.90                            | 4939.                         | 4941. | 4943. | 4945. | 4947. | 4949. | 4952. | 4954. | 4956. | 4958. |                 |
| 5174.00                            | 4960.                         | 4962. | 4965. | 4967. | 4969. | 4971. | 4973. | 4975. | 4978. | 4980. | 215.9           |
| 5174.10                            | 4982.                         | 4984. | 4986. | 4988. | 4991. | 4993. | 4995. | 4997. | 4999. | 5001. |                 |
| 5174.20                            | 5004.                         | 5006. | 5008. | 5010. | 5012. | 5014. | 5017. | 5019. | 5021. | 5023. |                 |
| 5174.30                            | 5025.                         | 5028. | 5030. | 5032. | 5034. | 5036. | 5039. | 5041. | 5043. | 5045. |                 |
| 5174.40                            | 5047.                         | 5050. | 5052. | 5054. | 5056. | 5058. | 5061. | 5063. | 5065. | 5067. |                 |
| 5174.50                            | 5069.                         | 5072. | 5074. | 5076. | 5078. | 5080. | 5083. | 5085. | 5087. | 5089. |                 |
| 5174.60                            | 5091.                         | 5094. | 5096. | 5098. | 5100. | 5103. | 5105. | 5107. | 5109. | 5112. |                 |
| 5174.70                            | 5114.                         | 5116. | 5118. | 5120. | 5123. | 5125. | 5127. | 5129. | 5132. | 5134. |                 |
| 5174.80                            | 5136.                         | 5138. | 5141. | 5143. | 5145. | 5147. | 5149. | 5152. | 5154. | 5156. |                 |
| 5174.90                            | 5158.                         | 5161. | 5163. | 5165. | 5167. | 5170. | 5172. | 5174. | 5176. | 5179. |                 |
| 5175.00                            | 5181.                         | 5183. | 5185. | 5188. | 5190. | 5192. | 5194. | 5196. | 5198. | 5201. | 222.0           |
| 5175.10                            | 5203.                         | 5205. | 5207. | 5209. | 5212. | 5214. | 5216. | 5218. | 5220. | 5223. |                 |
| 5175.20                            | 5225.                         | 5227. | 5229. | 5232. | 5234. | 5236. | 5238. | 5240. | 5243. | 5245. |                 |
| 5175.30                            | 5247.                         | 5249. | 5251. | 5254. | 5256. | 5258. | 5260. | 5262. | 5265. | 5267. |                 |
| 5175.40                            | 5269.                         | 5271. | 5274. | 5276. | 5278. | 5280. | 5282. | 5285. | 5287. | 5289. |                 |



TABLE 3 (CONT.)

| LITTLE WOOD RIVER RESERVOIR, IDAHO |                               |       |       |       |       |       |       |       |       |       |                 |
|------------------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| GAGE<br>HEIGHT<br>IN FEET          | Storage Capacity in Acre Feet |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|                                    | 0.00                          | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5175.50                            | 5291.                         | 5294. | 5296. | 5298. | 5300. | 5303. | 5305. | 5307. | 5309. | 5312. |                 |
| 5175.60                            | 5314.                         | 5316. | 5318. | 5320. | 5323. | 5325. | 5327. | 5329. | 5332. | 5334. |                 |
| 5175.70                            | 5336.                         | 5338. | 5341. | 5343. | 5345. | 5347. | 5350. | 5352. | 5354. | 5356. |                 |
| 5175.80                            | 5359.                         | 5361. | 5363. | 5365. | 5368. | 5370. | 5372. | 5375. | 5377. | 5379. |                 |
| 5175.90                            | 5381.                         | 5384. | 5386. | 5388. | 5391. | 5393. | 5395. | 5397. | 5400. | 5402. |                 |
| 5176.00                            | 5404.                         | 5406. | 5409. | 5411. | 5413. | 5416. | 5418. | 5420. | 5422. | 5425. | 228.2           |
| 5176.10                            | 5427.                         | 5429. | 5432. | 5434. | 5436. | 5438. | 5441. | 5443. | 5445. | 5448. |                 |
| 5176.20                            | 5450.                         | 5452. | 5455. | 5457. | 5459. | 5461. | 5464. | 5466. | 5468. | 5471. |                 |
| 5176.30                            | 5473.                         | 5475. | 5478. | 5480. | 5482. | 5484. | 5487. | 5489. | 5491. | 5494. |                 |
| 5176.40                            | 5496.                         | 5498. | 5501. | 5503. | 5505. | 5508. | 5510. | 5512. | 5515. | 5517. |                 |
| 5176.50                            | 5519.                         | 5522. | 5524. | 5526. | 5529. | 5531. | 5533. | 5536. | 5538. | 5540. |                 |
| 5176.60                            | 5543.                         | 5545. | 5547. | 5550. | 5552. | 5554. | 5557. | 5559. | 5561. | 5564. |                 |
| 5176.70                            | 5566.                         | 5568. | 5571. | 5573. | 5575. | 5578. | 5580. | 5582. | 5585. | 5587. |                 |
| 5176.80                            | 5590.                         | 5592. | 5594. | 5597. | 5599. | 5601. | 5604. | 5606. | 5609. | 5611. |                 |
| 5176.90                            | 5613.                         | 5616. | 5618. | 5620. | 5623. | 5625. | 5627. | 5630. | 5632. | 5635. |                 |
| 5177.00                            | 5637.                         | 5639. | 5641. | 5644. | 5646. | 5648. | 5651. | 5653. | 5655. | 5658. | 234.3           |
| 5177.10                            | 5660.                         | 5662. | 5665. | 5667. | 5669. | 5672. | 5674. | 5676. | 5679. | 5681. |                 |
| 5177.20                            | 5683.                         | 5686. | 5688. | 5690. | 5692. | 5695. | 5697. | 5699. | 5702. | 5704. |                 |
| 5177.30                            | 5706.                         | 5709. | 5711. | 5713. | 5716. | 5718. | 5720. | 5723. | 5725. | 5727. |                 |
| 5177.40                            | 5730.                         | 5732. | 5735. | 5737. | 5739. | 5742. | 5744. | 5746. | 5749. | 5751. |                 |
| 5177.50                            | 5753.                         | 5756. | 5758. | 5760. | 5763. | 5765. | 5767. | 5770. | 5772. | 5775. |                 |
| 5177.60                            | 5777.                         | 5779. | 5782. | 5784. | 5786. | 5789. | 5791. | 5793. | 5796. | 5798. |                 |
| 5177.70                            | 5800.                         | 5803. | 5805. | 5808. | 5810. | 5812. | 5815. | 5817. | 5819. | 5822. |                 |
| 5177.80                            | 5824.                         | 5827. | 5829. | 5831. | 5834. | 5836. | 5839. | 5841. | 5843. | 5846. |                 |
| 5177.90                            | 5848.                         | 5850. | 5853. | 5855. | 5858. | 5860. | 5862. | 5865. | 5867. | 5870. |                 |
| 5178.00                            | 5872.                         | 5874. | 5877. | 5879. | 5882. | 5884. | 5886. | 5889. | 5891. | 5894. | 240.4           |
| 5178.10                            | 5896.                         | 5899. | 5901. | 5903. | 5906. | 5908. | 5911. | 5913. | 5915. | 5918. |                 |
| 5178.20                            | 5920.                         | 5923. | 5925. | 5928. | 5930. | 5932. | 5935. | 5937. | 5940. | 5942. |                 |
| 5178.30                            | 5944.                         | 5947. | 5949. | 5952. | 5954. | 5957. | 5959. | 5961. | 5964. | 5966. |                 |
| 5178.40                            | 5969.                         | 5971. | 5974. | 5976. | 5979. | 5981. | 5984. | 5986. | 5988. | 5991. |                 |
| 5178.50                            | 5993.                         | 5996. | 5998. | 6001. | 6003. | 6006. | 6008. | 6010. | 6013. | 6015. |                 |
| 5178.60                            | 6018.                         | 6020. | 6023. | 6025. | 6028. | 6030. | 6033. | 6035. | 6037. | 6040. |                 |
| 5178.70                            | 6042.                         | 6045. | 6047. | 6050. | 6052. | 6055. | 6057. | 6060. | 6062. | 6065. |                 |
| 5178.80                            | 6067.                         | 6070. | 6072. | 6075. | 6077. | 6080. | 6082. | 6085. | 6087. | 6089. |                 |
| 5178.90                            | 6092.                         | 6094. | 6097. | 6099. | 6102. | 6104. | 6107. | 6109. | 6112. | 6114. |                 |
| 5179.00                            | 6117.                         | 6119. | 6122. | 6124. | 6127. | 6129. | 6131. | 6134. | 6136. | 6139. | 246.6           |
| 5179.10                            | 6141.                         | 6144. | 6146. | 6149. | 6151. | 6153. | 6156. | 6158. | 6161. | 6163. |                 |
| 5179.20                            | 6166.                         | 6168. | 6171. | 6173. | 6175. | 6178. | 6180. | 6183. | 6185. | 6188. |                 |
| 5179.30                            | 6190.                         | 6193. | 6195. | 6197. | 6200. | 6202. | 6205. | 6207. | 6210. | 6212. |                 |
| 5179.40                            | 6215.                         | 6217. | 6220. | 6222. | 6225. | 6227. | 6230. | 6232. | 6235. | 6237. |                 |

TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | Storage Capacity in Acre Feet      |       |       |       |       |       |       |       |       |       |                 |
|                           | 0.00                               | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5179.50                   | 6239.                              | 6242. | 6244. | 6247. | 6249. | 6252. | 6254. | 6257. | 6259. | 6262. |                 |
| 5179.60                   | 6264.                              | 6267. | 6269. | 6272. | 6274. | 6277. | 6279. | 6282. | 6284. | 6287. |                 |
| 5179.70                   | 6289.                              | 6292. | 6294. | 6297. | 6299. | 6302. | 6304. | 6307. | 6309. | 6312. |                 |
| 5179.80                   | 6314.                              | 6317. | 6319. | 6322. | 6324. | 6327. | 6329. | 6332. | 6334. | 6337. |                 |
| 5179.90                   | 6339.                              | 6342. | 6344. | 6347. | 6349. | 6352. | 6354. | 6357. | 6359. | 6362. |                 |
| 5180.00                   | 6364.                              | 6367. | 6369. | 6372. | 6374. | 6377. | 6380. | 6382. | 6385. | 6387. | 252.7           |
| 5180.10                   | 6390.                              | 6392. | 6395. | 6397. | 6400. | 6402. | 6405. | 6408. | 6410. | 6413. |                 |
| 5180.20                   | 6415.                              | 6418. | 6420. | 6423. | 6425. | 6428. | 6430. | 6433. | 6436. | 6438. |                 |
| 5180.30                   | 6441.                              | 6443. | 6446. | 6448. | 6451. | 6453. | 6456. | 6458. | 6461. | 6464. |                 |
| 5180.40                   | 6466.                              | 6469. | 6471. | 6474. | 6477. | 6479. | 6482. | 6484. | 6487. | 6489. |                 |
| 5180.50                   | 6492.                              | 6494. | 6497. | 6500. | 6502. | 6505. | 6507. | 6510. | 6512. | 6515. |                 |
| 5180.60                   | 6518.                              | 6520. | 6523. | 6526. | 6528. | 6531. | 6533. | 6536. | 6538. | 6541. |                 |
| 5180.70                   | 6544.                              | 6546. | 6549. | 6551. | 6554. | 6557. | 6559. | 6562. | 6564. | 6567. |                 |
| 5180.80                   | 6570.                              | 6572. | 6575. | 6577. | 6580. | 6583. | 6585. | 6588. | 6591. | 6593. |                 |
| 5180.90                   | 6596.                              | 6598. | 6601. | 6604. | 6606. | 6609. | 6611. | 6614. | 6617. | 6619. |                 |
| 5181.00                   | 6622.                              | 6624. | 6627. | 6630. | 6632. | 6635. | 6637. | 6640. | 6642. | 6645. | 257.9           |
| 5181.10                   | 6647.                              | 6650. | 6652. | 6655. | 6658. | 6660. | 6663. | 6665. | 6668. | 6670. |                 |
| 5181.20                   | 6673.                              | 6675. | 6678. | 6681. | 6683. | 6686. | 6688. | 6691. | 6693. | 6696. |                 |
| 5181.30                   | 6698.                              | 6701. | 6704. | 6706. | 6709. | 6711. | 6714. | 6716. | 6719. | 6722. |                 |
| 5181.40                   | 6724.                              | 6727. | 6729. | 6732. | 6734. | 6737. | 6740. | 6742. | 6745. | 6747. |                 |
| 5181.50                   | 6750.                              | 6753. | 6755. | 6758. | 6760. | 6763. | 6765. | 6768. | 6771. | 6773. |                 |
| 5181.60                   | 6776.                              | 6778. | 6781. | 6784. | 6786. | 6789. | 6791. | 6794. | 6797. | 6799. |                 |
| 5181.70                   | 6802.                              | 6804. | 6807. | 6810. | 6812. | 6815. | 6817. | 6820. | 6823. | 6825. |                 |
| 5181.80                   | 6828.                              | 6830. | 6833. | 6836. | 6838. | 6841. | 6844. | 6846. | 6849. | 6851. |                 |
| 5181.90                   | 6854.                              | 6857. | 6859. | 6862. | 6865. | 6867. | 6870. | 6872. | 6875. | 6878. |                 |
| 5182.00                   | 6880.                              | 6883. | 6886. | 6888. | 6891. | 6894. | 6896. | 6899. | 6901. | 6904. | 263.1           |
| 5182.10                   | 6907.                              | 6909. | 6912. | 6915. | 6917. | 6920. | 6923. | 6925. | 6928. | 6931. |                 |
| 5182.20                   | 6933.                              | 6936. | 6939. | 6941. | 6944. | 6947. | 6949. | 6952. | 6955. | 6957. |                 |
| 5182.30                   | 6960.                              | 6962. | 6965. | 6968. | 6971. | 6973. | 6976. | 6979. | 6981. | 6984. |                 |
| 5182.40                   | 6987.                              | 6989. | 6992. | 6995. | 6997. | 7000. | 7003. | 7005. | 7008. | 7011. |                 |
| 5182.50                   | 7013.                              | 7016. | 7019. | 7021. | 7024. | 7027. | 7029. | 7032. | 7035. | 7038. |                 |
| 5182.60                   | 7040.                              | 7043. | 7046. | 7048. | 7051. | 7054. | 7056. | 7059. | 7062. | 7065. |                 |
| 5182.70                   | 7067.                              | 7070. | 7073. | 7075. | 7078. | 7081. | 7084. | 7086. | 7089. | 7092. |                 |
| 5182.80                   | 7094.                              | 7097. | 7100. | 7103. | 7105. | 7108. | 7111. | 7113. | 7116. | 7119. |                 |
| 5182.90                   | 7122.                              | 7124. | 7127. | 7130. | 7133. | 7135. | 7138. | 7141. | 7144. | 7146. |                 |
| 5183.00                   | 7149.                              | 7152. | 7154. | 7157. | 7159. | 7162. | 7165. | 7167. | 7170. | 7173. | 268.4           |
| 5183.10                   | 7175.                              | 7178. | 7181. | 7183. | 7186. | 7189. | 7191. | 7194. | 7197. | 7199. |                 |
| 5183.20                   | 7202.                              | 7205. | 7207. | 7210. | 7212. | 7215. | 7218. | 7220. | 7223. | 7226. |                 |
| 5183.30                   | 7228.                              | 7231. | 7234. | 7236. | 7239. | 7242. | 7244. | 7247. | 7250. | 7252. |                 |
| 5183.40                   | 7255.                              | 7258. | 7261. | 7263. | 7266. | 7269. | 7271. | 7274. | 7277. | 7279. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |       |       |                               |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|------------------------------------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | 0.00                               | 0.01  | 0.02  | Storage Capacity in Acre Feet |       |       |       | 0.07  | 0.08  | 0.09  |                 |
|                           | 0.03                               | 0.04  | 0.05  | 0.06                          |       |       |       |       |       |       |                 |
| 5183.50                   | 7282.                              | 7285. | 7287. | 7290.                         | 7293. | 7295. | 7298. | 7301. | 7303. | 7306. |                 |
| 5183.60                   | 7309.                              | 7312. | 7314. | 7317.                         | 7320. | 7322. | 7325. | 7328. | 7330. | 7333. |                 |
| 5183.70                   | 7336.                              | 7339. | 7341. | 7344.                         | 7347. | 7349. | 7352. | 7355. | 7357. | 7360. |                 |
| 5183.80                   | 7363.                              | 7366. | 7368. | 7371.                         | 7374. | 7376. | 7379. | 7382. | 7385. | 7387. |                 |
| 5183.90                   | 7390.                              | 7393. | 7396. | 7398.                         | 7401. | 7404. | 7407. | 7409. | 7412. | 7415. |                 |
| 5184.00                   | 7417.                              | 7420. | 7423. | 7426.                         | 7428. | 7431. | 7434. | 7437. | 7439. | 7442. | 273.6           |
| 5184.10                   | 7445.                              | 7448. | 7450. | 7453.                         | 7456. | 7459. | 7461. | 7464. | 7467. | 7470. |                 |
| 5184.20                   | 7472.                              | 7475. | 7478. | 7481.                         | 7483. | 7486. | 7489. | 7492. | 7494. | 7497. |                 |
| 5184.30                   | 7500.                              | 7503. | 7505. | 7508.                         | 7511. | 7514. | 7517. | 7519. | 7522. | 7525. |                 |
| 5184.40                   | 7528.                              | 7530. | 7533. | 7536.                         | 7539. | 7541. | 7544. | 7547. | 7550. | 7553. |                 |
| 5184.50                   | 7555.                              | 7558. | 7561. | 7564.                         | 7566. | 7569. | 7572. | 7575. | 7578. | 7581. |                 |
| 5184.60                   | 7583.                              | 7586. | 7589. | 7592.                         | 7594. | 7597. | 7600. | 7603. | 7606. | 7609. |                 |
| 5184.70                   | 7611.                              | 7614. | 7617. | 7620.                         | 7623. | 7625. | 7628. | 7631. | 7634. | 7637. |                 |
| 5184.80                   | 7639.                              | 7642. | 7645. | 7648.                         | 7651. | 7653. | 7656. | 7659. | 7662. | 7665. |                 |
| 5184.90                   | 7668.                              | 7670. | 7673. | 7676.                         | 7679. | 7682. | 7685. | 7687. | 7690. | 7693. |                 |
| 5185.00                   | 7696.                              | 7699. | 7701. | 7704.                         | 7707. | 7710. | 7712. | 7715. | 7718. | 7721. | 278.8           |
| 5185.10                   | 7723.                              | 7726. | 7729. | 7732.                         | 7734. | 7737. | 7740. | 7743. | 7745. | 7748. |                 |
| 5185.20                   | 7751.                              | 7754. | 7756. | 7759.                         | 7762. | 7765. | 7768. | 7770. | 7773. | 7776. |                 |
| 5185.30                   | 7779.                              | 7781. | 7784. | 7787.                         | 7790. | 7792. | 7795. | 7798. | 7801. | 7804. |                 |
| 5185.40                   | 7806.                              | 7809. | 7812. | 7815.                         | 7817. | 7820. | 7823. | 7826. | 7829. | 7831. |                 |
| 5185.50                   | 7834.                              | 7837. | 7840. | 7843.                         | 7845. | 7848. | 7851. | 7854. | 7856. | 7859. |                 |
| 5185.60                   | 7862.                              | 7865. | 7868. | 7871.                         | 7873. | 7876. | 7879. | 7882. | 7885. | 7887. |                 |
| 5185.70                   | 7890.                              | 7893. | 7896. | 7899.                         | 7901. | 7904. | 7907. | 7910. | 7913. | 7915. |                 |
| 5185.80                   | 7918.                              | 7921. | 7924. | 7927.                         | 7930. | 7932. | 7935. | 7938. | 7941. | 7944. |                 |
| 5185.90                   | 7947.                              | 7949. | 7952. | 7955.                         | 7958. | 7961. | 7964. | 7966. | 7969. | 7972. |                 |
| 5186.00                   | 7975.                              | 7978. | 7980. | 7983.                         | 7986. | 7989. | 7992. | 7995. | 7998. | 8000. | 284.0           |
| 5186.10                   | 8003.                              | 8006. | 8009. | 8012.                         | 8015. | 8018. | 8020. | 8023. | 8026. | 8029. |                 |
| 5186.20                   | 8032.                              | 8035. | 8038. | 8041.                         | 8043. | 8046. | 8049. | 8052. | 8055. | 8058. |                 |
| 5186.30                   | 8061.                              | 8063. | 8066. | 8069.                         | 8072. | 8075. | 8078. | 8081. | 8084. | 8086. |                 |
| 5186.40                   | 8089.                              | 8092. | 8095. | 8098.                         | 8101. | 8104. | 8107. | 8109. | 8112. | 8115. |                 |
| 5186.50                   | 8118.                              | 8121. | 8124. | 8127.                         | 8130. | 8133. | 8135. | 8138. | 8141. | 8144. |                 |
| 5186.60                   | 8147.                              | 8150. | 8153. | 8156.                         | 8159. | 8162. | 8164. | 8167. | 8170. | 8173. |                 |
| 5186.70                   | 8176.                              | 8179. | 8182. | 8185.                         | 8188. | 8191. | 8194. | 8196. | 8199. | 8202. |                 |
| 5186.80                   | 8205.                              | 8208. | 8211. | 8214.                         | 8217. | 8220. | 8223. | 8226. | 8229. | 8232. |                 |
| 5186.90                   | 8235.                              | 8237. | 8240. | 8243.                         | 8246. | 8249. | 8252. | 8255. | 8258. | 8261. |                 |
| 5187.00                   | 8264.                              | 8265. | 8267. | 8268.                         | 8270. | 8271. | 8272. | 8274. | 8275. | 8277. | 289.2           |
| 5187.10                   | 8278.                              | 8280. | 8281. | 8282.                         | 8284. | 8285. | 8287. | 8288. | 8290. | 8291. |                 |
| 5187.20                   | 8292.                              | 8294. | 8295. | 8297.                         | 8298. | 8300. | 8301. | 8302. | 8304. | 8305. |                 |
| 5187.30                   | 8307.                              | 8308. | 8310. | 8311.                         | 8312. | 8314. | 8315. | 8317. | 8318. | 8320. |                 |
| 5187.40                   | 8321.                              | 8322. | 8324. | 8325.                         | 8327. | 8328. | 8330. | 8331. | 8332. | 8334. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |       |       |       |       |       |       |       |       |       | AREA<br>(ACRES) |
|---------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
|                           | Storage Capacity in Acre Feet      |       |       |       |       |       |       |       |       |       |                 |
|                           | 0.00                               | 0.01  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  |                 |
| 5187.50                   | 8335.                              | 8337. | 8338. | 8340. | 8341. | 8342. | 8344. | 8345. | 8347. | 8348. |                 |
| 5187.60                   | 8350.                              | 8351. | 8352. | 8354. | 8355. | 8357. | 8358. | 8360. | 8361. | 8363. |                 |
| 5187.70                   | 8364.                              | 8365. | 8367. | 8368. | 8370. | 8371. | 8373. | 8374. | 8375. | 8377. |                 |
| 5187.80                   | 8378.                              | 8380. | 8381. | 8383. | 8384. | 8386. | 8387. | 8388. | 8390. | 8391. |                 |
| 5187.90                   | 8393.                              | 8394. | 8396. | 8397. | 8399. | 8400. | 8401. | 8403. | 8404. | 8406. |                 |
| 5188.00                   | 8407.                              | 8409. | 8410. | 8412. | 8413. | 8414. | 8416. | 8417. | 8419. | 8420. | 294.5           |
| 5188.10                   | 8422.                              | 8423. | 8425. | 8426. | 8427. | 8429. | 8430. | 8432. | 8433. | 8435. |                 |
| 5188.20                   | 8436.                              | 8438. | 8439. | 8441. | 8442. | 8443. | 8445. | 8446. | 8448. | 8449. |                 |
| 5188.30                   | 8451.                              | 8452. | 8454. | 8455. | 8457. | 8458. | 8459. | 8461. | 8462. | 8464. |                 |
| 5188.40                   | 8465.                              | 8467. | 8468. | 8470. | 8471. | 8472. | 8474. | 8475. | 8477. | 8478. |                 |
| 5188.50                   | 8480.                              | 8481. | 8483. | 8484. | 8486. | 8487. | 8489. | 8490. | 8491. | 8493. |                 |
| 5188.60                   | 8494.                              | 8496. | 8497. | 8499. | 8500. | 8502. | 8503. | 8505. | 8506. | 8508. |                 |
| 5188.70                   | 8509.                              | 8510. | 8512. | 8513. | 8515. | 8516. | 8518. | 8519. | 8521. | 8522. |                 |
| 5188.80                   | 8524.                              | 8525. | 8527. | 8528. | 8529. | 8531. | 8532. | 8534. | 8535. | 8537. |                 |
| 5188.90                   | 8538.                              | 8540. | 8541. | 8543. | 8544. | 8546. | 8547. | 8549. | 8550. | 8551. |                 |
| 5189.00                   | 8553.                              | 8557. | 8561. | 8566. | 8570. | 8575. | 8579. | 8583. | 8587. | 8592. | 299.7           |
| 5189.10                   | 8596.                              | 8601. | 8605. | 8609. | 8614. | 8618. | 8622. | 8627. | 8631. | 8636. |                 |
| 5189.20                   | 8640.                              | 8644. | 8649. | 8653. | 8657. | 8662. | 8666. | 8670. | 8675. | 8679. |                 |
| 5189.30                   | 8684.                              | 8688. | 8692. | 8697. | 8701. | 8706. | 8710. | 8714. | 8719. | 8723. |                 |
| 5189.40                   | 8728.                              | 8732. | 8737. | 8741. | 8745. | 8750. | 8754. | 8759. | 8763. | 8767. |                 |
| 5189.50                   | 8772.                              | 8776. | 8781. | 8785. | 8790. | 8794. | 8798. | 8803. | 8807. | 8812. |                 |
| 5189.60                   | 8816.                              | 8821. | 8825. | 8830. | 8834. | 8839. | 8843. | 8848. | 8852. | 8857. |                 |
| 5189.70                   | 8861.                              | 8866. | 8870. | 8875. | 8879. | 8883. | 8888. | 8892. | 8897. | 8901. |                 |
| 5189.80                   | 8906.                              | 8910. | 8915. | 8919. | 8924. | 8928. | 8933. | 8937. | 8942. | 8946. |                 |
| 5189.90                   | 8951.                              | 8956. | 8960. | 8965. | 8969. | 8974. | 8978. | 8983. | 8987. | 8992. |                 |
| 5190.00                   | 8996.                              | 9001. | 9005. | 9010. | 9015. | 9019. | 9024. | 9028. | 9033. | 9037. | 304.9           |
| 5190.10                   | 9042.                              | 9047. | 9051. | 9056. | 9060. | 9065. | 9069. | 9074. | 9079. | 9083. |                 |
| 5190.20                   | 9088.                              | 9093. | 9097. | 9102. | 9106. | 9111. | 9115. | 9120. | 9125. | 9129. |                 |
| 5190.30                   | 9134.                              | 9138. | 9143. | 9148. | 9152. | 9157. | 9162. | 9166. | 9171. | 9175. |                 |
| 5190.40                   | 9180.                              | 9185. | 9190. | 9194. | 9199. | 9203. | 9208. | 9213. | 9217. | 9222. |                 |
| 5190.50                   | 9227.                              | 9231. | 9236. | 9241. | 9245. | 9250. | 9255. | 9259. | 9264. | 9269. |                 |
| 5190.60                   | 9273.                              | 9278. | 9283. | 9288. | 9292. | 9297. | 9302. | 9306. | 9311. | 9316. |                 |
| 5190.70                   | 9320.                              | 9325. | 9330. | 9335. | 9339. | 9344. | 9349. | 9353. | 9358. | 9363. |                 |
| 5190.80                   | 9368.                              | 9372. | 9377. | 9382. | 9387. | 9391. | 9396. | 9401. | 9406. | 9410. |                 |
| 5190.90                   | 9415.                              | 9420. | 9425. | 9429. | 9434. | 9439. | 9444. | 9449. | 9453. | 9458. |                 |
| 5191.00                   | 9463.                              | 9466. | 9469. | 9472. | 9475. | 9478. | 9481. | 9484. | 9487. | 9490. | 310.2           |
| 5191.10                   | 9493.                              | 9497. | 9500. | 9503. | 9506. | 9509. | 9512. | 9515. | 9518. | 9521. |                 |
| 5191.20                   | 9524.                              | 9527. | 9530. | 9534. | 9537. | 9540. | 9543. | 9546. | 9549. | 9552. |                 |
| 5191.30                   | 9555.                              | 9558. | 9561. | 9564. | 9567. | 9570. | 9574. | 9577. | 9580. | 9583. |                 |
| 5191.40                   | 9586.                              | 9589. | 9592. | 9595. | 9598. | 9601. | 9605. | 9608. | 9611. | 9614. |                 |

TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5191.50                   | 9617.                              | 9620.  | 9623.  | 9626.  | 9629.  | 9632.  | 9635.  | 9639.  | 9642.  | 9645.  | 315.5           |
| 5191.60                   | 9648.                              | 9651.  | 9654.  | 9657.  | 9660.  | 9664.  | 9667.  | 9670.  | 9673.  | 9676.  |                 |
| 5191.70                   | 9679.                              | 9682.  | 9685.  | 9689.  | 9692.  | 9695.  | 9698.  | 9701.  | 9704.  | 9707.  |                 |
| 5191.80                   | 9710.                              | 9714.  | 9717.  | 9720.  | 9723.  | 9726.  | 9729.  | 9732.  | 9736.  | 9739.  |                 |
| 5191.90                   | 9742.                              | 9745.  | 9748.  | 9751.  | 9754.  | 9758.  | 9761.  | 9764.  | 9767.  | 9770.  |                 |
| 5192.00                   | 9773.                              | 9776.  | 9780.  | 9783.  | 9786.  | 9789.  | 9792.  | 9795.  | 9799.  | 9802.  | 315.5           |
| 5192.10                   | 9805.                              | 9808.  | 9811.  | 9814.  | 9818.  | 9821.  | 9824.  | 9827.  | 9830.  | 9834.  |                 |
| 5192.20                   | 9837.                              | 9840.  | 9843.  | 9846.  | 9849.  | 9852.  | 9856.  | 9859.  | 9862.  | 9865.  |                 |
| 5192.30                   | 9868.                              | 9872.  | 9875.  | 9878.  | 9881.  | 9884.  | 9888.  | 9891.  | 9894.  | 9897.  |                 |
| 5192.40                   | 9900.                              | 9903.  | 9907.  | 9910.  | 9913.  | 9916.  | 9920.  | 9923.  | 9926.  | 9929.  |                 |
| 5192.50                   | 9932.                              | 9936.  | 9939.  | 9942.  | 9945.  | 9948.  | 9952.  | 9955.  | 9958.  | 9961.  | 320.7           |
| 5192.60                   | 9964.                              | 9968.  | 9971.  | 9974.  | 9977.  | 9981.  | 9984.  | 9987.  | 9990.  | 9993.  |                 |
| 5192.70                   | 9997.                              | 10000. | 10003. | 10006. | 10010. | 10013. | 10016. | 10019. | 10023. | 10026. |                 |
| 5192.80                   | 10029.                             | 10032. | 10035. | 10039. | 10042. | 10045. | 10048. | 10052. | 10055. | 10058. |                 |
| 5192.90                   | 10061.                             | 10065. | 10068. | 10071. | 10074. | 10078. | 10081. | 10084. | 10087. | 10091. |                 |
| 5193.00                   | 10094.                             | 10097. | 10100. | 10103. | 10106. | 10110. | 10113. | 10116. | 10119. | 10122. | 320.7           |
| 5193.10                   | 10126.                             | 10129. | 10132. | 10135. | 10138. | 10141. | 10145. | 10148. | 10151. | 10154. |                 |
| 5193.20                   | 10157.                             | 10161. | 10164. | 10167. | 10170. | 10173. | 10176. | 10180. | 10183. | 10186. |                 |
| 5193.30                   | 10189.                             | 10192. | 10196. | 10199. | 10202. | 10205. | 10208. | 10211. | 10215. | 10218. |                 |
| 5193.40                   | 10221.                             | 10224. | 10228. | 10231. | 10234. | 10237. | 10240. | 10243. | 10247. | 10250. |                 |
| 5193.50                   | 10253.                             | 10256. | 10259. | 10263. | 10266. | 10269. | 10272. | 10276. | 10279. | 10282. | 326.0           |
| 5193.60                   | 10285.                             | 10289. | 10292. | 10295. | 10298. | 10301. | 10305. | 10308. | 10311. | 10314. |                 |
| 5193.70                   | 10317.                             | 10321. | 10324. | 10327. | 10330. | 10334. | 10337. | 10340. | 10343. | 10347. |                 |
| 5193.80                   | 10350.                             | 10353. | 10356. | 10360. | 10363. | 10366. | 10369. | 10372. | 10376. | 10379. |                 |
| 5193.90                   | 10382.                             | 10385. | 10389. | 10392. | 10395. | 10399. | 10402. | 10405. | 10408. | 10412. |                 |
| 5194.00                   | 10415.                             | 10418. | 10421. | 10425. | 10428. | 10431. | 10434. | 10438. | 10441. | 10444. | 326.0           |
| 5194.10                   | 10447.                             | 10451. | 10454. | 10457. | 10461. | 10464. | 10467. | 10470. | 10474. | 10477. |                 |
| 5194.20                   | 10480.                             | 10484. | 10487. | 10490. | 10493. | 10497. | 10500. | 10503. | 10506. | 10510. |                 |
| 5194.30                   | 10513.                             | 10516. | 10520. | 10523. | 10526. | 10529. | 10533. | 10536. | 10539. | 10543. |                 |
| 5194.40                   | 10546.                             | 10549. | 10553. | 10556. | 10559. | 10563. | 10566. | 10569. | 10573. | 10576. |                 |
| 5194.50                   | 10579.                             | 10582. | 10586. | 10589. | 10592. | 10596. | 10599. | 10602. | 10606. | 10609. | 331.3           |
| 5194.60                   | 10612.                             | 10616. | 10619. | 10622. | 10625. | 10629. | 10632. | 10636. | 10639. | 10642. |                 |
| 5194.70                   | 10645.                             | 10649. | 10652. | 10656. | 10659. | 10662. | 10666. | 10669. | 10672. | 10675. |                 |
| 5194.80                   | 10679.                             | 10682. | 10686. | 10689. | 10692. | 10696. | 10699. | 10702. | 10706. | 10709. |                 |
| 5194.90                   | 10712.                             | 10716. | 10719. | 10722. | 10726. | 10729. | 10733. | 10736. | 10739. | 10743. |                 |
| 5195.00                   | 10746.                             | 10749. | 10752. | 10756. | 10759. | 10762. | 10765. | 10769. | 10772. | 10775. | 331.3           |
| 5195.10                   | 10779.                             | 10782. | 10785. | 10788. | 10792. | 10795. | 10798. | 10802. | 10805. | 10808. |                 |
| 5195.20                   | 10811.                             | 10815. | 10818. | 10821. | 10825. | 10828. | 10831. | 10834. | 10838. | 10841. |                 |
| 5195.30                   | 10844.                             | 10848. | 10851. | 10854. | 10857. | 10861. | 10864. | 10867. | 10871. | 10874. |                 |
| 5195.40                   | 10877.                             | 10881. | 10884. | 10887. | 10891. | 10894. | 10897. | 10900. | 10904. | 10907. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5195.50                   | 10910.                             | 10914. | 10917. | 10920. | 10924. | 10927. | 10930. | 10934. | 10937. | 10940. |                 |
| 5195.60                   | 10943.                             | 10947. | 10950. | 10954. | 10957. | 10960. | 10963. | 10967. | 10970. | 10974. |                 |
| 5195.70                   | 10977.                             | 10980. | 10983. | 10987. | 10990. | 10993. | 10997. | 11000. | 11004. | 11007. |                 |
| 5195.80                   | 11010.                             | 11014. | 11017. | 11020. | 11024. | 11027. | 11030. | 11034. | 11037. | 11040. |                 |
| 5195.90                   | 11044.                             | 11047. | 11050. | 11054. | 11057. | 11060. | 11064. | 11067. | 11071. | 11074. |                 |
| 5196.00                   | 11077.                             | 11081. | 11084. | 11087. | 11091. | 11094. | 11097. | 11101. | 11104. | 11108. | 336.6           |
| 5196.10                   | 11111.                             | 11114. | 11118. | 11121. | 11124. | 11128. | 11131. | 11135. | 11138. | 11141. |                 |
| 5196.20                   | 11145.                             | 11148. | 11152. | 11155. | 11158. | 11162. | 11165. | 11168. | 11172. | 11175. |                 |
| 5196.30                   | 11179.                             | 11182. | 11186. | 11189. | 11192. | 11196. | 11199. | 11202. | 11206. | 11209. |                 |
| 5196.40                   | 11213.                             | 11216. | 11220. | 11223. | 11226. | 11230. | 11233. | 11237. | 11240. | 11243. |                 |
| 5196.50                   | 11247.                             | 11250. | 11254. | 11257. | 11260. | 11264. | 11267. | 11271. | 11274. | 11278. |                 |
| 5196.60                   | 11281.                             | 11284. | 11288. | 11291. | 11295. | 11298. | 11302. | 11305. | 11308. | 11312. |                 |
| 5196.70                   | 11315.                             | 11319. | 11322. | 11326. | 11329. | 11332. | 11336. | 11339. | 11343. | 11346. |                 |
| 5196.80                   | 11350.                             | 11353. | 11357. | 11360. | 11364. | 11367. | 11370. | 11374. | 11377. | 11381. |                 |
| 5196.90                   | 11384.                             | 11388. | 11391. | 11395. | 11398. | 11402. | 11405. | 11409. | 11412. | 11415. |                 |
| 5197.00                   | 11419.                             | 11422. | 11426. | 11429. | 11432. | 11436. | 11439. | 11443. | 11446. | 11449. | 341.9           |
| 5197.10                   | 11453.                             | 11456. | 11459. | 11463. | 11466. | 11470. | 11473. | 11476. | 11480. | 11483. |                 |
| 5197.20                   | 11486.                             | 11490. | 11493. | 11497. | 11500. | 11503. | 11507. | 11510. | 11514. | 11517. |                 |
| 5197.30                   | 11520.                             | 11524. | 11527. | 11531. | 11534. | 11537. | 11541. | 11544. | 11548. | 11551. |                 |
| 5197.40                   | 11555.                             | 11558. | 11561. | 11565. | 11568. | 11572. | 11575. | 11578. | 11582. | 11585. |                 |
| 5197.50                   | 11589.                             | 11592. | 11595. | 11599. | 11602. | 11606. | 11609. | 11613. | 11616. | 11619. |                 |
| 5197.60                   | 11623.                             | 11626. | 11630. | 11633. | 11637. | 11640. | 11643. | 11647. | 11650. | 11654. |                 |
| 5197.70                   | 11657.                             | 11661. | 11664. | 11668. | 11671. | 11674. | 11678. | 11681. | 11685. | 11688. |                 |
| 5197.80                   | 11692.                             | 11695. | 11699. | 11702. | 11705. | 11709. | 11712. | 11716. | 11719. | 11723. |                 |
| 5197.90                   | 11726.                             | 11730. | 11733. | 11737. | 11740. | 11743. | 11747. | 11750. | 11754. | 11757. |                 |
| 5198.00                   | 11761.                             | 11764. | 11768. | 11771. | 11775. | 11778. | 11782. | 11785. | 11789. | 11792. | 347.1           |
| 5198.10                   | 11795.                             | 11799. | 11802. | 11806. | 11809. | 11813. | 11816. | 11820. | 11823. | 11827. |                 |
| 5198.20                   | 11830.                             | 11834. | 11837. | 11841. | 11844. | 11848. | 11851. | 11855. | 11858. | 11862. |                 |
| 5198.30                   | 11865.                             | 11869. | 11872. | 11876. | 11879. | 11883. | 11886. | 11890. | 11893. | 11897. |                 |
| 5198.40                   | 11900.                             | 11904. | 11907. | 11911. | 11915. | 11918. | 11922. | 11925. | 11929. | 11932. |                 |
| 5198.50                   | 11935.                             | 11939. | 11943. | 11946. | 11950. | 11953. | 11957. | 11960. | 11964. | 11967. |                 |
| 5198.60                   | 11971.                             | 11974. | 11978. | 11981. | 11985. | 11989. | 11992. | 11996. | 11999. | 12003. |                 |
| 5198.70                   | 12006.                             | 12010. | 12013. | 12017. | 12020. | 12024. | 12027. | 12031. | 12035. | 12038. |                 |
| 5198.80                   | 12042.                             | 12045. | 12049. | 12052. | 12056. | 12059. | 12063. | 12067. | 12070. | 12074. |                 |
| 5198.90                   | 12077.                             | 12081. | 12084. | 12088. | 12092. | 12095. | 12099. | 12102. | 12106. | 12109. |                 |
| 5199.00                   | 12113.                             | 12116. | 12120. | 12123. | 12127. | 12130. | 12134. | 12137. | 12141. | 12144. | 352.4           |
| 5199.10                   | 12148.                             | 12151. | 12155. | 12158. | 12162. | 12165. | 12169. | 12172. | 12176. | 12179. |                 |
| 5199.20                   | 12183.                             | 12186. | 12190. | 12193. | 12197. | 12200. | 12204. | 12207. | 12211. | 12214. |                 |
| 5199.30                   | 12218.                             | 12221. | 12225. | 12228. | 12232. | 12235. | 12239. | 12242. | 12246. | 12249. |                 |
| 5199.40                   | 12253.                             | 12256. | 12260. | 12263. | 12267. | 12270. | 12274. | 12277. | 12281. | 12285. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5199.50                   | 12288.                             | 12292. | 12295. | 12299. | 12302. | 12306. | 12309. | 12313. | 12316. | 12320. | 357.7           |
| 5199.60                   | 12323.                             | 12327. | 12330. | 12334. | 12338. | 12341. | 12345. | 12348. | 12352. | 12355. |                 |
| 5199.70                   | 12359.                             | 12362. | 12366. | 12370. | 12373. | 12377. | 12380. | 12384. | 12387. | 12391. |                 |
| 5199.80                   | 12394.                             | 12398. | 12402. | 12405. | 12409. | 12412. | 12416. | 12419. | 12423. | 12426. |                 |
| 5199.90                   | 12430.                             | 12434. | 12437. | 12441. | 12444. | 12448. | 12452. | 12455. | 12459. | 12462. |                 |
| 5200.00                   | 12466.                             | 12469. | 12473. | 12477. | 12480. | 12484. | 12487. | 12491. | 12494. | 12498. | 357.7           |
| 5200.10                   | 12502.                             | 12505. | 12509. | 12512. | 12516. | 12520. | 12523. | 12527. | 12530. | 12534. |                 |
| 5200.20                   | 12538.                             | 12541. | 12545. | 12548. | 12552. | 12556. | 12559. | 12563. | 12566. | 12570. |                 |
| 5200.30                   | 12574.                             | 12577. | 12581. | 12584. | 12588. | 12592. | 12595. | 12599. | 12603. | 12606. |                 |
| 5200.40                   | 12610.                             | 12613. | 12617. | 12621. | 12624. | 12628. | 12632. | 12635. | 12639. | 12642. |                 |
| 5200.50                   | 12646.                             | 12650. | 12653. | 12657. | 12661. | 12664. | 12668. | 12672. | 12675. | 12679. | 364.2           |
| 5200.60                   | 12682.                             | 12686. | 12690. | 12693. | 12697. | 12701. | 12704. | 12708. | 12712. | 12715. |                 |
| 5200.70                   | 12719.                             | 12723. | 12726. | 12730. | 12733. | 12737. | 12741. | 12744. | 12748. | 12752. |                 |
| 5200.80                   | 12755.                             | 12759. | 12763. | 12766. | 12770. | 12774. | 12777. | 12781. | 12785. | 12788. |                 |
| 5200.90                   | 12792.                             | 12796. | 12800. | 12803. | 12807. | 12810. | 12814. | 12818. | 12822. | 12825. |                 |
| 5201.00                   | 12829.                             | 12833. | 12836. | 12840. | 12843. | 12847. | 12850. | 12854. | 12858. | 12861. | 364.2           |
| 5201.10                   | 12865.                             | 12869. | 12872. | 12876. | 12879. | 12883. | 12887. | 12890. | 12894. | 12898. |                 |
| 5201.20                   | 12901.                             | 12905. | 12908. | 12912. | 12916. | 12919. | 12923. | 12926. | 12930. | 12934. |                 |
| 5201.30                   | 12937.                             | 12941. | 12945. | 12948. | 12952. | 12956. | 12959. | 12963. | 12967. | 12970. |                 |
| 5201.40                   | 12974.                             | 12977. | 12981. | 12985. | 12988. | 12992. | 12996. | 12999. | 13003. | 13007. |                 |
| 5201.50                   | 13010.                             | 13014. | 13018. | 13021. | 13025. | 13029. | 13032. | 13036. | 13039. | 13043. | 370.7           |
| 5201.60                   | 13047.                             | 13051. | 13054. | 13058. | 13061. | 13065. | 13069. | 13073. | 13076. | 13080. |                 |
| 5201.70                   | 13084.                             | 13087. | 13091. | 13095. | 13098. | 13102. | 13106. | 13109. | 13113. | 13117. |                 |
| 5201.80                   | 13120.                             | 13124. | 13128. | 13131. | 13135. | 13139. | 13142. | 13146. | 13150. | 13153. |                 |
| 5201.90                   | 13157.                             | 13161. | 13165. | 13168. | 13172. | 13176. | 13179. | 13183. | 13187. | 13190. |                 |
| 5202.00                   | 13194.                             | 13198. | 13202. | 13205. | 13209. | 13213. | 13216. | 13220. | 13224. | 13228. | 370.7           |
| 5202.10                   | 13231.                             | 13235. | 13239. | 13243. | 13246. | 13250. | 13254. | 13257. | 13261. | 13265. |                 |
| 5202.20                   | 13268.                             | 13272. | 13276. | 13280. | 13283. | 13287. | 13291. | 13295. | 13298. | 13302. |                 |
| 5202.30                   | 13306.                             | 13309. | 13313. | 13317. | 13321. | 13324. | 13328. | 13332. | 13336. | 13339. |                 |
| 5202.40                   | 13343.                             | 13347. | 13351. | 13354. | 13358. | 13362. | 13366. | 13369. | 13373. | 13377. |                 |
| 5202.50                   | 13381.                             | 13385. | 13388. | 13392. | 13396. | 13400. | 13403. | 13407. | 13411. | 13415. | 377.2           |
| 5202.60                   | 13418.                             | 13422. | 13426. | 13430. | 13433. | 13437. | 13441. | 13445. | 13449. | 13452. |                 |
| 5202.70                   | 13456.                             | 13460. | 13464. | 13468. | 13471. | 13475. | 13479. | 13482. | 13486. | 13490. |                 |
| 5202.80                   | 13494.                             | 13498. | 13502. | 13505. | 13509. | 13513. | 13517. | 13520. | 13524. | 13528. |                 |
| 5202.90                   | 13532.                             | 13536. | 13540. | 13543. | 13547. | 13551. | 13555. | 13558. | 13562. | 13566. |                 |
| 5203.00                   | 13570.                             | 13574. | 13577. | 13581. | 13585. | 13589. | 13592. | 13596. | 13600. | 13604. | 377.2           |
| 5203.10                   | 13607.                             | 13611. | 13615. | 13619. | 13622. | 13626. | 13630. | 13634. | 13637. | 13641. |                 |
| 5203.20                   | 13645.                             | 13649. | 13652. | 13656. | 13660. | 13663. | 13667. | 13671. | 13675. | 13678. |                 |
| 5203.30                   | 13682.                             | 13686. | 13690. | 13694. | 13697. | 13701. | 13705. | 13709. | 13712. | 13716. |                 |
| 5203.40                   | 13720.                             | 13724. | 13728. | 13731. | 13735. | 13739. | 13743. | 13746. | 13750. | 13754. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5203.50                   | 13758.                             | 13762. | 13765. | 13769. | 13773. | 13777. | 13780. | 13784. | 13788. | 13792. | 383.7           |
| 5203.60                   | 13796.                             | 13799. | 13803. | 13807. | 13811. | 13815. | 13818. | 13822. | 13826. | 13830. |                 |
| 5203.70                   | 13834.                             | 13837. | 13841. | 13845. | 13849. | 13853. | 13856. | 13860. | 13864. | 13868. |                 |
| 5203.80                   | 13872.                             | 13875. | 13879. | 13883. | 13887. | 13891. | 13895. | 13898. | 13902. | 13906. |                 |
| 5203.90                   | 13910.                             | 13914. | 13918. | 13921. | 13925. | 13929. | 13933. | 13937. | 13941. | 13944. |                 |
| 5204.00                   | 13948.                             | 13952. | 13956. | 13960. | 13963. | 13967. | 13971. | 13975. | 13979. | 13983. | 390.2           |
| 5204.10                   | 13986.                             | 13990. | 13994. | 13998. | 14002. | 14006. | 14010. | 14014. | 14017. | 14021. |                 |
| 5204.20                   | 14025.                             | 14029. | 14033. | 14037. | 14040. | 14044. | 14048. | 14052. | 14056. | 14060. |                 |
| 5204.30                   | 14064.                             | 14067. | 14071. | 14075. | 14079. | 14083. | 14087. | 14091. | 14095. | 14098. |                 |
| 5204.40                   | 14102.                             | 14106. | 14110. | 14114. | 14118. | 14122. | 14126. | 14130. | 14133. | 14137. |                 |
| 5204.50                   | 14141.                             | 14145. | 14149. | 14153. | 14157. | 14161. | 14164. | 14168. | 14172. | 14176. | 396.8           |
| 5204.60                   | 14180.                             | 14184. | 14188. | 14192. | 14196. | 14200. | 14203. | 14207. | 14211. | 14215. |                 |
| 5204.70                   | 14219.                             | 14223. | 14227. | 14231. | 14235. | 14239. | 14243. | 14246. | 14250. | 14254. |                 |
| 5204.80                   | 14258.                             | 14262. | 14266. | 14270. | 14274. | 14278. | 14282. | 14286. | 14290. | 14294. |                 |
| 5204.90                   | 14298.                             | 14301. | 14305. | 14309. | 14313. | 14317. | 14321. | 14325. | 14329. | 14333. |                 |
| 5205.00                   | 14337.                             | 14341. | 14345. | 14349. | 14352. | 14356. | 14360. | 14364. | 14368. | 14372. | 403.3           |
| 5205.10                   | 14376.                             | 14380. | 14383. | 14387. | 14391. | 14395. | 14399. | 14403. | 14407. | 14411. |                 |
| 5205.20                   | 14414.                             | 14418. | 14422. | 14426. | 14430. | 14434. | 14438. | 14442. | 14446. | 14449. |                 |
| 5205.30                   | 14453.                             | 14457. | 14461. | 14465. | 14469. | 14473. | 14477. | 14481. | 14485. | 14488. |                 |
| 5205.40                   | 14492.                             | 14496. | 14500. | 14504. | 14508. | 14512. | 14516. | 14520. | 14524. | 14528. |                 |
| 5205.50                   | 14531.                             | 14535. | 14539. | 14543. | 14547. | 14551. | 14555. | 14559. | 14563. | 14567. |                 |
| 5205.60                   | 14571.                             | 14575. | 14578. | 14582. | 14586. | 14590. | 14594. | 14598. | 14602. | 14606. |                 |
| 5205.70                   | 14610.                             | 14614. | 14618. | 14622. | 14626. | 14630. | 14634. | 14637. | 14641. | 14645. |                 |
| 5205.80                   | 14649.                             | 14653. | 14657. | 14661. | 14665. | 14669. | 14673. | 14677. | 14681. | 14685. |                 |
| 5205.90                   | 14689.                             | 14693. | 14697. | 14701. | 14705. | 14709. | 14713. | 14717. | 14721. | 14725. |                 |
| 5206.00                   | 14728.                             | 14733. | 14736. | 14740. | 14744. | 14748. | 14752. | 14756. | 14760. | 14764. |                 |
| 5206.10                   | 14768.                             | 14772. | 14776. | 14780. | 14784. | 14788. | 14792. | 14796. | 14800. | 14804. |                 |
| 5206.20                   | 14808.                             | 14812. | 14816. | 14820. | 14824. | 14828. | 14832. | 14836. | 14840. | 14844. |                 |
| 5206.30                   | 14848.                             | 14852. | 14856. | 14860. | 14864. | 14868. | 14872. | 14876. | 14880. | 14884. |                 |
| 5206.40                   | 14888.                             | 14892. | 14896. | 14900. | 14904. | 14908. | 14912. | 14916. | 14920. | 14924. |                 |
| 5206.50                   | 14928.                             | 14932. | 14936. | 14940. | 14944. | 14949. | 14952. | 14957. | 14961. | 14965. |                 |
| 5206.60                   | 14969.                             | 14973. | 14977. | 14981. | 14985. | 14989. | 14993. | 14997. | 15001. | 15005. |                 |
| 5206.70                   | 15009.                             | 15013. | 15017. | 15021. | 15025. | 15029. | 15033. | 15037. | 15041. | 15045. |                 |
| 5206.80                   | 15050.                             | 15054. | 15058. | 15062. | 15066. | 15070. | 15074. | 15078. | 15082. | 15086. |                 |
| 5206.90                   | 15090.                             | 15094. | 15098. | 15102. | 15107. | 15111. | 15115. | 15119. | 15123. | 15127. |                 |
| 5207.00                   | 15131.                             | 15135. | 15139. | 15143. | 15147. | 15151. | 15155. | 15159. | 15163. | 15167. |                 |
| 5207.10                   | 15171.                             | 15175. | 15179. | 15183. | 15187. | 15191. | 15195. | 15199. | 15203. | 15207. |                 |
| 5207.20                   | 15211.                             | 15215. | 15219. | 15223. | 15227. | 15231. | 15235. | 15239. | 15243. | 15247. |                 |
| 5207.30                   | 15251.                             | 15255. | 15259. | 15263. | 15267. | 15271. | 15275. | 15279. | 15283. | 15287. |                 |
| 5207.40                   | 15292.                             | 15295. | 15300. | 15304. | 15308. | 15312. | 15316. | 15320. | 15324. | 15328. |                 |



TABLE 3 (CONT.)

| LITTLE WOOD RIVER RESERVOIR, IDAHO |                               |        |        |        |        |        |        |        |        |        |                 |
|------------------------------------|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
| GAGE<br>HEIGHT<br>IN FEET          | Storage Capacity in Acre Feet |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|                                    | 0.00                          | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5207.50                            | 15332.                        | 15336. | 15340. | 15344. | 15348. | 15352. | 15356. | 15360. | 15364. | 15368. |                 |
| 5207.60                            | 15372.                        | 15376. | 15380. | 15385. | 15389. | 15393. | 15397. | 15401. | 15405. | 15409. |                 |
| 5207.70                            | 15413.                        | 15417. | 15421. | 15425. | 15429. | 15433. | 15437. | 15441. | 15446. | 15450. |                 |
| 5207.80                            | 15454.                        | 15458. | 15462. | 15466. | 15470. | 15474. | 15478. | 15482. | 15486. | 15490. |                 |
| 5207.90                            | 15495.                        | 15499. | 15503. | 15507. | 15511. | 15515. | 15519. | 15523. | 15527. | 15531. |                 |
| 5208.00                            | 15535.                        | 15540. | 15544. | 15548. | 15552. | 15556. | 15560. | 15564. | 15568. | 15572. | 409.8           |
| 5208.10                            | 15576.                        | 15581. | 15585. | 15589. | 15593. | 15597. | 15601. | 15605. | 15609. | 15614. |                 |
| 5208.20                            | 15618.                        | 15622. | 15626. | 15630. | 15634. | 15638. | 15642. | 15646. | 15651. | 15655. |                 |
| 5208.30                            | 15659.                        | 15663. | 15667. | 15671. | 15676. | 15680. | 15684. | 15688. | 15692. | 15696. |                 |
| 5208.40                            | 15700.                        | 15704. | 15709. | 15713. | 15717. | 15721. | 15725. | 15729. | 15734. | 15738. |                 |
| 5208.50                            | 15742.                        | 15746. | 15750. | 15754. | 15758. | 15763. | 15767. | 15771. | 15775. | 15779. |                 |
| 5208.60                            | 15783.                        | 15788. | 15792. | 15796. | 15800. | 15804. | 15808. | 15813. | 15817. | 15821. |                 |
| 5208.70                            | 15825.                        | 15829. | 15833. | 15838. | 15842. | 15846. | 15850. | 15854. | 15859. | 15863. |                 |
| 5208.80                            | 15867.                        | 15871. | 15875. | 15879. | 15884. | 15888. | 15892. | 15896. | 15901. | 15905. |                 |
| 5208.90                            | 15909.                        | 15913. | 15917. | 15921. | 15926. | 15930. | 15934. | 15938. | 15943. | 15947. |                 |
| 5209.00                            | 15951.                        | 15955. | 15959. | 15963. | 15967. | 15972. | 15976. | 15980. | 15984. | 15988. | 416.3           |
| 5209.10                            | 15992.                        | 15996. | 16000. | 16005. | 16009. | 16013. | 16017. | 16021. | 16025. | 16029. |                 |
| 5209.20                            | 16034.                        | 16038. | 16042. | 16046. | 16050. | 16054. | 16058. | 16062. | 16067. | 16071. |                 |
| 5209.30                            | 16075.                        | 16079. | 16083. | 16087. | 16092. | 16096. | 16100. | 16104. | 16108. | 16112. |                 |
| 5209.40                            | 16117.                        | 16121. | 16125. | 16129. | 16133. | 16137. | 16142. | 16146. | 16150. | 16154. |                 |
| 5209.50                            | 16158.                        | 16162. | 16167. | 16171. | 16175. | 16179. | 16183. | 16188. | 16192. | 16196. |                 |
| 5209.60                            | 16200.                        | 16204. | 16208. | 16213. | 16217. | 16221. | 16225. | 16230. | 16234. | 16238. |                 |
| 5209.70                            | 16242.                        | 16246. | 16250. | 16255. | 16259. | 16263. | 16267. | 16271. | 16276. | 16280. |                 |
| 5209.80                            | 16284.                        | 16288. | 16293. | 16297. | 16301. | 16305. | 16309. | 16313. | 16318. | 16322. |                 |
| 5209.90                            | 16326.                        | 16330. | 16335. | 16339. | 16343. | 16347. | 16352. | 16356. | 16360. | 16364. |                 |
| 5210.00                            | 16368.                        | 16373. | 16377. | 16381. | 16385. | 16390. | 16394. | 16398. | 16402. | 16407. | 422.8           |
| 5210.10                            | 16411.                        | 16415. | 16419. | 16424. | 16428. | 16432. | 16436. | 16441. | 16445. | 16449. |                 |
| 5210.20                            | 16453.                        | 16458. | 16462. | 16466. | 16470. | 16474. | 16479. | 16483. | 16487. | 16491. |                 |
| 5210.30                            | 16496.                        | 16500. | 16504. | 16509. | 16513. | 16517. | 16521. | 16526. | 16530. | 16534. |                 |
| 5210.40                            | 16539.                        | 16543. | 16547. | 16551. | 16556. | 16560. | 16564. | 16568. | 16573. | 16577. |                 |
| 5210.50                            | 16581.                        | 16586. | 16590. | 16594. | 16598. | 16603. | 16607. | 16611. | 16616. | 16620. |                 |
| 5210.60                            | 16624.                        | 16629. | 16633. | 16637. | 16641. | 16646. | 16650. | 16654. | 16659. | 16663. |                 |
| 5210.70                            | 16667.                        | 16672. | 16676. | 16680. | 16684. | 16689. | 16693. | 16697. | 16702. | 16706. |                 |
| 5210.80                            | 16710.                        | 16715. | 16719. | 16723. | 16728. | 16732. | 16736. | 16741. | 16745. | 16749. |                 |
| 5210.90                            | 16754.                        | 16758. | 16762. | 16767. | 16771. | 16775. | 16780. | 16784. | 16788. | 16793. |                 |
| 5211.00                            | 16797.                        | 16801. | 16805. | 16810. | 16814. | 16818. | 16822. | 16827. | 16831. | 16835. | 428.4           |
| 5211.10                            | 16839.                        | 16844. | 16848. | 16852. | 16856. | 16861. | 16865. | 16869. | 16873. | 16878. |                 |
| 5211.20                            | 16882.                        | 16886. | 16890. | 16895. | 16899. | 16903. | 16907. | 16911. | 16916. | 16920. |                 |
| 5211.30                            | 16924.                        | 16929. | 16933. | 16937. | 16941. | 16946. | 16950. | 16954. | 16959. | 16963. |                 |
| 5211.40                            | 16967.                        | 16971. | 16976. | 16980. | 16984. | 16988. | 16993. | 16997. | 17001. | 17006. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5211.50                   | 17010.                             | 17014. | 17018. | 17023. | 17027. | 17031. | 17035. | 17040. | 17044. | 17048. | 434.0           |
| 5211.60                   | 17053.                             | 17057. | 17061. | 17066. | 17070. | 17074. | 17078. | 17083. | 17087. | 17092. |                 |
| 5211.70                   | 17096.                             | 17100. | 17104. | 17109. | 17113. | 17117. | 17122. | 17126. | 17130. | 17134. |                 |
| 5211.80                   | 17139.                             | 17143. | 17148. | 17152. | 17156. | 17160. | 17165. | 17169. | 17173. | 17178. |                 |
| 5211.90                   | 17182.                             | 17186. | 17191. | 17195. | 17199. | 17204. | 17208. | 17212. | 17217. | 17221. |                 |
| 5212.00                   | 17225.                             | 17230. | 17234. | 17238. | 17243. | 17247. | 17251. | 17256. | 17260. | 17265. | 439.6           |
| 5212.10                   | 17269.                             | 17273. | 17278. | 17282. | 17286. | 17291. | 17295. | 17299. | 17304. | 17308. |                 |
| 5212.20                   | 17312.                             | 17317. | 17321. | 17326. | 17330. | 17334. | 17339. | 17343. | 17347. | 17352. |                 |
| 5212.30                   | 17356.                             | 17360. | 17365. | 17369. | 17374. | 17378. | 17382. | 17387. | 17391. | 17395. |                 |
| 5212.40                   | 17400.                             | 17404. | 17409. | 17413. | 17418. | 17422. | 17426. | 17431. | 17435. | 17439. |                 |
| 5212.50                   | 17444.                             | 17448. | 17452. | 17457. | 17461. | 17466. | 17470. | 17475. | 17479. | 17483. | 445.2           |
| 5212.60                   | 17488.                             | 17492. | 17497. | 17501. | 17505. | 17510. | 17514. | 17519. | 17523. | 17528. |                 |
| 5212.70                   | 17532.                             | 17536. | 17541. | 17545. | 17550. | 17554. | 17558. | 17563. | 17567. | 17572. |                 |
| 5212.80                   | 17576.                             | 17580. | 17585. | 17589. | 17594. | 17598. | 17603. | 17607. | 17612. | 17616. |                 |
| 5212.90                   | 17621.                             | 17625. | 17629. | 17634. | 17638. | 17643. | 17647. | 17652. | 17656. | 17660. |                 |
| 5213.00                   | 17665.                             | 17669. | 17673. | 17678. | 17682. | 17687. | 17691. | 17695. | 17700. | 17704. | 450.8           |
| 5213.10                   | 17708.                             | 17713. | 17717. | 17721. | 17726. | 17730. | 17734. | 17739. | 17743. | 17748. |                 |
| 5213.20                   | 17752.                             | 17756. | 17761. | 17765. | 17769. | 17774. | 17778. | 17782. | 17787. | 17791. |                 |
| 5213.30                   | 17796.                             | 17800. | 17804. | 17809. | 17813. | 17817. | 17822. | 17826. | 17831. | 17835. |                 |
| 5213.40                   | 17839.                             | 17844. | 17848. | 17853. | 17857. | 17861. | 17866. | 17870. | 17875. | 17879. |                 |
| 5213.50                   | 17883.                             | 17888. | 17892. | 17897. | 17901. | 17905. | 17910. | 17914. | 17918. | 17923. | 450.8           |
| 5213.60                   | 17927.                             | 17932. | 17936. | 17941. | 17945. | 17949. | 17954. | 17958. | 17963. | 17967. |                 |
| 5213.70                   | 17971.                             | 17976. | 17980. | 17985. | 17989. | 17993. | 17998. | 18002. | 18007. | 18011. |                 |
| 5213.80                   | 18016.                             | 18020. | 18025. | 18029. | 18033. | 18038. | 18042. | 18047. | 18051. | 18055. |                 |
| 5213.90                   | 18060.                             | 18064. | 18069. | 18073. | 18078. | 18082. | 18087. | 18091. | 18096. | 18100. |                 |
| 5214.00                   | 18104.                             | 18109. | 18113. | 18118. | 18122. | 18127. | 18131. | 18136. | 18140. | 18145. | 450.8           |
| 5214.10                   | 18149.                             | 18153. | 18158. | 18162. | 18167. | 18171. | 18176. | 18180. | 18185. | 18189. |                 |
| 5214.20                   | 18194.                             | 18198. | 18203. | 18207. | 18212. | 18216. | 18220. | 18225. | 18229. | 18234. |                 |
| 5214.30                   | 18238.                             | 18243. | 18247. | 18252. | 18256. | 18261. | 18265. | 18270. | 18274. | 18279. |                 |
| 5214.40                   | 18283.                             | 18288. | 18292. | 18297. | 18301. | 18306. | 18310. | 18315. | 18319. | 18324. |                 |
| 5214.50                   | 18328.                             | 18333. | 18337. | 18342. | 18346. | 18351. | 18355. | 18360. | 18364. | 18369. | 450.8           |
| 5214.60                   | 18373.                             | 18378. | 18382. | 18387. | 18391. | 18396. | 18400. | 18405. | 18410. | 18414. |                 |
| 5214.70                   | 18419.                             | 18423. | 18428. | 18432. | 18437. | 18441. | 18446. | 18450. | 18455. | 18459. |                 |
| 5214.80                   | 18464.                             | 18468. | 18473. | 18477. | 18482. | 18487. | 18491. | 18496. | 18500. | 18505. |                 |
| 5214.90                   | 18509.                             | 18514. | 18519. | 18523. | 18528. | 18532. | 18537. | 18541. | 18546. | 18550. |                 |
| 5215.00                   | 18555.                             | 18559. | 18564. | 18568. | 18573. | 18577. | 18582. | 18586. | 18591. | 18595. | 450.8           |
| 5215.10                   | 18599.                             | 18604. | 18608. | 18613. | 18617. | 18622. | 18626. | 18631. | 18635. | 18640. |                 |
| 5215.20                   | 18644.                             | 18649. | 18653. | 18658. | 18662. | 18667. | 18671. | 18676. | 18680. | 18684. |                 |
| 5215.30                   | 18689.                             | 18693. | 18698. | 18702. | 18707. | 18711. | 18716. | 18720. | 18725. | 18729. |                 |
| 5215.40                   | 18734.                             | 18738. | 18743. | 18747. | 18752. | 18757. | 18761. | 18766. | 18770. | 18775. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5215.50                   | 18779.                             | 18784. | 18788. | 18793. | 18797. | 18802. | 18806. | 18811. | 18815. | 18820. | 456.4           |
| 5215.60                   | 18824.                             | 18829. | 18833. | 18838. | 18842. | 18847. | 18851. | 18856. | 18860. | 18865. |                 |
| 5215.70                   | 18869.                             | 18874. | 18879. | 18883. | 18888. | 18892. | 18897. | 18901. | 18906. | 18910. |                 |
| 5215.80                   | 18915.                             | 18919. | 18924. | 18928. | 18933. | 18938. | 18942. | 18947. | 18951. | 18956. |                 |
| 5215.90                   | 18960.                             | 18965. | 18970. | 18974. | 18979. | 18983. | 18988. | 18992. | 18997. | 19001. |                 |
| 5216.00                   | 19006.                             | 19010. | 19015. | 19020. | 19024. | 19029. | 19033. | 19038. | 19042. | 19047. | 456.4           |
| 5216.10                   | 19052.                             | 19056. | 19061. | 19065. | 19070. | 19075. | 19079. | 19084. | 19088. | 19093. |                 |
| 5216.20                   | 19097.                             | 19102. | 19107. | 19111. | 19116. | 19120. | 19125. | 19129. | 19134. | 19139. |                 |
| 5216.30                   | 19143.                             | 19148. | 19153. | 19157. | 19162. | 19166. | 19171. | 19176. | 19180. | 19185. |                 |
| 5216.40                   | 19189.                             | 19194. | 19199. | 19203. | 19208. | 19212. | 19217. | 19222. | 19226. | 19231. |                 |
| 5216.50                   | 19235.                             | 19240. | 19245. | 19249. | 19254. | 19259. | 19263. | 19268. | 19272. | 19277. | 462.0           |
| 5216.60                   | 19282.                             | 19286. | 19291. | 19296. | 19300. | 19305. | 19310. | 19314. | 19319. | 19324. |                 |
| 5216.70                   | 19328.                             | 19333. | 19337. | 19342. | 19347. | 19351. | 19356. | 19361. | 19365. | 19370. |                 |
| 5216.80                   | 19375.                             | 19379. | 19384. | 19389. | 19393. | 19398. | 19403. | 19407. | 19412. | 19416. |                 |
| 5216.90                   | 19421.                             | 19426. | 19431. | 19435. | 19440. | 19445. | 19449. | 19454. | 19459. | 19463. |                 |
| 5217.00                   | 19468.                             | 19472. | 19477. | 19482. | 19486. | 19491. | 19495. | 19500. | 19504. | 19509. | 462.0           |
| 5217.10                   | 19514.                             | 19518. | 19523. | 19527. | 19532. | 19537. | 19541. | 19546. | 19550. | 19555. |                 |
| 5217.20                   | 19559.                             | 19564. | 19569. | 19573. | 19578. | 19582. | 19587. | 19591. | 19596. | 19601. |                 |
| 5217.30                   | 19605.                             | 19610. | 19615. | 19619. | 19624. | 19628. | 19633. | 19638. | 19642. | 19647. |                 |
| 5217.40                   | 19651.                             | 19656. | 19661. | 19665. | 19670. | 19674. | 19679. | 19684. | 19688. | 19693. |                 |
| 5217.50                   | 19697.                             | 19702. | 19707. | 19711. | 19716. | 19721. | 19725. | 19730. | 19734. | 19739. | 467.6           |
| 5217.60                   | 19744.                             | 19748. | 19753. | 19758. | 19762. | 19767. | 19772. | 19776. | 19781. | 19786. |                 |
| 5217.70                   | 19790.                             | 19795. | 19799. | 19804. | 19809. | 19813. | 19818. | 19823. | 19827. | 19832. |                 |
| 5217.80                   | 19837.                             | 19841. | 19846. | 19851. | 19855. | 19860. | 19865. | 19869. | 19874. | 19879. |                 |
| 5217.90                   | 19883.                             | 19888. | 19893. | 19897. | 19902. | 19907. | 19911. | 19916. | 19921. | 19925. |                 |
| 5218.00                   | 19930.                             | 19935. | 19939. | 19944. | 19949. | 19953. | 19958. | 19963. | 19967. | 19972. | 467.6           |
| 5218.10                   | 19977.                             | 19981. | 19986. | 19991. | 19995. | 20000. | 20005. | 20010. | 20014. | 20019. |                 |
| 5218.20                   | 20024.                             | 20028. | 20033. | 20038. | 20042. | 20047. | 20052. | 20056. | 20061. | 20066. |                 |
| 5218.30                   | 20071.                             | 20075. | 20080. | 20085. | 20090. | 20094. | 20099. | 20104. | 20108. | 20113. |                 |
| 5218.40                   | 20118.                             | 20122. | 20127. | 20132. | 20137. | 20141. | 20146. | 20151. | 20156. | 20160. |                 |
| 5218.50                   | 20165.                             | 20170. | 20174. | 20179. | 20184. | 20189. | 20193. | 20198. | 20203. | 20208. | 473.2           |
| 5218.60                   | 20212.                             | 20217. | 20222. | 20227. | 20231. | 20236. | 20241. | 20246. | 20250. | 20255. |                 |
| 5218.70                   | 20260.                             | 20265. | 20269. | 20274. | 20279. | 20283. | 20288. | 20293. | 20298. | 20303. |                 |
| 5218.80                   | 20307.                             | 20312. | 20317. | 20322. | 20327. | 20331. | 20336. | 20341. | 20346. | 20350. |                 |
| 5218.90                   | 20355.                             | 20360. | 20365. | 20369. | 20374. | 20379. | 20384. | 20389. | 20393. | 20398. |                 |
| 5219.00                   | 20403.                             | 20408. | 20412. | 20417. | 20422. | 20426. | 20431. | 20436. | 20440. | 20445. | 473.2           |
| 5219.10                   | 20450.                             | 20454. | 20459. | 20464. | 20468. | 20473. | 20478. | 20483. | 20487. | 20492. |                 |
| 5219.20                   | 20497.                             | 20501. | 20506. | 20511. | 20515. | 20520. | 20525. | 20529. | 20534. | 20539. |                 |
| 5219.30                   | 20544.                             | 20548. | 20553. | 20558. | 20563. | 20567. | 20572. | 20577. | 20581. | 20586. |                 |
| 5219.40                   | 20591.                             | 20595. | 20600. | 20605. | 20610. | 20614. | 20619. | 20624. | 20629. | 20633. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5219.50                   | 20638.                             | 20643. | 20647. | 20652. | 20657. | 20662. | 20666. | 20671. | 20676. | 20681. | 478.8           |
| 5219.60                   | 20685.                             | 20690. | 20695. | 20700. | 20704. | 20709. | 20714. | 20719. | 20723. | 20728. |                 |
| 5219.70                   | 20733.                             | 20738. | 20742. | 20747. | 20752. | 20757. | 20761. | 20766. | 20771. | 20776. |                 |
| 5219.80                   | 20780.                             | 20785. | 20790. | 20795. | 20800. | 20804. | 20809. | 20814. | 20819. | 20823. |                 |
| 5219.90                   | 20828.                             | 20833. | 20838. | 20842. | 20847. | 20852. | 20857. | 20862. | 20866. | 20871. |                 |
| 5220.00                   | 20876.                             | 20881. | 20885. | 20890. | 20895. | 20900. | 20905. | 20909. | 20914. | 20919. | 478.8           |
| 5220.10                   | 20924.                             | 20929. | 20933. | 20938. | 20943. | 20948. | 20953. | 20957. | 20962. | 20967. |                 |
| 5220.20                   | 20972.                             | 20977. | 20981. | 20986. | 20991. | 20996. | 21001. | 21005. | 21010. | 21015. |                 |
| 5220.30                   | 21020.                             | 21025. | 21030. | 21034. | 21039. | 21044. | 21049. | 21054. | 21059. | 21063. |                 |
| 5220.40                   | 21068.                             | 21073. | 21078. | 21083. | 21088. | 21092. | 21097. | 21102. | 21107. | 21112. |                 |
| 5220.50                   | 21116.                             | 21121. | 21126. | 21131. | 21136. | 21141. | 21145. | 21150. | 21155. | 21160. | 484.1           |
| 5220.60                   | 21165.                             | 21170. | 21175. | 21180. | 21184. | 21189. | 21194. | 21199. | 21204. | 21209. |                 |
| 5220.70                   | 21214.                             | 21218. | 21223. | 21228. | 21233. | 21238. | 21243. | 21247. | 21252. | 21257. |                 |
| 5220.80                   | 21262.                             | 21267. | 21272. | 21277. | 21282. | 21287. | 21292. | 21296. | 21301. | 21306. |                 |
| 5220.90                   | 21311.                             | 21316. | 21321. | 21326. | 21331. | 21335. | 21340. | 21345. | 21350. | 21355. |                 |
| 5221.00                   | 21360.                             | 21365. | 21369. | 21374. | 21379. | 21384. | 21389. | 21393. | 21398. | 21403. | 484.1           |
| 5221.10                   | 21408.                             | 21413. | 21417. | 21422. | 21427. | 21432. | 21437. | 21441. | 21446. | 21451. |                 |
| 5221.20                   | 21456.                             | 21461. | 21465. | 21470. | 21475. | 21480. | 21485. | 21489. | 21494. | 21499. |                 |
| 5221.30                   | 21504.                             | 21509. | 21514. | 21518. | 21523. | 21528. | 21533. | 21538. | 21543. | 21547. |                 |
| 5221.40                   | 21552.                             | 21557. | 21562. | 21567. | 21572. | 21576. | 21581. | 21586. | 21591. | 21596. |                 |
| 5221.50                   | 21600.                             | 21605. | 21610. | 21615. | 21620. | 21625. | 21630. | 21634. | 21639. | 21644. | 489.3           |
| 5221.60                   | 21649.                             | 21654. | 21659. | 21664. | 21668. | 21673. | 21678. | 21683. | 21688. | 21693. |                 |
| 5221.70                   | 21698.                             | 21703. | 21707. | 21712. | 21717. | 21722. | 21727. | 21732. | 21737. | 21741. |                 |
| 5221.80                   | 21746.                             | 21751. | 21756. | 21761. | 21766. | 21771. | 21776. | 21780. | 21785. | 21790. |                 |
| 5221.90                   | 21795.                             | 21800. | 21805. | 21810. | 21815. | 21819. | 21824. | 21829. | 21834. | 21839. |                 |
| 5222.00                   | 21844.                             | 21849. | 21854. | 21859. | 21863. | 21868. | 21873. | 21878. | 21883. | 21888. | 489.3           |
| 5222.10                   | 21893.                             | 21898. | 21903. | 21908. | 21912. | 21918. | 21922. | 21927. | 21932. | 21937. |                 |
| 5222.20                   | 21942.                             | 21947. | 21952. | 21957. | 21962. | 21966. | 21972. | 21976. | 21981. | 21986. |                 |
| 5222.30                   | 21991.                             | 21996. | 22001. | 22006. | 22011. | 22016. | 22021. | 22026. | 22031. | 22036. |                 |
| 5222.40                   | 22041.                             | 22045. | 22051. | 22055. | 22060. | 22065. | 22070. | 22075. | 22080. | 22085. |                 |
| 5222.50                   | 22090.                             | 22095. | 22100. | 22105. | 22110. | 22115. | 22120. | 22125. | 22130. | 22135. | 494.6           |
| 5222.60                   | 22139.                             | 22145. | 22149. | 22155. | 22159. | 22164. | 22169. | 22174. | 22179. | 22184. |                 |
| 5222.70                   | 22189.                             | 22194. | 22199. | 22204. | 22209. | 22214. | 22219. | 22224. | 22229. | 22234. |                 |
| 5222.80                   | 22239.                             | 22244. | 22249. | 22254. | 22259. | 22264. | 22269. | 22274. | 22279. | 22284. |                 |
| 5222.90                   | 22289.                             | 22294. | 22299. | 22304. | 22309. | 22314. | 22319. | 22324. | 22329. | 22334. |                 |
| 5223.00                   | 22339.                             | 22344. | 22349. | 22354. | 22358. | 22363. | 22368. | 22373. | 22378. | 22383. | 494.6           |
| 5223.10                   | 22388.                             | 22393. | 22398. | 22403. | 22407. | 22412. | 22417. | 22422. | 22427. | 22432. |                 |
| 5223.20                   | 22437.                             | 22442. | 22447. | 22452. | 22457. | 22461. | 22466. | 22471. | 22476. | 22481. |                 |
| 5223.30                   | 22486.                             | 22491. | 22496. | 22501. | 22506. | 22511. | 22516. | 22521. | 22526. | 22530. |                 |
| 5223.40                   | 22535.                             | 22540. | 22545. | 22550. | 22555. | 22560. | 22565. | 22570. | 22575. | 22580. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5223.50                   | 22585.                             | 22590. | 22595. | 22600. | 22604. | 22610. | 22614. | 22619. | 22624. | 22629. |                 |
| 5223.60                   | 22634.                             | 22639. | 22644. | 22649. | 22654. | 22659. | 22664. | 22669. | 22674. | 22679. |                 |
| 5223.70                   | 22684.                             | 22689. | 22694. | 22699. | 22704. | 22709. | 22714. | 22719. | 22724. | 22729. |                 |
| 5223.80                   | 22734.                             | 22739. | 22744. | 22748. | 22754. | 22758. | 22764. | 22768. | 22774. | 22778. |                 |
| 5223.90                   | 22784.                             | 22788. | 22794. | 22798. | 22804. | 22808. | 22814. | 22818. | 22824. | 22828. |                 |
| 5224.00                   | 22833.                             | 22838. | 22843. | 22848. | 22853. | 22858. | 22863. | 22868. | 22873. | 22878. | 499.9           |
| 5224.10                   | 22883.                             | 22889. | 22893. | 22899. | 22903. | 22909. | 22914. | 22919. | 22924. | 22929. |                 |
| 5224.20                   | 22934.                             | 22939. | 22944. | 22949. | 22954. | 22959. | 22964. | 22969. | 22974. | 22979. |                 |
| 5224.30                   | 22984.                             | 22989. | 22994. | 22999. | 23004. | 23009. | 23014. | 23019. | 23024. | 23029. |                 |
| 5224.40                   | 23034.                             | 23039. | 23044. | 23049. | 23055. | 23059. | 23065. | 23070. | 23075. | 23080. |                 |
| 5224.50                   | 23085.                             | 23090. | 23095. | 23100. | 23105. | 23110. | 23115. | 23120. | 23125. | 23130. |                 |
| 5224.60                   | 23135.                             | 23141. | 23145. | 23151. | 23156. | 23161. | 23166. | 23171. | 23176. | 23181. |                 |
| 5224.70                   | 23186.                             | 23191. | 23196. | 23201. | 23206. | 23211. | 23217. | 23222. | 23227. | 23232. |                 |
| 5224.80                   | 23237.                             | 23242. | 23247. | 23252. | 23257. | 23262. | 23268. | 23272. | 23278. | 23283. |                 |
| 5224.90                   | 23288.                             | 23293. | 23298. | 23303. | 23308. | 23313. | 23319. | 23324. | 23329. | 23334. |                 |
| 5225.00                   | 23339.                             | 23344. | 23349. | 23354. | 23359. | 23364. | 23369. | 23374. | 23379. | 23384. | 505.2           |
| 5225.10                   | 23389.                             | 23394. | 23399. | 23404. | 23409. | 23414. | 23419. | 23424. | 23429. | 23434. |                 |
| 5225.20                   | 23439.                             | 23444. | 23449. | 23454. | 23459. | 23464. | 23469. | 23474. | 23479. | 23484. |                 |
| 5225.30                   | 23489.                             | 23494. | 23499. | 23504. | 23509. | 23514. | 23520. | 23524. | 23530. | 23535. |                 |
| 5225.40                   | 23540.                             | 23545. | 23550. | 23555. | 23560. | 23565. | 23570. | 23575. | 23580. | 23585. |                 |
| 5225.50                   | 23590.                             | 23595. | 23600. | 23605. | 23610. | 23615. | 23620. | 23625. | 23630. | 23636. |                 |
| 5225.60                   | 23641.                             | 23646. | 23651. | 23656. | 23661. | 23666. | 23671. | 23676. | 23681. | 23686. |                 |
| 5225.70                   | 23691.                             | 23696. | 23701. | 23707. | 23712. | 23717. | 23722. | 23727. | 23732. | 23737. |                 |
| 5225.80                   | 23742.                             | 23747. | 23752. | 23757. | 23762. | 23767. | 23773. | 23778. | 23783. | 23788. |                 |
| 5225.90                   | 23793.                             | 23798. | 23803. | 23808. | 23813. | 23818. | 23824. | 23829. | 23834. | 23839. |                 |
| 5226.00                   | 23844.                             | 23849. | 23854. | 23859. | 23864. | 23869. | 23874. | 23880. | 23885. | 23890. | 510.4           |
| 5226.10                   | 23895.                             | 23900. | 23905. | 23910. | 23915. | 23921. | 23926. | 23931. | 23936. | 23941. |                 |
| 5226.20                   | 23946.                             | 23951. | 23956. | 23962. | 23967. | 23972. | 23977. | 23982. | 23987. | 23992. |                 |
| 5226.30                   | 23998.                             | 24003. | 24008. | 24013. | 24018. | 24023. | 24028. | 24033. | 24039. | 24044. |                 |
| 5226.40                   | 24049.                             | 24054. | 24059. | 24064. | 24070. | 24075. | 24080. | 24085. | 24090. | 24095. |                 |
| 5226.50                   | 24100.                             | 24106. | 24111. | 24116. | 24121. | 24126. | 24131. | 24137. | 24142. | 24147. |                 |
| 5226.60                   | 24152.                             | 24157. | 24162. | 24168. | 24173. | 24178. | 24183. | 24188. | 24194. | 24199. |                 |
| 5226.70                   | 24204.                             | 24209. | 24214. | 24220. | 24225. | 24230. | 24235. | 24240. | 24245. | 24251. |                 |
| 5226.80                   | 24256.                             | 24261. | 24266. | 24271. | 24277. | 24282. | 24287. | 24292. | 24297. | 24303. |                 |
| 5226.90                   | 24308.                             | 24313. | 24318. | 24323. | 24329. | 24334. | 24339. | 24344. | 24350. | 24355. |                 |
| 5227.00                   | 24360.                             | 24365. | 24370. | 24375. | 24380. | 24385. | 24390. | 24396. | 24401. | 24406. | 515.7           |
| 5227.10                   | 24411.                             | 24416. | 24421. | 24426. | 24431. | 24437. | 24442. | 24447. | 24452. | 24457. |                 |
| 5227.20                   | 24462.                             | 24467. | 24472. | 24478. | 24483. | 24488. | 24493. | 24498. | 24503. | 24508. |                 |
| 5227.30                   | 24513.                             | 24518. | 24524. | 24529. | 24534. | 24539. | 24544. | 24549. | 24555. | 24560. |                 |
| 5227.40                   | 24565.                             | 24570. | 24575. | 24580. | 24585. | 24591. | 24596. | 24601. | 24606. | 24611. |                 |



TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | Storage Capacity in Acre Feet      |        |        |        |        |        |        |        |        |        |                 |
|                           | 0.00                               | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5227.50                   | 24616.                             | 24621. | 24627. | 24632. | 24637. | 24642. | 24647. | 24652. | 24657. | 24663. |                 |
| 5227.60                   | 24668.                             | 24673. | 24678. | 24683. | 24689. | 24694. | 24699. | 24704. | 24709. | 24715. |                 |
| 5227.70                   | 24720.                             | 24725. | 24730. | 24735. | 24740. | 24745. | 24751. | 24756. | 24761. | 24766. |                 |
| 5227.80                   | 24771.                             | 24777. | 24782. | 24787. | 24792. | 24797. | 24803. | 24808. | 24813. | 24818. |                 |
| 5227.90                   | 24823.                             | 24829. | 24834. | 24839. | 24844. | 24849. | 24855. | 24860. | 24865. | 24870. |                 |
| 5228.00                   | 24875.                             | 24881. | 24886. | 24891. | 24896. | 24901. | 24907. | 24912. | 24917. | 24922. | 521.0           |
| 5228.10                   | 24927.                             | 24933. | 24938. | 24943. | 24948. | 24954. | 24959. | 24964. | 24969. | 24975. |                 |
| 5228.20                   | 24980.                             | 24985. | 24990. | 24996. | 25001. | 25006. | 25011. | 25016. | 25022. | 25027. |                 |
| 5228.30                   | 25032.                             | 25037. | 25043. | 25048. | 25053. | 25058. | 25064. | 25069. | 25074. | 25079. |                 |
| 5228.40                   | 25085.                             | 25090. | 25095. | 25100. | 25106. | 25111. | 25116. | 25121. | 25127. | 25132. |                 |
| 5228.50                   | 25137.                             | 25143. | 25148. | 25153. | 25158. | 25164. | 25169. | 25174. | 25179. | 25185. |                 |
| 5228.60                   | 25190.                             | 25195. | 25200. | 25206. | 25211. | 25216. | 25222. | 25227. | 25232. | 25238. |                 |
| 5228.70                   | 25243.                             | 25248. | 25253. | 25259. | 25264. | 25269. | 25275. | 25280. | 25285. | 25290. |                 |
| 5228.80                   | 25296.                             | 25301. | 25306. | 25312. | 25317. | 25322. | 25328. | 25333. | 25338. | 25343. |                 |
| 5228.90                   | 25349.                             | 25354. | 25359. | 25365. | 25370. | 25375. | 25381. | 25386. | 25391. | 25397. |                 |
| 5229.00                   | 25402.                             | 25407. | 25412. | 25417. | 25423. | 25428. | 25433. | 25438. | 25443. | 25449. | 526.2           |
| 5229.10                   | 25454.                             | 25459. | 25464. | 25470. | 25475. | 25480. | 25485. | 25491. | 25496. | 25501. |                 |
| 5229.20                   | 25506.                             | 25512. | 25517. | 25522. | 25527. | 25532. | 25538. | 25543. | 25548. | 25553. |                 |
| 5229.30                   | 25559.                             | 25564. | 25569. | 25574. | 25580. | 25585. | 25590. | 25595. | 25601. | 25606. |                 |
| 5229.40                   | 25611.                             | 25616. | 25622. | 25627. | 25632. | 25637. | 25643. | 25648. | 25653. | 25658. |                 |
| 5229.50                   | 25663.                             | 25669. | 25674. | 25679. | 25684. | 25690. | 25695. | 25700. | 25706. | 25711. |                 |
| 5229.60                   | 25716.                             | 25722. | 25727. | 25732. | 25737. | 25743. | 25748. | 25753. | 25758. | 25764. |                 |
| 5229.70                   | 25769.                             | 25774. | 25780. | 25785. | 25790. | 25795. | 25801. | 25806. | 25811. | 25816. |                 |
| 5229.80                   | 25822.                             | 25827. | 25832. | 25838. | 25843. | 25848. | 25854. | 25859. | 25864. | 25869. |                 |
| 5229.90                   | 25875.                             | 25880. | 25886. | 25891. | 25896. | 25901. | 25907. | 25912. | 25917. | 25923. |                 |
| 5230.00                   | 25928.                             | 25933. | 25938. | 25944. | 25949. | 25955. | 25960. | 25965. | 25970. | 25976. | 531.5           |
| 5230.10                   | 25981.                             | 25987. | 25992. | 25997. | 26002. | 26008. | 26013. | 26019. | 26024. | 26029. |                 |
| 5230.20                   | 26034.                             | 26040. | 26045. | 26051. | 26056. | 26061. | 26066. | 26072. | 26077. | 26082. |                 |
| 5230.30                   | 26088.                             | 26093. | 26099. | 26104. | 26109. | 26115. | 26120. | 26125. | 26131. | 26136. |                 |
| 5230.40                   | 26141.                             | 26147. | 26152. | 26157. | 26163. | 26168. | 26174. | 26179. | 26184. | 26190. |                 |
| 5230.50                   | 26195.                             | 26200. | 26206. | 26211. | 26216. | 26222. | 26227. | 26233. | 26238. | 26243. |                 |
| 5230.60                   | 26249.                             | 26254. | 26259. | 26265. | 26270. | 26276. | 26281. | 26287. | 26292. | 26297. |                 |
| 5230.70                   | 26303.                             | 26308. | 26313. | 26319. | 26324. | 26329. | 26335. | 26340. | 26346. | 26351. |                 |
| 5230.80                   | 26357.                             | 26362. | 26367. | 26373. | 26378. | 26384. | 26389. | 26394. | 26400. | 26405. |                 |
| 5230.90                   | 26411.                             | 26416. | 26422. | 26427. | 26432. | 26438. | 26443. | 26449. | 26454. | 26459. |                 |
| 5231.00                   | 26465.                             | 26470. | 26475. | 26481. | 26486. | 26492. | 26497. | 26502. | 26507. | 26513. | 537.1           |
| 5231.10                   | 26518.                             | 26524. | 26529. | 26534. | 26539. | 26545. | 26550. | 26556. | 26561. | 26566. |                 |
| 5231.20                   | 26572.                             | 26577. | 26582. | 26588. | 26593. | 26598. | 26604. | 26609. | 26614. | 26620. |                 |
| 5231.30                   | 26625.                             | 26630. | 26636. | 26641. | 26646. | 26652. | 26657. | 26662. | 26668. | 26673. |                 |
| 5231.40                   | 26679.                             | 26684. | 26689. | 26695. | 26700. | 26705. | 26711. | 26716. | 26722. | 26727. |                 |



TABLE 3 (CONT.)

| LITTLE WOOD RIVER RESERVOIR, IDAHO |                               |        |        |        |        |        |        |        |        |        |                 |
|------------------------------------|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
| GAGE<br>HEIGHT<br>IN FEET          | Storage Capacity in Acre Feet |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|                                    | 0.00                          | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5231.50                            | 26732.                        | 26738. | 26743. | 26748. | 26754. | 26759. | 26764. | 26770. | 26775. | 26781. | 542.7           |
| 5231.60                            | 26786.                        | 26792. | 26797. | 26802. | 26808. | 26813. | 26818. | 26824. | 26829. | 26835. |                 |
| 5231.70                            | 26840.                        | 26846. | 26851. | 26856. | 26862. | 26867. | 26872. | 26878. | 26883. | 26889. |                 |
| 5231.80                            | 26894.                        | 26899. | 26905. | 26910. | 26916. | 26921. | 26927. | 26932. | 26937. | 26943. |                 |
| 5231.90                            | 26948.                        | 26954. | 26959. | 26964. | 26970. | 26975. | 26981. | 26986. | 26992. | 26997. |                 |
| 5232.00                            | 27002.                        | 27008. | 27013. | 27019. | 27024. | 27030. | 27035. | 27040. | 27046. | 27051. | 548.4           |
| 5232.10                            | 27057.                        | 27062. | 27068. | 27073. | 27078. | 27084. | 27089. | 27095. | 27100. | 27106. |                 |
| 5232.20                            | 27111.                        | 27117. | 27122. | 27128. | 27133. | 27138. | 27144. | 27149. | 27155. | 27160. |                 |
| 5232.30                            | 27166.                        | 27171. | 27177. | 27182. | 27188. | 27193. | 27199. | 27204. | 27210. | 27215. |                 |
| 5232.40                            | 27221.                        | 27226. | 27232. | 27237. | 27242. | 27248. | 27253. | 27259. | 27264. | 27270. |                 |
| 5232.50                            | 27275.                        | 27281. | 27286. | 27292. | 27297. | 27303. | 27308. | 27314. | 27319. | 27325. | 554.0           |
| 5232.60                            | 27330.                        | 27336. | 27341. | 27347. | 27352. | 27358. | 27363. | 27369. | 27374. | 27380. |                 |
| 5232.70                            | 27385.                        | 27391. | 27396. | 27402. | 27407. | 27413. | 27418. | 27424. | 27429. | 27435. |                 |
| 5232.80                            | 27440.                        | 27446. | 27451. | 27457. | 27462. | 27468. | 27473. | 27479. | 27485. | 27490. |                 |
| 5232.90                            | 27496.                        | 27501. | 27507. | 27512. | 27518. | 27523. | 27529. | 27534. | 27540. | 27545. |                 |
| 5233.00                            | 27551.                        | 27556. | 27562. | 27567. | 27572. | 27578. | 27583. | 27589. | 27594. | 27600. | 559.6           |
| 5233.10                            | 27605.                        | 27611. | 27616. | 27622. | 27627. | 27633. | 27638. | 27643. | 27649. | 27654. |                 |
| 5233.20                            | 27660.                        | 27665. | 27671. | 27676. | 27682. | 27687. | 27692. | 27698. | 27703. | 27709. |                 |
| 5233.30                            | 27714.                        | 27720. | 27725. | 27731. | 27736. | 27742. | 27747. | 27753. | 27758. | 27763. |                 |
| 5233.40                            | 27769.                        | 27774. | 27780. | 27785. | 27791. | 27796. | 27802. | 27807. | 27813. | 27818. |                 |
| 5233.50                            | 27824.                        | 27829. | 27835. | 27840. | 27846. | 27851. | 27857. | 27862. | 27868. | 27873. | 559.6           |
| 5233.60                            | 27879.                        | 27884. | 27890. | 27895. | 27901. | 27906. | 27912. | 27917. | 27923. | 27928. |                 |
| 5233.70                            | 27934.                        | 27939. | 27945. | 27950. | 27956. | 27961. | 27967. | 27972. | 27978. | 27983. |                 |
| 5233.80                            | 27989.                        | 27994. | 28000. | 28005. | 28011. | 28016. | 28022. | 28027. | 28033. | 28038. |                 |
| 5233.90                            | 28044.                        | 28050. | 28055. | 28061. | 28066. | 28072. | 28077. | 28083. | 28088. | 28094. |                 |
| 5234.00                            | 28099.                        | 28105. | 28110. | 28116. | 28121. | 28127. | 28133. | 28138. | 28144. | 28149. | 559.6           |
| 5234.10                            | 28155.                        | 28160. | 28166. | 28172. | 28177. | 28183. | 28188. | 28194. | 28199. | 28205. |                 |
| 5234.20                            | 28210.                        | 28216. | 28222. | 28227. | 28233. | 28238. | 28244. | 28249. | 28255. | 28260. |                 |
| 5234.30                            | 28266.                        | 28272. | 28277. | 28283. | 28288. | 28294. | 28300. | 28305. | 28311. | 28316. |                 |
| 5234.40                            | 28322.                        | 28327. | 28333. | 28339. | 28344. | 28350. | 28355. | 28361. | 28367. | 28372. |                 |
| 5234.50                            | 28378.                        | 28383. | 28389. | 28395. | 28400. | 28406. | 28411. | 28417. | 28422. | 28428. | 559.6           |
| 5234.60                            | 28434.                        | 28439. | 28445. | 28451. | 28456. | 28462. | 28467. | 28473. | 28479. | 28484. |                 |
| 5234.70                            | 28490.                        | 28496. | 28501. | 28507. | 28512. | 28518. | 28524. | 28529. | 28535. | 28540. |                 |
| 5234.80                            | 28546.                        | 28552. | 28557. | 28563. | 28569. | 28574. | 28580. | 28585. | 28591. | 28597. |                 |
| 5234.90                            | 28603.                        | 28608. | 28614. | 28619. | 28625. | 28631. | 28636. | 28642. | 28648. | 28653. |                 |
| 5235.00                            | 28659.                        | 28664. | 28670. | 28676. | 28681. | 28687. | 28692. | 28698. | 28703. | 28709. | 559.6           |
| 5235.10                            | 28714.                        | 28720. | 28725. | 28731. | 28736. | 28742. | 28748. | 28753. | 28759. | 28764. |                 |
| 5235.20                            | 28770.                        | 28776. | 28781. | 28787. | 28792. | 28798. | 28803. | 28809. | 28814. | 28820. |                 |
| 5235.30                            | 28826.                        | 28831. | 28837. | 28842. | 28848. | 28853. | 28859. | 28865. | 28870. | 28876. |                 |
| 5235.40                            | 28881.                        | 28887. | 28893. | 28898. | 28904. | 28909. | 28915. | 28920. | 28926. | 28932. |                 |



TABLE 3 (CONT.)

| LITTLE WOOD RIVER RESERVOIR, IDAHO |                               |        |        |        |        |        |        |        |        |        |                 |
|------------------------------------|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
| GAGE<br>HEIGHT<br>IN FEET          | Storage Capacity in Acre Feet |        |        |        |        |        |        |        |        |        | AREA<br>(ACRES) |
|                                    | 0.00                          | 0.01   | 0.02   | 0.03   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.09   |                 |
| 5235.50                            | 28937.                        | 28943. | 28948. | 28954. | 28960. | 28965. | 28971. | 28977. | 28982. | 28988. |                 |
| 5235.60                            | 28993.                        | 28999. | 29004. | 29010. | 29016. | 29021. | 29027. | 29033. | 29038. | 29044. |                 |
| 5235.70                            | 29049.                        | 29055. | 29061. | 29066. | 29072. | 29077. | 29083. | 29089. | 29094. | 29100. |                 |
| 5235.80                            | 29106.                        | 29111. | 29117. | 29122. | 29128. | 29134. | 29139. | 29145. | 29151. | 29156. |                 |
| 5235.90                            | 29162.                        | 29168. | 29173. | 29179. | 29185. | 29190. | 29196. | 29201. | 29207. | 29213. |                 |
| 5236.00                            | 29218.                        | 29224. | 29230. | 29235. | 29241. | 29247. | 29252. | 29258. | 29264. | 29269. | 565.2           |
| 5236.10                            | 29275.                        | 29281. | 29286. | 29292. | 29298. | 29303. | 29309. | 29315. | 29320. | 29326. |                 |
| 5236.20                            | 29332.                        | 29337. | 29343. | 29349. | 29354. | 29360. | 29366. | 29371. | 29377. | 29383. |                 |
| 5236.30                            | 29388.                        | 29394. | 29400. | 29405. | 29411. | 29417. | 29423. | 29428. | 29434. | 29439. |                 |
| 5236.40                            | 29445.                        | 29451. | 29457. | 29462. | 29468. | 29474. | 29480. | 29485. | 29491. | 29497. |                 |
| 5236.50                            | 29502.                        | 29508. | 29514. | 29519. | 29525. | 29531. | 29536. | 29542. | 29548. | 29554. |                 |
| 5236.60                            | 29559.                        | 29565. | 29571. | 29577. | 29582. | 29588. | 29594. | 29599. | 29605. | 29611. |                 |
| 5236.70                            | 29617.                        | 29622. | 29628. | 29634. | 29639. | 29645. | 29651. | 29657. | 29662. | 29668. |                 |
| 5236.80                            | 29674.                        | 29679. | 29685. | 29691. | 29697. | 29703. | 29708. | 29714. | 29720. | 29726. |                 |
| 5236.90                            | 29731.                        | 29737. | 29743. | 29749. | 29754. | 29760. | 29766. | 29772. | 29777. | 29783. |                 |
| 5237.00                            | 29789.                        | 29796. | 29803. | 29810. | 29817. | 29824. | 29831. | 29838. | 29845. | 29852. | 570.8           |
| 5237.10                            | 29859.                        | 29866. | 29873. | 29880. | 29887. | 29894. | 29901. | 29908. | 29915. | 29923. |                 |
| 5237.20                            | 29929.                        | 29937. | 29944. | 29951. | 29958. | 29965. | 29972. | 29979. | 29986. | 29993. |                 |
| 5237.30                            | 30000.                        | 30005. | 30011. | 30016. | 30022. | 30027. | 30033. | 30038. | 30044. | 30049. |                 |
| 5237.40                            | 30055.                        | 30060. | 30066. | 30071. | 30077. | 30082. | 30087. | 30093. | 30098. | 30104. |                 |
| 5237.50                            | 30109.                        | 30115. | 30120. | 30126. | 30131. | 30137. | 30142. | 30148. | 30153. | 30159. |                 |
| 5237.60                            | 30164.                        | 30170. | 30175. | 30181. | 30186. | 30192. | 30197. | 30203. | 30208. | 30214. |                 |
| 5237.70                            | 30219.                        | 30225. | 30230. | 30236. | 30241. | 30246. | 30252. | 30257. | 30263. | 30268. |                 |
| 5237.80                            | 30274.                        | 30279. | 30285. | 30290. | 30296. | 30301. | 30307. | 30312. | 30318. | 30324. |                 |
| 5237.90                            | 30329.                        | 30335. | 30340. | 30346. | 30351. | 30357. | 30362. | 30368. | 30373. | 30379. |                 |
| 5238.00                            | 30384.                        | 30390. | 30395. | 30401. | 30406. | 30412. | 30417. | 30423. | 30428. | 30434. | 576.5           |
| 5238.10                            | 30440.                        | 30445. | 30451. | 30456. | 30462. | 30467. | 30473. | 30478. | 30484. | 30490. |                 |
| 5238.20                            | 30495.                        | 30501. | 30506. | 30512. | 30517. | 30523. | 30528. | 30534. | 30539. | 30545. |                 |
| 5238.30                            | 30551.                        | 30556. | 30562. | 30567. | 30573. | 30578. | 30584. | 30589. | 30595. | 30600. |                 |
| 5238.40                            | 30606.                        | 30612. | 30617. | 30623. | 30628. | 30634. | 30640. | 30645. | 30651. | 30656. |                 |
| 5238.50                            | 30662.                        | 30667. | 30673. | 30679. | 30684. | 30690. | 30695. | 30701. | 30706. | 30712. |                 |
| 5238.60                            | 30718.                        | 30723. | 30729. | 30734. | 30740. | 30746. | 30751. | 30757. | 30762. | 30768. |                 |
| 5238.70                            | 30773.                        | 30779. | 30785. | 30790. | 30796. | 30801. | 30807. | 30813. | 30818. | 30824. |                 |
| 5238.80                            | 30830.                        | 30835. | 30841. | 30846. | 30852. | 30857. | 30863. | 30869. | 30874. | 30880. |                 |
| 5238.90                            | 30886.                        | 30891. | 30897. | 30902. | 30908. | 30914. | 30919. | 30925. | 30931. | 30936. |                 |
| 5239.00                            | 30942.                        | 30948. | 30953. | 30959. | 30965. | 30971. | 30976. | 30982. | 30988. | 30994. | 582.1           |
| 5239.10                            | 30999.                        | 31005. | 31011. | 31017. | 31023. | 31029. | 31034. | 31040. | 31046. | 31052. |                 |
| 5239.20                            | 31057.                        | 31063. | 31069. | 31075. | 31081. | 31086. | 31092. | 31098. | 31104. | 31109. |                 |
| 5239.30                            | 31115.                        | 31121. | 31127. | 31133. | 31139. | 31144. | 31150. | 31156. | 31162. | 31167. |                 |
| 5239.40                            | 31173.                        | 31179. | 31185. | 31191. | 31197. | 31202. | 31208. | 31214. | 31220. | 31226. |                 |

TABLE 3 (CONT.)

| GAGE<br>HEIGHT<br>IN FEET | LITTLE WOOD RIVER RESERVOIR, IDAHO |        |        |                               |        |        |        |        |        |        | AREA<br>(ACRES) |
|---------------------------|------------------------------------|--------|--------|-------------------------------|--------|--------|--------|--------|--------|--------|-----------------|
|                           | 0.00                               | 0.01   | 0.02   | Storage Capacity in Acre Feet |        |        | 0.06   | 0.07   | 0.08   | 0.09   |                 |
|                           | 0.03                               | 0.04   | 0.05   |                               |        |        |        |        |        |        |                 |
| 5239.50                   | 31231.                             | 31237. | 31243. | 31249.                        | 31255. | 31261. | 31266. | 31272. | 31278. | 31284. |                 |
| 5239.60                   | 31290.                             | 31296. | 31301. | 31307.                        | 31313. | 31319. | 31325. | 31331. | 31336. | 31342. |                 |
| 5239.70                   | 31348.                             | 31354. | 31360. | 31366.                        | 31372. | 31377. | 31383. | 31389. | 31395. | 31401. |                 |
| 5239.80                   | 31407.                             | 31412. | 31418. | 31424.                        | 31430. | 31436. | 31442. | 31448. | 31454. | 31459. |                 |
| 5239.90                   | 31465.                             | 31471. | 31477. | 31483.                        | 31489. | 31495. | 31501. | 31506. | 31512. | 31518. |                 |
| 5240.00                   | 31524.                             | 31530. | 31536. | 31542.                        | 31547. | 31553. | 31559. | 31565. | 31571. | 31577. | 587.7           |
| 5240.10                   | 31583.                             | 31589. | 31594. | 31600.                        | 31606. | 31612. | 31618. | 31624. | 31630. | 31636. |                 |
| 5240.20                   | 31642.                             | 31648. | 31653. | 31659.                        | 31665. | 31671. | 31677. | 31683. | 31689. | 31695. |                 |
| 5240.30                   | 31701.                             | 31706. | 31712. | 31718.                        | 31724. | 31730. | 31736. | 31742. | 31748. | 31754. |                 |
| 5240.40                   | 31760.                             | 31766. | 31772. | 31777.                        | 31784. | 31789. | 31795. | 31801. | 31807. | 31813. |                 |
| 5240.50                   | 31819.                             | 31825. | 31831. | 31837.                        | 31843. | 31849. | 31854. | 31861. | 31866. | 31872. |                 |
| 5240.60                   | 31878.                             | 31884. | 31890. | 31896.                        | 31902. | 31908. | 31914. | 31920. | 31926. | 31932. |                 |
| 5240.70                   | 31938.                             | 31944. | 31950. | 31956.                        | 31962. | 31967. | 31974. | 31979. | 31985. | 31991. |                 |
| 5240.80                   | 31997.                             | 32003. | 32009. | 32015.                        | 32021. | 32027. | 32033. | 32039. | 32045. | 32051. |                 |
| 5240.90                   | 32057.                             | 32063. | 32069. | 32075.                        | 32081. | 32087. | 32093. | 32099. | 32105. | 32111. |                 |
| 5241.00                   | 32117.                             | 32123. | 32128. | 32135.                        | 32140. | 32146. | 32152. | 32158. | 32164. | 32170. | 592.8           |
| 5241.10                   | 32176.                             | 32182. | 32187. | 32193.                        | 32199. | 32205. | 32211. | 32217. | 32223. | 32229. |                 |
| 5241.20                   | 32234.                             | 32240. | 32246. | 32252.                        | 32258. | 32264. | 32270. | 32276. | 32282. | 32287. |                 |
| 5241.30                   | 32293.                             | 32299. | 32305. | 32311.                        | 32317. | 32323. | 32329. | 32335. | 32341. | 32346. |                 |
| 5241.40                   | 32352.                             | 32358. | 32364. | 32370.                        | 32376. | 32382. | 32388. | 32394. | 32400. | 32406. |                 |
| 5241.50                   | 32411.                             | 32417. | 32423. | 32429.                        | 32435. | 32441. | 32447. | 32453. | 32459. | 32465. |                 |
| 5241.60                   | 32471.                             | 32477. | 32483. | 32489.                        | 32494. | 32501. | 32506. | 32512. | 32518. | 32524. |                 |
| 5241.70                   | 32530.                             | 32536. | 32542. | 32548.                        | 32554. | 32560. | 32566. | 32572. | 32578. | 32584. |                 |
| 5241.80                   | 32590.                             | 32595. | 32602. | 32607.                        | 32614. | 32619. | 32625. | 32631. | 32637. | 32643. |                 |
| 5241.90                   | 32649.                             | 32655. | 32661. | 32667.                        | 32673. | 32679. | 32685. | 32691. | 32697. | 32703. |                 |
| 5242.00                   | 32709.                             | 32715. | 32721. | 32727.                        | 32733. | 32739. | 32745. | 32751. | 32757. | 32763. | 597.9           |
| 5242.10                   | 32769.                             | 32775. | 32781. | 32787.                        | 32793. | 32799. | 32805. | 32811. | 32817. | 32823. |                 |
| 5242.20                   | 32829.                             | 32835. | 32841. | 32847.                        | 32853. | 32859. | 32865. | 32871. | 32877. | 32883. |                 |
| 5242.30                   | 32889.                             | 32895. | 32901. | 32907.                        | 32913. | 32919. | 32925. | 32931. | 32937. | 32943. |                 |
| 5242.40                   | 32949.                             | 32955. | 32961. | 32967.                        | 32973. | 32979. | 32985. | 32991. | 32997. | 33003. |                 |
| 5242.50                   | 33009.                             | 33015. | 33021. | 33027.                        | 33033. | 33039. | 33045. | 33051. | 33057. | 33063. |                 |
| 5242.60                   | 33069.                             | 33075. | 33081. | 33088.                        | 33093. | 33100. | 33106. | 33112. | 33118. | 33124. |                 |
| 5242.70                   | 33130.                             | 33136. | 33142. | 33148.                        | 33154. | 33160. | 33166. | 33172. | 33178. | 33184. |                 |
| 5242.80                   | 33190.                             | 33196. | 33203. | 33209.                        | 33215. | 33221. | 33227. | 33233. | 33239. | 33245. |                 |
| 5242.90                   | 33251.                             | 33257. | 33263. | 33269.                        | 33276. | 33281. | 33288. | 33294. | 33300. | 33306. |                 |
| 5243.00                   | 33312.                             |        |        |                               |        |        |        |        |        |        |                 |



TABLE 4

DISCHARGE RATING TABLE - LITTLE WOOD RIVER NR CAREY, ID  
(USGS STA NO. 13148500)

| GAGE<br>HEIGHT<br>FEET | DISCHARGE IN CFS |     |     |     |     |     |     |     |     |     |
|------------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                        | .00              | .01 | .02 | .03 | .04 | .05 | .06 | .07 | .08 | .09 |
| 0.50                   |                  |     |     |     |     |     |     |     |     |     |
| 0.60                   | 1                | 1   | 1   | 1   | 1   | 2   | 2   | 2   | 2   | 2   |
| 0.70                   | 2                | 2   | 2   | 2   | 2   | 3   | 3   | 3   | 3   | 3   |
| 0.80                   | 3                | 3   | 4   | 4   | 4   | 5   | 5   | 5   | 5   | 5   |
| 0.90                   | 6                | 6   | 7   | 7   | 7   | 8   | 8   | 8   | 8   | 8   |
| 1.00                   | 9                | 9   | 10  | 10  | 10  | 11  | 11  | 11  | 11  | 12  |
| 1.10                   | 12               | 13  | 13  | 14  | 14  | 15  | 15  | 16  | 16  | 17  |
| 1.20                   | 17               | 18  | 18  | 19  | 19  | 20  | 20  | 21  | 21  | 22  |
| 1.30                   | 22               | 23  | 23  | 24  | 25  | 26  | 26  | 27  | 28  | 28  |
| 1.40                   | 29               | 30  | 30  | 31  | 32  | 33  | 33  | 34  | 35  | 35  |
| 1.50                   | 36               | 37  | 38  | 39  | 40  | 41  | 41  | 42  | 43  | 44  |
| 1.60                   | 45               | 46  | 47  | 48  | 49  | 50  | 50  | 51  | 52  | 53  |
| 1.70                   | 54               | 55  | 56  | 57  | 58  | 60  | 61  | 62  | 63  | 64  |
| 1.80                   | 65               | 66  | 68  | 69  | 70  | 72  | 73  | 74  | 75  | 77  |
| 1.90                   | 78               | 79  | 81  | 82  | 84  | 85  | 86  | 88  | 89  | 91  |
| 2.00                   | 92               | 94  | 95  | 97  | 98  | 100 | 101 | 103 | 104 | 106 |
| 2.10                   | 107              | 109 | 110 | 112 | 113 | 115 | 117 | 118 | 120 | 121 |
| 2.20                   | 123              | 125 | 127 | 129 | 131 | 133 | 135 | 137 | 139 | 141 |
| 2.30                   | 143              | 145 | 147 | 149 | 151 | 154 | 156 | 158 | 160 | 162 |
| 2.40                   | 164              | 166 | 168 | 171 | 173 | 175 | 177 | 179 | 182 | 184 |
| 2.50                   | 186              | 188 | 191 | 193 | 195 | 198 | 200 | 202 | 204 | 207 |
| 2.60                   | 209              | 211 | 214 | 216 | 219 | 221 | 223 | 226 | 228 | 231 |
| 2.70                   | 233              | 236 | 238 | 241 | 243 | 246 | 249 | 251 | 254 | 256 |
| 2.80                   | 259              | 262 | 265 | 267 | 270 | 273 | 276 | 279 | 281 | 284 |
| 2.90                   | 287              | 290 | 293 | 295 | 298 | 301 | 304 | 307 | 309 | 312 |
| 3.00                   | 315              | 318 | 321 | 324 | 327 | 330 | 332 | 335 | 338 | 341 |
| 3.10                   | 344              | 347 | 350 | 353 | 356 | 359 | 362 | 365 | 368 | 371 |
| 3.20                   | 374              | 377 | 380 | 383 | 386 | 390 | 393 | 396 | 399 | 402 |
| 3.30                   | 405              | 408 | 412 | 415 | 418 | 422 | 425 | 428 | 431 | 435 |
| 3.40                   | 438              | 441 | 445 | 448 | 452 | 455 | 458 | 462 | 465 | 469 |
| 3.50                   | 472              | 476 | 479 | 483 | 486 | 490 | 493 | 497 | 500 | 504 |
| 3.60                   | 507              | 511 | 515 | 518 | 522 | 526 | 530 | 534 | 537 | 541 |
| 3.70                   | 545              | 549 | 553 | 557 | 561 | 565 | 569 | 573 | 577 | 581 |
| 3.80                   | 585              | 589 | 593 | 597 | 601 | 605 | 609 | 613 | 617 | 621 |
| 3.90                   | 625              | 629 | 633 | 637 | 641 | 645 | 649 | 653 | 657 | 661 |
| 4.00                   | 665              | 670 | 674 | 679 | 683 | 688 | 692 | 697 | 701 | 706 |
| 4.10                   | 710              | 715 | 719 | 724 | 728 | 733 | 737 | 742 | 746 | 751 |
| 4.20                   | 755              | 760 | 765 | 770 | 775 | 780 | 785 | 790 | 795 | 800 |
| 4.30                   | 805              | 810 | 815 | 821 | 826 | 831 | 836 | 841 | 847 | 852 |
| 4.40                   | 857              | 862 | 868 | 873 | 878 | 884 | 889 | 894 | 899 | 905 |

TABLE 4

DISCHARGE RATING TABLE - LITTLE WOOD RIVER NR CAREY, ID  
(USGS STA NO. 13148500)

| GAGE<br>HEIGHT<br>FEET | DISCHARGE IN CFS |      |      |      |      |      |      |      |      |      |
|------------------------|------------------|------|------|------|------|------|------|------|------|------|
|                        | .00              | .01  | .02  | .03  | .04  | .05  | .06  | .07  | .08  | .09  |
| 4.50                   | 910              | 916  | 921  | 927  | 932  | 938  | 943  | 949  | 954  | 960  |
| 4.60                   | 965              | 971  | 976  | 982  | 987  | 993  | 998  | 1004 | 1009 | 1015 |
| 4.70                   | 1020             | 1026 | 1032 | 1038 | 1044 | 1050 | 1056 | 1062 | 1068 | 1074 |
| 4.80                   | 1080             | 1086 | 1092 | 1098 | 1104 | 1110 | 1116 | 1122 | 1128 | 1134 |
| 4.90                   | 1140             | 1146 | 1152 | 1158 | 1164 | 1170 | 1176 | 1182 | 1188 | 1194 |
| 5.00                   | 1200             | 1206 | 1212 | 1218 | 1224 | 1230 | 1236 | 1242 | 1248 | 1254 |
| 5.10                   | 1260             | 1267 | 1274 | 1281 | 1288 | 1295 | 1302 | 1309 | 1316 | 1323 |
| 5.20                   | 1330             | 1337 | 1344 | 1351 | 1358 | 1365 | 1372 | 1379 | 1386 | 1393 |
| 5.30                   | 1400             | 1407 | 1414 | 1421 | 1428 | 1435 | 1442 | 1449 | 1456 | 1463 |
| 5.40                   | 1470             | 1477 | 1484 | 1491 | 1498 | 1505 | 1512 | 1519 | 1526 | 1533 |
| 5.50                   | 1540             | 1547 | 1554 | 1561 | 1568 | 1575 | 1582 | 1589 | 1596 | 1603 |
| 5.60                   | 1610             | 1617 | 1624 | 1631 | 1638 | 1645 | 1652 | 1659 | 1666 | 1673 |
| 5.70                   | 1680             | 1688 | 1696 | 1704 | 1712 | 1720 | 1728 | 1736 | 1744 | 1752 |
| 5.80                   | 1760             | 1768 | 1776 | 1784 | 1792 | 1800 | 1808 | 1816 | 1824 | 1832 |
| 5.90                   | 1840             | 1848 | 1856 | 1864 | 1872 | 1880 | 1888 | 1896 | 1904 | 1912 |
| 6.00                   | 1920             | 1928 | 1936 | 1944 | 1952 | 1960 | 1968 | 1976 | 1984 | 1992 |
| 6.10                   | 2000             | 2008 | 2016 | 2024 | 2032 | 2040 | 2048 | 2056 | 2064 | 2072 |
| 6.20                   | 2080             | 2088 | 2096 | 2104 | 2112 | 2120 | 2128 | 2136 | 2144 | 2152 |
| 6.30                   | 2160             | 2169 | 2178 | 2187 | 2196 | 2205 | 2214 | 2223 | 2232 | 2240 |
| 6.40                   | 2250             | 2259 | 2268 | 2277 | 2286 | 2295 | 2304 | 2313 | 2322 | 2331 |
| 6.50                   | 2340             | 2349 | 2358 | 2367 | 2376 | 2385 | 2394 | 2403 | 2412 | 2421 |
| 6.60                   | 2430             | 2439 | 2448 | 2457 | 2466 | 2475 | 2484 | 2493 | 2502 | 2511 |
| 6.70                   | 2520             | 2529 | 2538 | 2547 | 2556 | 2565 | 2574 | 2583 | 2592 | 2601 |
| 6.80                   | 2610             | 2619 | 2628 | 2637 | 2646 | 2655 | 2664 | 2673 | 2682 | 2691 |
| 6.90                   | 2700             | 2710 | 2720 | 2730 | 2740 | 2750 | 2760 | 2770 | 2780 | 2790 |
| 7.00                   | 2800             | 2810 | 2820 | 2830 | 2840 | 2850 | 2860 | 2870 | 2880 | 2890 |
| 7.10                   | 2900             | 2910 | 2920 | 2930 | 2940 | 2950 | 2960 | 2970 | 2980 | 2990 |
| 7.20                   | 3000             | 3010 | 3020 | 3030 | 3040 | 3050 | 3060 | 3070 | 3080 | 3090 |
| 7.30                   | 3100             | 3110 | 3120 | 3130 | 3140 | 3150 | 3160 | 3170 | 3180 | 3190 |
| 7.40                   | 3200             | 3211 | 3222 | 3233 | 3244 | 3255 | 3266 | 3277 | 3288 | 3299 |
| 7.50                   | 3310             | 3321 | 3332 | 3343 | 3354 | 3365 | 3376 | 3387 | 3398 | 3409 |
| 7.60                   | 3420             | 3431 | 3442 | 3453 | 3464 | 3475 | 3486 | 3497 | 3508 | 3519 |
| 7.70                   | 3530             | 3541 | 3552 | 3563 | 3574 | 3585 | 3596 | 3607 | 3618 | 3629 |
| 7.80                   | 3640             | 3651 | 3662 | 3673 | 3684 | 3695 | 3706 | 3717 | 3728 | 3739 |
| 7.90                   | 3750             | 3761 | 3772 | 3783 | 3794 | 3805 | 3816 | 3827 | 3838 | 3849 |
| 8.00                   | 3860             | 3872 | 3884 | 3896 | 3908 | 3920 | 3932 | 3944 | 3956 | 3968 |
| 8.10                   | 3980             | 3992 | 4004 | 4016 | 4028 | 4040 | 4052 | 4064 | 4076 | 4088 |
| 8.20                   | 4100             | 4112 | 4124 | 4136 | 4148 | 4160 | 4172 | 4184 | 4196 | 4208 |
| 8.30                   | 4220             | 4232 | 4244 | 4256 | 4268 | 4280 | 4292 | 4304 | 4316 | 4328 |
| 8.40                   | 4340             | 4352 | 4364 | 4376 | 4388 | 4400 | 4412 | 4424 | 4436 | 4448 |



TABLE 4

DISCHARGE RATING TABLE - LITTLE WOOD RIVER NR CAREY, ID  
(USGS STA NO. 13148500)

| GAGE<br>HEIGHT<br>FEET | DISCHARGE IN CFS |       |       |       |       |       |       |       |       |       |
|------------------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                        | .00              | .01   | .02   | .03   | .04   | .05   | .06   | .07   | .08   | .09   |
| 8.50                   | 4460             | 4473  | 4486  | 4499  | 4512  | 4525  | 4538  | 4551  | 4564  | 4577  |
| 8.60                   | 4590             | 4603  | 4616  | 4629  | 4642  | 4655  | 4668  | 4681  | 4694  | 4707  |
| 8.70                   | 4720             | 4733  | 4746  | 4759  | 4772  | 4785  | 4798  | 4811  | 4824  | 4837  |
| 8.80                   | 4850             | 4863  | 4876  | 4889  | 4902  | 4915  | 4928  | 4941  | 4954  | 4967  |
| 8.90                   | 4980             | 4993  | 5006  | 5019  | 5032  | 5045  | 5058  | 5071  | 5084  | 5097  |
| 9.00                   | 5110             | 5123  | 5136  | 5149  | 5162  | 5175  | 5188  | 5201  | 5214  | 5227  |
| 9.10                   | 5240             | 5254  | 5268  | 5282  | 5296  | 5310  | 5324  | 5338  | 5352  | 5366  |
| 9.20                   | 5380             | 5394  | 5408  | 5422  | 5436  | 5450  | 5464  | 5478  | 5492  | 5506  |
| 9.30                   | 5520             | 5534  | 5548  | 5562  | 5576  | 5590  | 5604  | 5618  | 5632  | 5646  |
| 9.40                   | 5660             | 5674  | 5688  | 5702  | 5716  | 5730  | 5744  | 5758  | 5772  | 5786  |
| 9.50                   | 5800             | 5814  | 5828  | 5842  | 5856  | 5870  | 5884  | 5898  | 5912  | 5926  |
| 9.60                   | 5940             | 5954  | 5968  | 5982  | 5996  | 6010  | 6024  | 6038  | 6052  | 6066  |
| 9.70                   | 6080             | 6095  | 6110  | 6125  | 6140  | 6155  | 6170  | 6185  | 6200  | 6215  |
| 9.80                   | 6230             | 6245  | 6260  | 6275  | 6290  | 6305  | 6320  | 6335  | 6350  | 6365  |
| 9.90                   | 6380             | 6395  | 6410  | 6425  | 6440  | 6455  | 6470  | 6485  | 6500  | 6515  |
| 10.00                  | 6530             | 6545  | 6560  | 6575  | 6590  | 6605  | 6620  | 6635  | 6650  | 6665  |
| 10.10                  | 6680             | 6695  | 6710  | 6725  | 6740  | 6755  | 6770  | 6785  | 6800  | 6815  |
| 10.20                  | 6830             | 6846  | 6862  | 6878  | 6894  | 6910  | 6926  | 6942  | 6958  | 6974  |
| 10.30                  | 6990             | 7006  | 7022  | 7038  | 7054  | 7070  | 7086  | 7102  | 7118  | 7134  |
| 10.40                  | 7150             | 7166  | 7182  | 7198  | 7214  | 7230  | 7246  | 7262  | 7278  | 7294  |
| 10.50                  | 7310             | 7326  | 7342  | 7358  | 7374  | 7390  | 7406  | 7422  | 7438  | 7454  |
| 10.60                  | 7470             | 7486  | 7502  | 7518  | 7534  | 7550  | 7566  | 7582  | 7598  | 7614  |
| 10.70                  | 7630             | 7647  | 7664  | 7681  | 7698  | 7715  | 7732  | 7749  | 7766  | 7783  |
| 10.80                  | 7800             | 7817  | 7834  | 7851  | 7868  | 7885  | 7902  | 7919  | 7936  | 7953  |
| 10.90                  | 7970             | 7987  | 8004  | 8021  | 8038  | 8055  | 8072  | 8089  | 8106  | 8123  |
| 11.00                  | 8140             | 8157  | 8174  | 8191  | 8208  | 8225  | 8242  | 8259  | 8276  | 8293  |
| 11.10                  | 8310             | 8327  | 8344  | 8361  | 8378  | 8395  | 8412  | 8429  | 8446  | 8463  |
| 11.20                  | 8480             | 8497  | 8514  | 8531  | 8548  | 8565  | 8582  | 8599  | 8616  | 8633  |
| 11.30                  | 8650             | 8668  | 8686  | 8704  | 8722  | 8740  | 8758  | 8776  | 8794  | 8812  |
| 11.40                  | 8830             | 8848  | 8866  | 8884  | 8902  | 8920  | 8938  | 8956  | 8974  | 8992  |
| 11.50                  | 9010             | 9028  | 9046  | 9064  | 9082  | 9100  | 9118  | 9136  | 9154  | 9172  |
| 11.60                  | 9190             | 9208  | 9226  | 9244  | 9262  | 9280  | 9298  | 9316  | 9334  | 9352  |
| 11.70                  | 9370             | 9388  | 9406  | 9424  | 9442  | 9460  | 9478  | 9496  | 9514  | 9532  |
| 11.80                  | 9550             | 9569  | 9588  | 9607  | 9626  | 9645  | 9664  | 9683  | 9702  | 9721  |
| 11.90                  | 9740             | 9759  | 9778  | 9797  | 9816  | 9835  | 9854  | 9873  | 9892  | 9911  |
| 12.00                  | 9930             | 9949  | 9968  | 9987  | 10006 | 10025 | 10044 | 10063 | 10082 | 10101 |
| 12.10                  | 10120            | 10139 | 10158 | 10177 | 10196 | 10215 | 10234 | 10253 | 10272 | 10291 |
| 12.20                  | 10310            | 10329 | 10348 | 10367 | 10386 | 10405 | 10424 | 10443 | 10462 | 10481 |
| 12.30                  | 10500            | 10520 | 10540 | 10560 | 10580 | 10600 | 10620 | 10640 | 10660 | 10680 |
| 12.40                  | 10700            | 10720 | 10740 | 10760 | 10780 | 10800 | 10820 | 10840 | 10860 | 10880 |



TABLE 4

DISCHARGE RATING TABLE - LITTLE WOOD RIVER NR CAREY, ID  
(USGS STA NO. 13148500)

| GAGE<br>HEIGHT<br>FEET | DISCHARGE IN CFS |       |       |       |       |       |       |       |       |       |
|------------------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                        | .00              | .01   | .02   | .03   | .04   | .05   | .06   | .07   | .08   | .09   |
| 12.50                  | 10900            | 10920 | 10940 | 10960 | 10980 | 11000 | 11020 | 11040 | 11060 | 11080 |
| 12.60                  | 11100            | 11120 | 11140 | 11160 | 11180 | 11200 | 11220 | 11240 | 11260 | 11280 |
| 12.70                  | 11300            | 11320 | 11340 | 11360 | 11380 | 11400 | 11420 | 11440 | 11460 | 11480 |
| 12.80                  | 11500            | 11520 | 11540 | 11560 | 11580 | 11600 | 11620 | 11640 | 11660 | 11680 |
| 12.90                  | 11700            | 11720 | 11740 | 11760 | 11780 | 11800 | 11820 | 11840 | 11860 | 11880 |
| 13.00                  | 11900            | 11920 | 11940 | 11960 | 11980 | 12000 | 12020 | 12040 | 12060 | 12080 |
| 13.10                  | 12100            | 12120 | 12140 | 12160 | 12180 | 12200 | 12220 | 12240 | 12260 | 12280 |
| 13.20                  | 12300            | 12320 | 12340 | 12360 | 12380 | 12400 | 12420 | 12440 | 12460 | 12480 |
| 13.30                  | 12500            | 12520 | 12540 | 12560 | 12580 | 12600 | 12620 | 12640 | 12660 | 12680 |
| 13.40                  | 12700            | 12720 | 12740 | 12760 | 12780 | 12800 | 12820 | 12840 | 12860 | 12880 |
| 13.50                  | 12900            | 12920 | 12940 | 12960 | 12980 | 13000 | 13020 | 13040 | 13060 | 13080 |
| 13.60                  | 13100            | 13120 | 13140 | 13160 | 13180 | 13200 | 13220 | 13240 | 13260 | 13280 |
| 13.70                  | 13300            | 13320 | 13340 | 13360 | 13380 | 13400 | 13420 | 13440 | 13460 | 13480 |
| 13.80                  | 13500            | 13525 | 13550 | 13575 | 13600 | 13625 | 13650 | 13675 | 13700 | 13725 |
| 13.90                  | 13750            | 13775 | 13800 | 13825 | 13850 | 13875 | 13900 | 13925 | 13950 | 13975 |
| 14.00                  | 14000            | 14025 | 14050 | 14075 | 14100 | 14125 | 14150 | 14175 | 14200 | 14225 |
| 14.10                  | 14250            | 14275 | 14300 | 14325 | 14350 | 14375 | 14400 | 14425 | 14450 | 14475 |
| 14.20                  | 14500            | 14525 | 14550 | 14575 | 14600 | 14625 | 14650 | 14675 | 14700 | 14725 |
| 14.30                  | 14750            | 14775 | 14800 | 14825 | 14850 | 14875 | 14900 | 14925 | 14950 | 14975 |
| 14.40                  | 15000            | 15025 | 15050 | 15075 | 15100 | 15125 | 15150 | 15175 | 15200 | 15225 |
| 14.50                  | 15250            | 15275 | 15300 | 15325 | 15350 | 15375 | 15400 | 15425 | 15450 | 15475 |
| 14.60                  | 15500            | 15525 | 15550 | 15575 | 15600 | 15625 | 15650 | 15675 | 15700 | 15725 |
| 14.70                  | 15750            | 15775 | 15800 | 15825 | 15850 | 15875 | 15900 | 15925 | 15950 | 15975 |
| 14.80                  | 16000            | 16025 | 16050 | 16075 | 16100 | 16125 | 16150 | 16175 | 16200 | 16225 |
| 14.90                  | 16250            | 16275 | 16300 | 16325 | 16350 | 16375 | 16400 | 16425 | 16450 | 16475 |
| 15.00                  | 16500            | 16525 | 16550 | 16575 | 16600 | 16625 | 16650 | 16675 | 16700 | 16725 |
| 15.10                  | 16750            | 16775 | 16800 | 16825 | 16850 | 16875 | 16900 | 16925 | 16950 | 16975 |
| 15.20                  | 17000            | 17025 | 17050 | 17075 | 17100 | 17125 | 17150 | 17175 | 17200 | 17225 |
| 15.30                  | 17250            | 17275 | 17300 | 17325 | 17350 | 17375 | 17400 | 17425 | 17450 | 17475 |
| 15.40                  | 17500            | 17525 | 17550 | 17575 | 17600 | 17625 | 17650 | 17675 | 17700 | 17725 |
| 15.50                  | 17750            | 17775 | 17800 | 17825 | 17850 | 17875 | 17900 | 17925 | 17950 | 17975 |
| 15.60                  | 18000            | 18025 | 18050 | 18075 | 18100 | 18125 | 18150 | 18175 | 18200 | 18225 |
| 15.70                  | 18250            | 18275 | 18300 | 18325 | 18350 | 18375 | 18400 | 18425 | 18450 | 18475 |
| 15.80                  | 18500            | 18525 | 18550 | 18575 | 18600 | 18625 | 18650 | 18675 | 18700 | 18725 |
| 15.90                  | 18750            | 18775 | 18800 | 18825 | 18850 | 18875 | 18900 | 18925 | 18950 | 18975 |
| 16.00                  | 19000            | 19025 | 19050 | 19075 | 19100 | 19125 | 19150 | 19175 | 19200 | 19225 |
| 16.10                  | 19250            | 19275 | 19300 | 19325 | 19350 | 19375 | 19400 | 19425 | 19450 | 19475 |
| 16.20                  | 19500            | 19525 | 19550 | 19575 | 19600 | 19625 | 19650 | 19675 | 19700 | 19725 |
| 16.30                  | 19750            | 19775 | 19800 | 19825 | 19850 | 19875 | 19900 | 19925 | 19950 | 19975 |
| 16.40                  | 20000            | 20025 | 20050 | 20075 | 20100 | 20125 | 20150 | 20175 | 20200 | 20225 |



TABLE 4

DISCHARGE RATING TABLE - LITTLE WOOD RIVER NR CAREY, ID  
(USGS STA NO. 13148500)

| GAGE<br>HEIGHT<br>FEET | DISCHARGE IN CFS |       |       |       |       |       |       |       |       |       |
|------------------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                        | .00              | .01   | .02   | .03   | .04   | .05   | .06   | .07   | .08   | .09   |
| 16.50                  | 20250            | 20275 | 20300 | 20325 | 20350 | 20375 | 20400 | 20425 | 20450 | 20475 |
| 16.60                  | 20500            | 20530 | 20560 | 20590 | 20620 | 20650 | 20680 | 20710 | 20740 | 20770 |
| 16.70                  | 20800            | 20830 | 20860 | 20890 | 20920 | 20950 | 20980 | 21010 | 21040 | 21070 |
| 16.80                  | 21100            | 21130 | 21160 | 21190 | 21220 | 21250 | 21280 | 21310 | 21340 | 21370 |
| 16.90                  | 21400            | 21430 | 21460 | 21490 | 21520 | 21550 | 21580 | 21610 | 21640 | 21670 |
| 17.00                  | 21700.           |       |       |       |       |       |       |       |       |       |

# RATING TABLE

## LITTLE WOOD RIVER NEAR CAREY, IDAHO

| Gage<br>Height | Dis-<br>charge | Differ-<br>ence |  | Gage<br>Height | Dis-<br>charge | Differ-<br>ence |
|----------------|----------------|-----------------|--|----------------|----------------|-----------------|
| Feet           | CFS            | CFS             |  | Feet           | CFS            | CFS             |
| 1.00           |                |                 |  | 5.00           | 794            | 42              |
| .10            |                |                 |  | .10            | 836            | 42              |
| .20            |                |                 |  | .20            | 878            | 43              |
| .30            | 1.2            | 0.4             |  | .30            | 921            | 44              |
| .40            | 1.6            | .8              |  | .40            | 965            | 45              |
| .50            | 2.4            | 1.2             |  | .50            | 1,010          | 40              |
| .60            | 3.6            | 2.0             |  | .60            | 1,050          | 50              |
| .70            | 5.6            | 2.7             |  | .70            | 1,100          | 40              |
| .80            | 8.3            | 3.5             |  | .80            | 1,140          | 50              |
| .90            | 11.8           | 4.4             |  | .90            | 1,190          | 40              |
| 2.00           | 16.2           | 5.3             |  | 6.00           | 1,230          | 50              |
| .10            | 21.5           | 6.6             |  | .10            | 1,280          | 40              |
| .20            | 28.1           | 8.1             |  | .20            | 1,320          | 50              |
| .30            | 36.2           | 9.7             |  | .30            | 1,370          | 50              |
| .40            | 45.9           | 11.0            |  | .40            | 1,420          | 40              |
| .50            | 56.9           | 12.3            |  | .50            | 1,460          | 50              |
| .60            | 69.2           | 13.7            |  | .60            | 1,510          | 50              |
| .70            | 82.9           | 15.1            |  | .70            | 1,560          | 40              |
| .80            | 98.0           | 18              |  | .80            | 1,600          | 50              |
| .90            | 116            | 20              |  | .90            | 1,650          | 50              |
| 3.00           | 136            | 22              |  | 7.00           | 1,700          | 50              |
| .10            | 158            | 24              |  | .10            | 1,750          | 40              |
| .20            | 182            | 25              |  | .20            | 1,790          | 50              |
| .30            | 207            | 27              |  | .30            | 1,840          | 50              |
| .40            | 234            | 28              |  | .40            | 1,890          | 50              |
| .50            | 262            | 29              |  | .50            | 1,940          | 50              |
| .60            | 291            | 30              |  | .60            | 1,990          | 40              |
| .70            | 321            | 31              |  | .70            | 2,030          |                 |
| .80            | 352            | 32              |  | .80            |                |                 |
| .90            | 384            | 33              |  | .90            |                |                 |
| 4.00           | 417            | 34              |  | 8.00           |                |                 |
| .10            | 451            | 35              |  |                |                |                 |
| .20            | 486            | 36              |  |                |                |                 |
| .30            | 522            | 36              |  |                |                |                 |
| .40            | 558            | 37              |  |                |                |                 |
| .50            | 595            | 38              |  |                |                |                 |
| .60            | 633            | 39              |  |                |                |                 |
| .70            | 672            | 40              |  |                |                |                 |
| .80            | 712            | 41              |  |                |                |                 |
| .90            | 753            | 41              |  |                |                |                 |

NOTE: Data taken from U. S. G. S. table dated 1 Oct 1960



# RATING TABLE

Little Wood River Above High Five Creek Near Carey, Idaho

| Gage<br>Height | Dis-<br>Charge | Differ-<br>ence |  | Gage<br>Height | Dis-<br>Charge | Differ-<br>ence |
|----------------|----------------|-----------------|--|----------------|----------------|-----------------|
| Feet           | CFS            | CFS             |  | Feet           | CFS            | CFS             |
| 1.00           |                |                 |  |                |                |                 |
| .10            |                |                 |  |                |                |                 |
| .20            |                |                 |  |                |                |                 |
| .30            | 13             | 7               |  |                |                |                 |
| .40            | 20             | 8               |  |                |                |                 |
| .50            | 28             | 9               |  |                |                |                 |
| .60            | 37             | 9.5             |  |                |                |                 |
| .70            | 46.5           | 10.5            |  |                |                |                 |
| .80            | 57             | 11.5            |  |                |                |                 |
| .90            | 68.5           | 12.5            |  |                |                |                 |
| 2.00           | 81             | 13              |  |                |                |                 |
| .10            | 94             | 14              |  |                |                |                 |
| .20            | 108            | 15              |  |                |                |                 |
| .30            | 123            | 16              |  |                |                |                 |
| .40            | 139            | 18              |  |                |                |                 |
| .50            | 157            | 20              |  |                |                |                 |
| .60            | 177            | 22              |  |                |                |                 |
| .70            | 199            | 24              |  |                |                |                 |
| .80            | 223            | 26              |  |                |                |                 |
| .90            | 249            | 28              |  |                |                |                 |
| 3.00           | 277            | 30              |  |                |                |                 |
| .10            | 307            | 32              |  |                |                |                 |
| .20            | 339            | 34              |  |                |                |                 |
| .30            | 373            | 37              |  |                |                |                 |
| .40            | 410            | 40              |  |                |                |                 |
| .50            | 450            | 50              |  |                |                |                 |
| .60            | 500            | 50              |  |                |                |                 |
| .70            | 550            | 50              |  |                |                |                 |
| .80            | 600            | 50              |  |                |                |                 |
| .90            | 650            | 50              |  |                |                |                 |
| 4.00           | 700            | 50              |  |                |                |                 |
| .10            | 750            | 60              |  |                |                |                 |
| .20            | 810            | 60              |  |                |                |                 |
| .30            | 870            | 60              |  |                |                |                 |
| .40            | 930            | 60              |  |                |                |                 |
| .50            | 990            | 60              |  |                |                |                 |
| .60            |                |                 |  |                |                |                 |
| .70            |                |                 |  |                |                |                 |
| .80            |                |                 |  |                |                |                 |
| .90            |                |                 |  |                |                |                 |

NOTE: Data taken from U.S.G.S. table dated 5 April 1960

TABLE 5

TABLE 6

## Unregulated Runoff Little Wood River near Carey, Idaho

| Year      | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Total<br>Oct.-Sept. | Total<br>Apr-Sept | Total<br>Apr-July |
|-----------|------|------|------|------|------|------|------|------|------|------|------|-------|---------------------|-------------------|-------------------|
| 1926-27   | 1.9  | 2.7  | 3.0  | 3.1  | 2.9  | 6.5  | 27.7 | 37.8 | 36.1 | 12.4 | 4.3  | 4.4   | 142.8               | 122.7             |                   |
| 1927-28   | 4.8  | 6.6  | 4.2  | 3.7  | 3.0  | 11.6 | 11.1 | 24.1 | 9.4  | 4.4  | 1.8  | 1.5   | 86.2                | 52.3              |                   |
| 1928-29   | 2.2  | 2.7  | 2.4  | 2.4  | 2.1  | 3.8  | 6.7  | 10.1 | 8.4  | 2.7  | 0.9  | 1.5   | 45.9                | 30.3              |                   |
| 1929-30   | 1.8  | 2.2  | 4.2  | 1.6  | 1.9  | 3.9  | 15.8 | 17.2 | 12.9 | 4.5  | 2.6  | 2.2   | 70.8                | 55.2              |                   |
| 1930-31   | 3.9  | 2.9  | 2.0  | 2.0  | 1.7  | 2.5  | 5.9  | 6.7  | 3.3  | 0.8  | 0.7  | 0.6   | 33.0                | 18.0              |                   |
| 1931-32   | 1.2  | 1.6  | 1.7  | 1.6  | 1.7  | 3.6  | 18.7 | 38.2 | 26.4 | 9.4  | 2.9  | 2.3   | 109.3               | 97.8              |                   |
| 1932-33   | 3.1  | 2.9  | 2.2  | 2.2  | 1.9  | 2.5  | 10.5 | 15.6 | 18.3 | 4.1  | 1.4  | 1.3   | 66.0                | 51.2              |                   |
| 1933-34   | 1.8  | 2.5  | 2.6  | 2.7  | 3.2  | 5.6  | 5.4  | 4.9  | 2.4  | 0.9  | 0.4  | 0.6   | 33.0                | 14.6              |                   |
| 1934-35   | 1.2  | 1.8  | 1.5  | 1.5  | 1.7  | 3.3  | 14.7 | 20.0 | 25.0 | 7.0  | 2.3  | 1.3   | 81.3                | 70.3              |                   |
| 1935-36   | 1.9  | 2.4  | 2.5  | 2.5  | 2.3  | 3.6  | 23.6 | 18.9 | 13.3 | 3.8  | 2.2  | 1.8   | 78.8                | 63.6              | 59.6              |
| 1936-37   | 2.0  | 2.4  | 2.1  | 2.0  | 2.1  | 3.4  | 12.4 | 16.3 | 7.0  | 3.1  | 1.0  | 0.8   | 54.6                | 40.6              | 38.8              |
| 1937-38   | 1.3  | 2.0  | 7.5  | 3.2  | 2.8  | 5.4  | 56.1 | 59.4 | 40.0 | 23.9 | 6.0  | 3.6   | 211.2               | 189.0             | 179.4             |
| 1938-39   | 5.2  | 4.7  | 4.0  | 3.7  | 3.0  | 11.3 | 13.9 | 10.6 | 5.2  | 2.5  | 1.0  | 1.0   | 66.1                | 34.2              | 32.2              |
| 1939-40   | 1.8  | 2.1  | 2.2  | 2.2  | 2.5  | 9.2  | 22.0 | 21.9 | 10.6 | 3.4  | 1.3  | 2.2   | 81.4                | 61.4              | 57.9              |
| 1940-41   | 3.6  | 3.1  | 3.1  | 3.1  | 3.3  | 6.2  | 16.4 | 18.6 | 13.6 | 5.5  | 3.6  | 3.9   | 84.0                | 61.6              | 54.1              |
| 1941-42   | 3.6  | 3.9  | 4.0  | 3.9  | 2.3  | 4.4  | 32.8 | 24.3 | 22.4 | 12.2 | 4.5  | 2.6   | 120.9               | 98.8              | 91.7              |
| 1942-43   | 3.5  | 4.2  | 3.5  | 3.7  | 3.5  | 7.9  | 46.0 | 39.7 | 29.8 | 18.1 | 5.8  | 5.5   | 171.0               | 144.9             | 133.6             |
| 1943-44   | 4.3  | 4.2  | 3.2  | 3.1  | 2.5  | 4.3  | 15.7 | 22.7 | 24.7 | 12.1 | 3.7  | 2.2   | 102.7               | 81.1              | 75.2              |
| 1944-45   | 3.2  | 3.7  | 3.0  | 2.9  | 4.5  | 4.9  | 16.1 | 18.6 | 19.7 | 8.2  | 2.9  | 2.8   | 90.5                | 68.3              | 62.6              |
| 1945-46   | 3.5  | 3.8  | 3.8  | 4.2  | 3.5  | 7.8  | 37.3 | 24.6 | 16.4 | 5.9  | 2.6  | 2.7   | 116.1               | 89.5              | 84.2              |
| 1946-47   | 5.2  | 4.9  | 4.9  | 4.1  | 2.1  | 16.8 | 23.0 | 28.5 | 14.7 | 6.2  | 2.6  | 3.3   | 116.3               | 78.3              | 72.4              |
| 1947-48   | 3.0  | 2.4  | 4.6  | 3.3  | 3.6  | 4.6  | 12.2 | 18.8 | 20.4 | 6.5  | 2.2  | 1.8   | 83.4                | 61.9              | 57.9              |
| 1948-49   | 3.7  | 3.5  | 2.3  | 2.6  | 3.3  | 4.1  | 23.4 | 20.5 | 10.5 | 3.2  | 1.9  | 1.1   | 80.1                | 60.6              | 57.6              |
| 1949-50   | 2.8  | 3.1  | 3.1  | 2.5  | 3.0  | 2.8  | 35.6 | 29.1 | 20.3 | 12.5 | 3.1  | 0     | 117.9               | 100.6             | 97.5              |
| 1950-51   | 3.9  | 4.3  | 3.3  | 3.5  | 3.3  | 5.2  | 31.2 | 34.4 | 18.1 | 9.3  | 7.0  | 0.8   | 124.3               | 100.8             | 93.0              |
| 1951-52   | 4.6  | 3.3  | 3.4  | 4.2  | 4.2  | 4.7  | 60.6 | 67.3 | 30.2 | 12.0 | 4.3  | 2.5   | 201.3               | 176.9             | 170.1             |
| 1952-53   | 3.7  | 3.8  | 4.2  | 4.3  | 3.7  | 6.5  | 22.2 | 19.4 | 25.4 | 12.1 | 3.2  | 2.4   | 110.9               | 84.7              | 79.1              |
| 1953-54   | 2.3  | 3.1  | 2.6  | 3.5  | 3.5  | 4.9  | 15.8 | 18.9 | 12.2 | 4.8  | 2.2  | 3.0*  | 76.8                | 56.9              | 51.7              |
| 1954-55   | 2.8  | 3.3  | 2.0  | 2.0  | 1.8  | 2.7  | 6.7  | 14.4 | 16.2 | 6.7  | 2.1  | 1.8   | 62.5                | 47.9              | 44.0              |
| 1955-56   | 2.2  | 2.9  | 14.9 | 5.3  | 3.6  | 9.8  | 40.6 | 37.0 | 27.0 | 9.7  | 3.5  | 2.6   | 159.1               | 120.4             | 114.3             |
| 1956-57   | 3.5  | 3.7  | 3.0  | 3.1  | 3.9  | 5.9  | 13.4 | 40.5 | 28.3 | 10.1 | 3.4  | 3.1   | 120.7               | 98.8              | 92.3              |
| 1957-58   | 3.8  | 3.2  | 3.3  | 3.8  | 3.6  | 5.0  | 23.2 | 64.7 | 28.5 | 10.6 | 4.2  | 3.5   | 157.4               | 134.7             | 127.0             |
| **1958-59 | 3.6  | 3.6  | 3.7  | 3.4  | 3.2  | 3.8  | 9.1  | 8.3  | 12.8 | 3.6  | 1.8  | 3.2   | 60.1                | 38.8              | 33.8              |

NOTE: Runoff adjusted for Little Wood Res. operation after Feb. 1941.

1/ Estimated by correlation w/L. Wood R. @ Campbell Ranch.

2/ Estimated by correlation w/Big Wood R. &amp; Slough at Hailey.

3/ Same as 2/ except adjusted to agree with rec. of total runoff for period.

4/ Same as 1/ except adjusted to agree with rec. of total runoff for period.

\* Estimated

\*\* Provisional record. Storage adjustment partially estimated.

Data computed by Regional Office No. 1, U.S.B.R.

TABLE 6



TABLE 7  
HYDROLOGIC DATA.

Project LITTLE WOOD RIVER RESERVOIR

Comp. \_\_\_\_\_

Subject Daily Flood Control Study - 1952 Flood

Chkd. \_\_\_\_\_

Date: \_\_\_\_\_

| Date<br>March | Forecast<br>From date<br>to 30 Sept. | SPACE<br>REQUIRED<br>From<br>Forecast | From<br>Recession<br>Curve | Computed<br>natural disch.<br>at Carey Gage | Water<br>RQMTS. | FLOOD<br>CONTROL<br>RELEASE | Regulated<br>disch. at<br>Carey Gage | Reservoir<br>Content<br>E.C.D | Maximum<br>Allowable<br>Res. Content | Reservoir<br>Inflow | Reservoir<br>Outflow |
|---------------|--------------------------------------|---------------------------------------|----------------------------|---|-----------------|-----------------------------|--------------------------------------|-------------------------------|--------------------------------------|---------------------|----------------------|
|               | 1000 A.F.                            | 1000 A.F.                             | 1000 A.F.                  | c.f.s.                                      | c.f.s.          | c.f.s.                      | c.f.s.                               | 1000 A.F.                     | 1000 A.F.                            | c.f.s.              | c.f.s.               |
| 1             | 156.8<br>156.6                       | Assume forecast<br>made on 5 Mar.     | 0                          | 80  | 84              | 0                           | 84                                   | 26.5                          | 26.5                                 | 80                  | 84                   |
| 2             | 156.5                                |                                       | "                          | 80  | "               | "                           | "                                    | "                             | "                                    | 80                  | "                    |
| 3             | 156.3                                |                                       | "                          | 80  | "               | "                           | "                                    | "                             | "                                    | 80                  | "                    |
| 4             | 156.2                                |                                       | "                          | 80  | "               | "                           | "                                    | "                             | "                                    | 80                  | "                    |
| 5             | 156.0                                |                                       | "                          | 80  | "               | 0                           | 84                                   | 26.5                          | 26.5                                 | 80                  | 84                   |
| 6             | 155.8                                | 30.0                                  | 0                          | 80  | 84              | 716                         | 800                                  | 5                             | 0                                    | 80                  | 800                  |
| 7             | 155.7                                | "                                     | "                          | 79  | "               | "                           | "                                    | 5                             | "                                    | 79                  | "                    |
| 8             | 155.5                                | "                                     | "                          | 79  | "               | "                           | "                                    | 5                             | "                                    | 79                  | "                    |
| 9             | 155.4                                | "                                     | "                          | 77  | "               | "                           | "                                    | 5                             | "                                    | 77                  | "                    |
| 10            | 155.2                                | 30.0                                  | 0                          | 80  | 84              | 716                         | 800                                  | 19.3                          | 0                                    | 80                  | 800                  |
| 11            | 155.1                                | "                                     | "                          | 80  | "               | "                           | "                                    | 5                             | "                                    | 80                  | "                    |
| 12            | 154.9                                | "                                     | "                          | 80  | "               | "                           | "                                    | 5                             | "                                    | 80                  | "                    |
| 13            | 154.7                                | "                                     | "                          | 80  | "               | "                           | "                                    | 5                             | "                                    | 80                  | "                    |
| 14            | 154.6                                | "                                     | "                          | 80  | "               | "                           | "                                    | 5                             | "                                    | 80                  | "                    |
| 15            | 154.4                                | 30.0                                  | 0                          | 80  | 84              | 716                         | 800                                  | 12.1                          | 0                                    | 80                  | 800                  |
| 16            | 154.3                                | "                                     | "                          | 80  | "               | "                           | "                                    | 5                             | "                                    | 80                  | "                    |
| 17            | 154.1                                | "                                     | "                          | 77  | "               | "                           | "                                    | 5                             | "                                    | 77                  | "                    |
| 18            | 153.9                                | "                                     | "                          | 75  | "               | "                           | "                                    | 5                             | "                                    | 75                  | "                    |
| 19            | 153.8                                | "                                     | "                          | 75  | "               | "                           | "                                    | 5                             | "                                    | 75                  | "                    |
| 20            | 153.7                                | 30.0                                  | 0                          | 68  | 84              | 716                         | 800                                  | 4.8                           | 0                                    | 68                  | 800                  |
| 21            | 153.5                                | "                                     | "                          | 64  | "               | 716                         | 800                                  | 3.3                           | 0                                    | 64                  | 800                  |
| 22            | 153.4                                | "                                     | "                          | 64  | "               | 696                         | 780                                  | 1.9                           | 0                                    | 64                  | 780                  |
| 23            | 153.3                                | "                                     | "                          | 64  | "               | 556                         | 640                                  | .8                            | 0                                    | 64                  | 640                  |
| 24            | 153.1                                | "                                     | "                          | 64  | "               | 241                         | 325                                  | .2                            | "                                    | 64                  | 325                  |
| 25            | 153.0                                | "                                     | "                          | 64  | "               | 51                          | 135                                  | .1                            | "                                    | 64                  | 135                  |
| 26            | 152.9                                | "                                     | "                          | 64  | "               | 0                           | 84                                   | .1                            | "                                    | 64                  | 84                   |
| 27            | 152.8                                | "                                     | "                          | 70  | "               | "                           | "                                    | .1                            | "                                    | 70                  | "                    |
| 28            | 152.6                                | "                                     | "                          | 76  | "               | "                           | "                                    | .1                            | "                                    | 76                  | "                    |
| 29            | 152.4                                | "                                     | "                          | 76  | "               | "                           | "                                    | .1                            | "                                    | 76                  | "                    |
| 30            | 152.3                                | "                                     | "                          | 76  | "               | "                           | "                                    | .1                            | "                                    | 76                  | "                    |
| 31            | 152.1                                | 30.0                                  | 0                          | 89  | 84              | 0                           | 84                                   | .1                            | 0                                    | 89                  | 84                   |



Project LITTLE WOOD RIVER RESERVOIR

Comp. \_\_\_\_\_

Subject Daily Flood Control Study-1952 Flood

Chkd. \_\_\_\_\_

Date: \_\_\_\_\_

[illegible]



# TABLE 7 HYDROLOGIC DATA.

Project LITTLE WOOD RIVER RESERVOIR

Comp. \_\_\_\_\_

Subject Daily Flood Control Study - 1952 Flood

Chkd. \_\_\_\_\_

Date: \_\_\_\_\_

| Date | Forecast<br>From date<br>to 30 Sept. | SPACE<br>REQUIRED<br>From<br>Forecast | SPACE<br>REQUIRED<br>From<br>Regression<br>Curve | Computed<br>natural disch.<br>at Carey gage | WATER<br>RGMTS. | FLOOD<br>CONTROL<br>RELEASE | Regulated<br>disch. at<br>Carey gage | Reservoir<br>Content<br>E.C.D. | Maximum<br>Allowable<br>Res. Content | Reservoir<br>Inflow | Reservoir<br>Outflow |
|------|--------------------------------------|---------------------------------------|--|---|-----------------|-----------------------------|--------------------------------------|--------------------------------|--------------------------------------|---------------------|----------------------|
| May  | 1000 A.F.                            | 1000 A.F.                             | 1000 A.F.  | c.f.s.                                      | c.f.s.          | c.f.s.                      | c.f.s.                               | 1000 A.F.                      | 1000 A.F.                            | c.f.s.              | c.f.s.               |
| 1    | 98.5                                 | 14.2                                  | 5.5  | 1680  | 182             | 1018                        | 1200                                 | 19.0                           | 15.8                                 | 1520                | 1040                 |
| 2    | 95.1                                 | 12.6                                  | 5.5  | 1680  | "               | 1018                        | 1200                                 | 20.0                           | 17.4                                 | 1530                | 1050                 |
| 3    | 91.6                                 | 10.8                                  | 5.9  | 1760  | "               | 1018                        | 1200                                 | 21.1                           | 19.2                                 | 1660                | 1100                 |
| 4    | 87.9                                 | 9.0                                   | 6.7  | 1900  | "               | 1018                        | 1200                                 | 22.5                           | 21.0                                 | 1740                | 1040                 |
| 5    | 84.6                                 | 7.3                                   | 5.3  | 1640  | 182             | 1018                        | 1200                                 | 23.4                           | 22.7                                 | 1500                | 1060                 |
| 6    | 81.8                                 | 5.9                                   | 4.2  | 1420  | "               | 1018                        | 1070                                 | 24.1                           | 24.1                                 | 1320                | 970                  |
| 7    | 79.2                                 | 4.8                                   | 3.6  | 1300  | "               | 1018                        | 750                                  | 25.2                           | 25.2                                 | 1200                | 650                  |
| 8    | 76.6                                 | 4.2                                   | 3.6  | 1300  | "               | 1018                        | 1000                                 | 25.8                           | 25.8                                 | 1200                | 900                  |
| 9    | 74.2                                 | 3.6                                   | 3.2  | 1220  | "               | 1018                        | 920                                  | 26.4                           | 26.4                                 | 1120                | 820                  |
| 10   | 72.0                                 | 3.0                                   | 2.9  | 1140  | 182             | 958                         | 840                                  | 27.0                           | 27.0                                 | 1100                | 800                  |
| 11   | 69.9                                 | 2.5                                   | 2.5  | 1040  | "               | 858                         | 790                                  | 27.5                           | 27.5                                 | 1040                | 790                  |
| 12   | 67.9                                 | 2.0                                   | 2.4  | 1020  | "               | 788                         | 970                                  | 27.6                           | 27.6                                 | 1020                | 970                  |
| 13   | 65.7                                 | 1.4                                   | 2.7  | 1090  | "               | 1018                        | 1100                                 | 27.6                           | 27.3                                 | 1090                | 1100                 |
| 14   | 63.3                                 | .8                                    | 3.1  | 1200  | "               | 1018                        | 1100                                 | 27.8                           | 26.9                                 | 1200                | 1100                 |
| 15   | 61.0                                 | .2                                    | 3.0  | 1170  | 182             | 1018                        | 1100                                 | 27.9                           | 27.0                                 | 1170                | 1100                 |
| 16   | 59.0                                 | 0                                     | 2.4  | 1020  | "               | 687                         | 1100                                 | 27.8                           | 27.6                                 | 1020                | 1100                 |
| 17   | 57.2                                 | 0                                     | 1.9  | 896   | "               | 462                         | 746                                  | 28.1                           | 28.1                                 | 896                 | 746                  |
| 18   | 55.6                                 | 0                                     | 1.7  | 841   | "               | 558                         | 740                                  | 28.3                           | 28.3                                 | 841                 | 740                  |
| 19   | 53.9                                 | 0                                     | 1.7  | 837   | "               | 655                         | 837                                  | 28.3                           | 28.3                                 | 837                 | 837                  |
| 20   | 52.2                                 | 0                                     | 1.7  | 841   | 182             | 659                         | 841                                  | 28.3                           | 28.3                                 | 841                 | 841                  |
| 21   | 50.6                                 | 0                                     | 1.7  | 841   | "               | 659                         | 841                                  | 28.3                           | 28.3                                 | 841                 | 841                  |
| 22   | 49.0                                 | 0                                     | 1.5  | 787   | "               | 504                         | 686                                  | 28.5                           | 28.5                                 | 787                 | 686                  |
| 23   | 47.5                                 | 0                                     | 1.3  | 738   | "               | 455                         | 637                                  | 28.7                           | 28.7                                 | 738                 | 637                  |
| 24   | 46.0                                 | 0                                     | 1.4  | 754   | "               | 622                         | 804                                  | 28.6                           | 28.6                                 | 754                 | 804                  |
| 25   | 44.4                                 | 0                                     | 1.7  | 837   | 182             | 806                         | 988                                  | 28.3                           | 28.3                                 | 837                 | 988                  |
| 26   | 42.6                                 | 0                                     | 1.9  | 904   | "               | 823                         | 1005                                 | 28.1                           | 28.1                                 | 904                 | 1005                 |
| 27   | 40.9                                 | 0                                     | 1.8  | 866   | "               | 634                         | 816                                  | 28.2                           | 28.2                                 | 866                 | 816                  |
| 28   | 39.2                                 | 0                                     | 1.7  | 841   | "               | 608                         | 790                                  | 28.3                           | 28.3                                 | 841                 | 790                  |
| 29   | 37.6                                 | 0                                     | 1.6  | 824   | "               | 592                         | 774                                  | 28.4                           | 28.4                                 | 824                 | 774                  |
| 30   | 36.0                                 | 0                                     | 1.5  | 803   | "               | 571                         | 753                                  | 28.5                           | 28.5                                 | 803                 | 753                  |
| 31   | 34.5                                 | 0                                     | 1.4  | 762   | 182             | 530                         | 712                                  | 28.6                           | 28.6                                 | 762                 | 712                  |

Project LITTLE WOOD RIVER RESERVOIR

Comp. \_\_\_\_\_

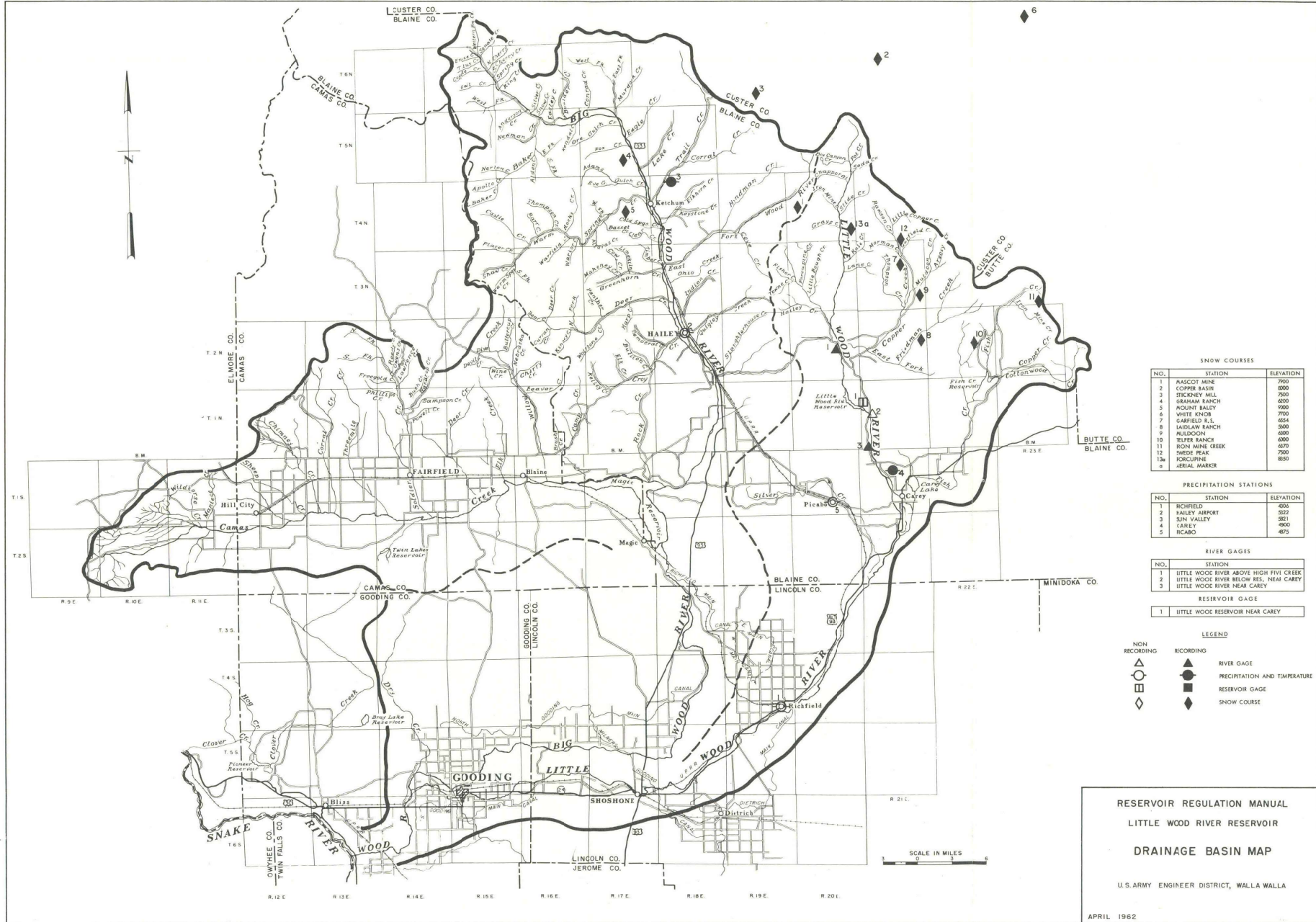
Subject Daily Flood Control Study - 1952 Flood

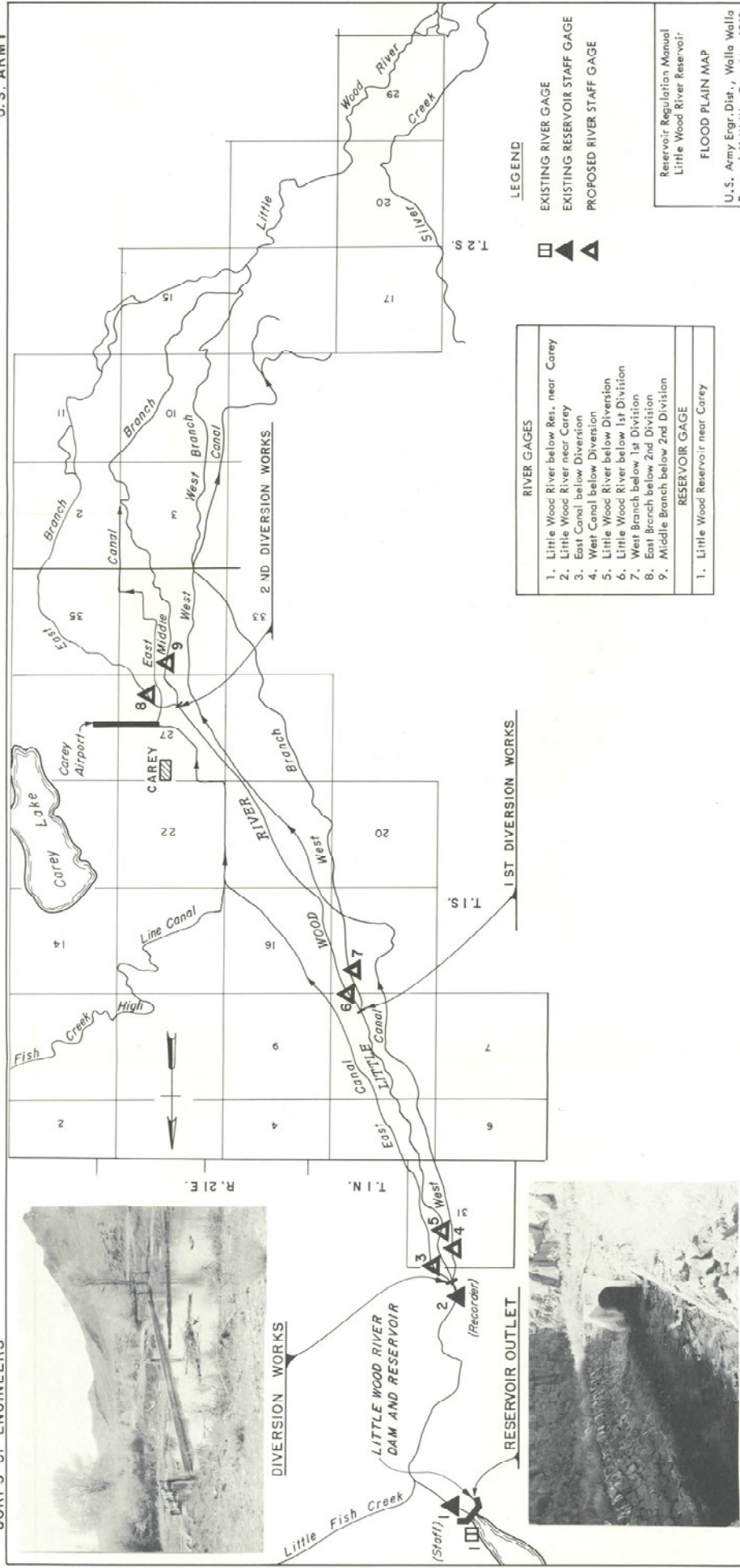
Chkd. \_\_\_\_\_

Date: \_\_\_\_\_

[illegible]



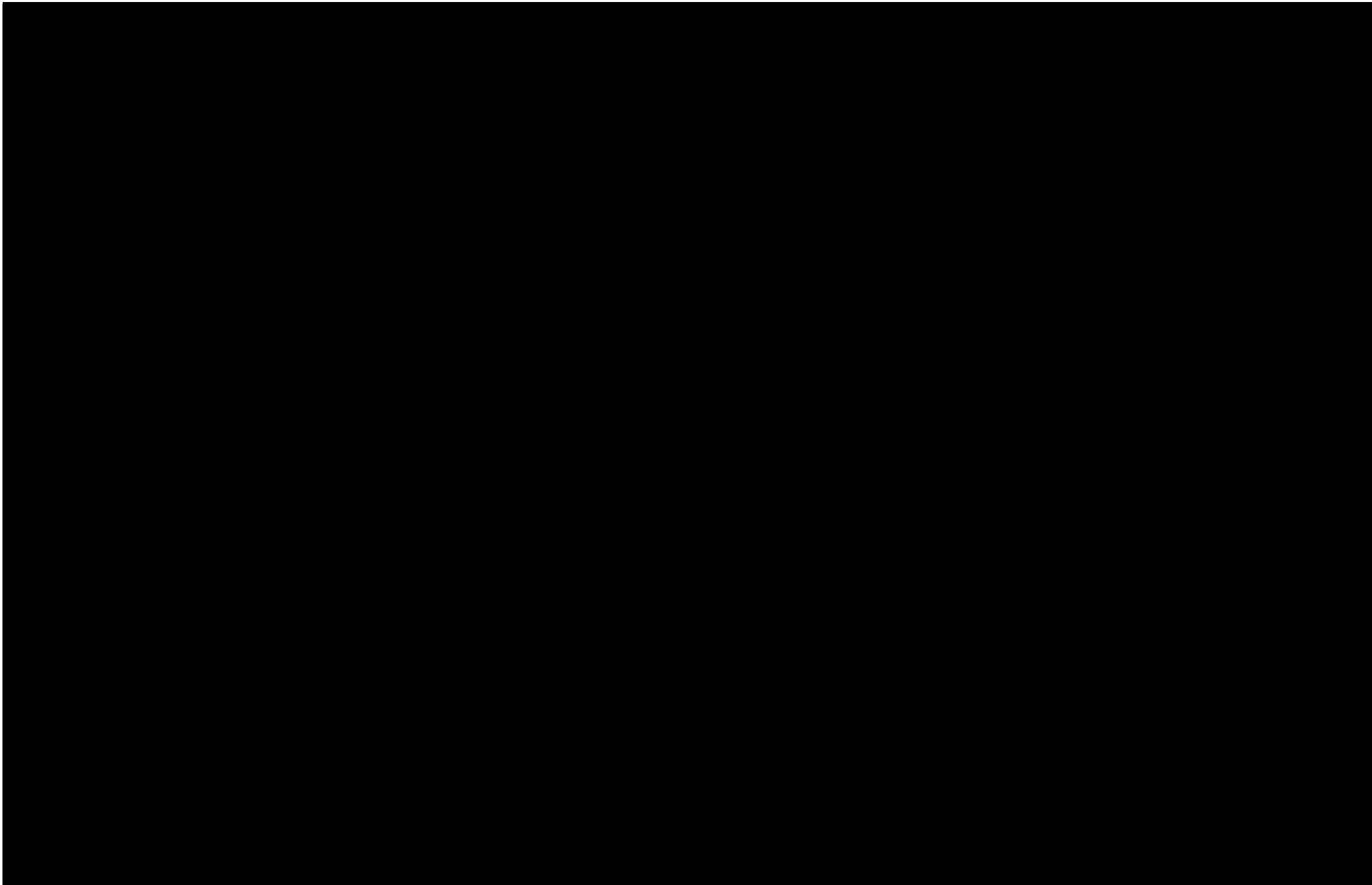




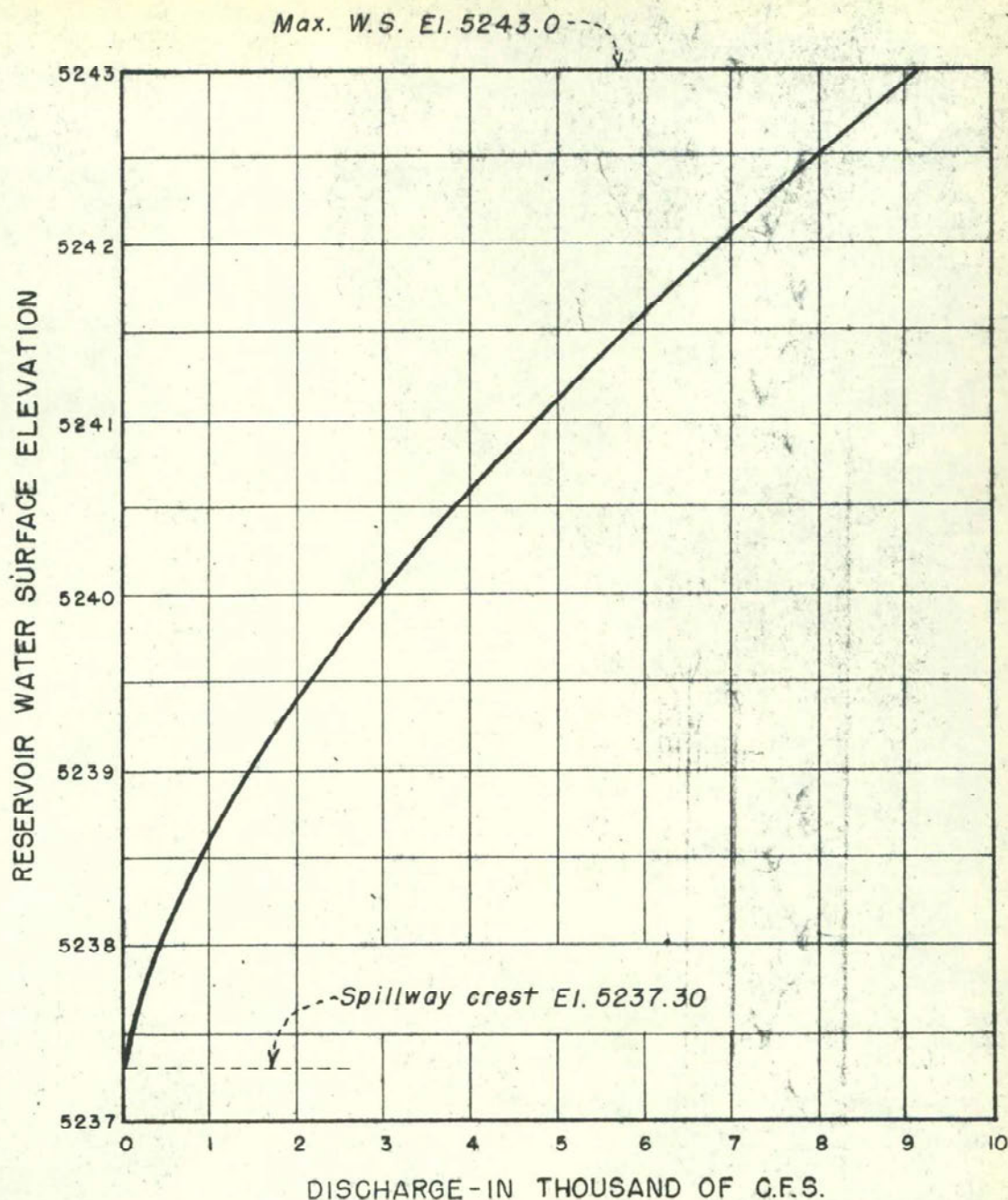
Reservoir Regulation Manual  
 Little Wood River Reservoir  
 FLOOD PLAIN MAP  
 U.S. Army Eng. Dist., Wella Wella  
 Prepared: K. W. W. Date: Mar. 1962









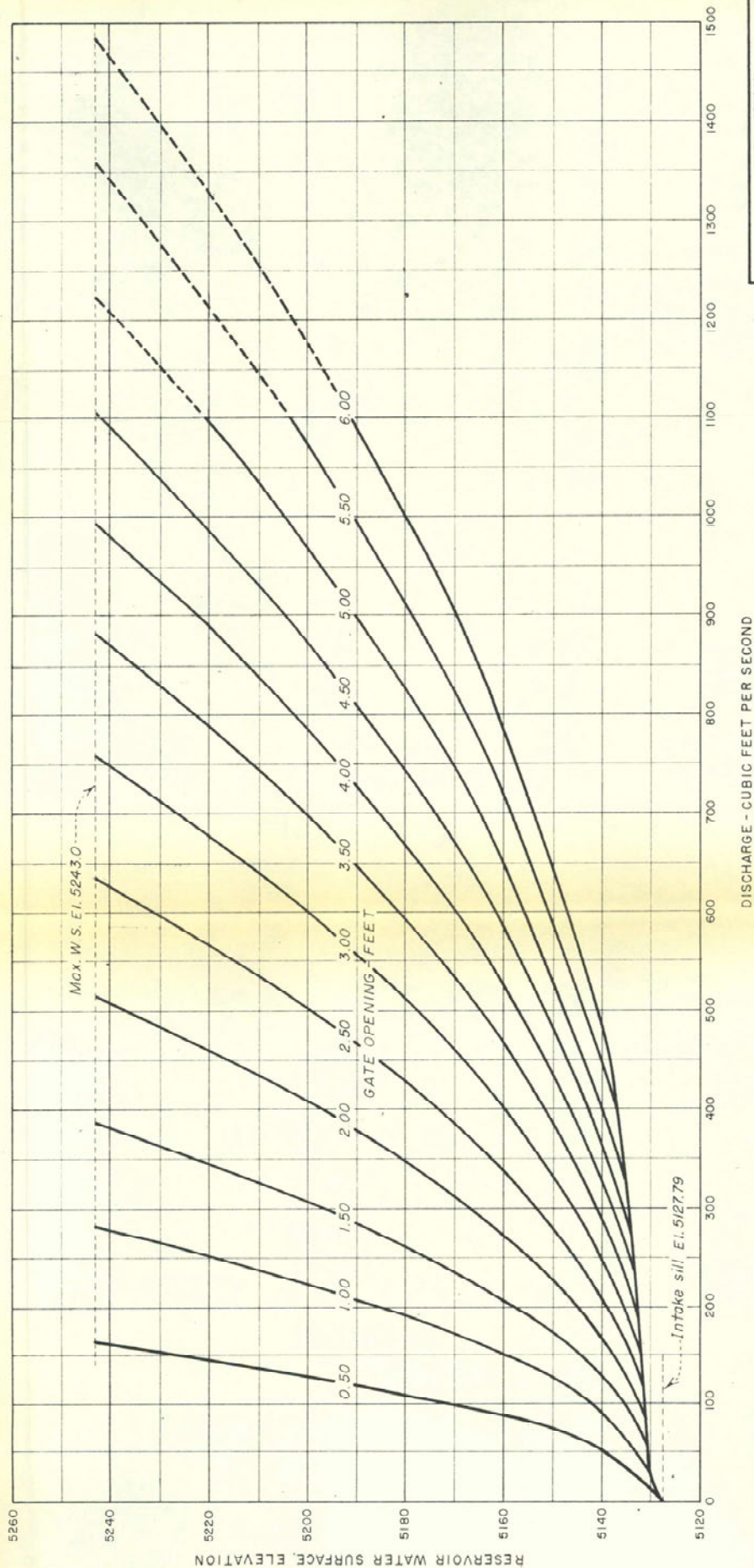


#### NOTES

200'- 0" Wide uncontrolled spillway crest.  
Any variation in discharges from this curve as determined by measurements of flow downstream from the spillway should be reported to the Assistant Commissioner and Chief Engineer.

|   |                                  |
|---|----------------------------------|
| UNITED STATES<br>DEPARTMENT OF THE INTERIOR<br>BUREAU OF RECLAMATION    |                                  |
| LITTLE WOOD RIVER PROJECT - IDAHO                                       |                                  |
| <b>LITTLE WOOD RIVER DAM ENLARGEMENT<br/>SPILLWAY - DISCHARGE CURVE</b> |                                  |
| DRAWN - J.E.W.  | SUBMITTED - <i>R.W. Whingson</i> |
| TRACED - R.T.S.   | RECOMMENDED - <i>O.F. Rice</i>   |
| CHECKED - <i>ETS</i>  | APPROVED - <i>C.V. Lindseth</i>  |
| ACT. CHIEF DESIGN. ENGR.  |                                  |
| DENVER, COLO., SEPT. 15, 1959   | <b>811-D-34</b>                  |



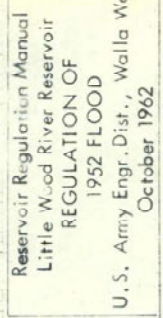


### NOTES

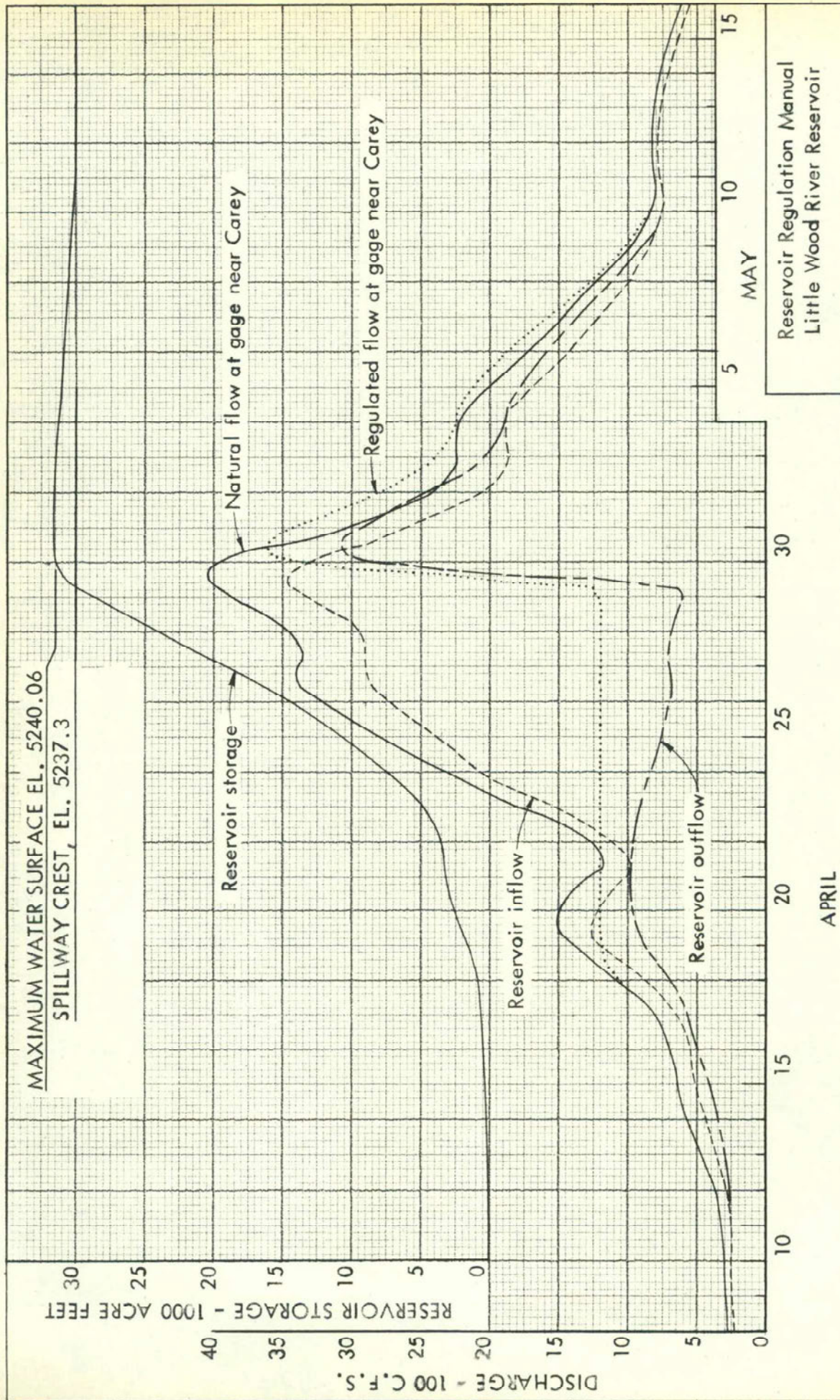
Gate : 4'-0" x 6'-0" H.P. regulating gate.  
 Any variations in discharge from these curves as determined by flow measurements downstream from the outlet works should be reported to the Assistant Commissioner and Chief Engineer.  
 Discharges through the outlet works are limited to a maximum of 1100 cubic feet per second.

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 BUREAU OF RECLAMATION  
 LITTLE WOOD RIVER PROJECT - IDAHO  
**LITTLE WOOD RIVER DAM ENLARGEMENT**  
**OUTLET WORKS - DISCHARGE CURVES**  
 DRAWN - J.E.W. SUBMITTED - R.H. Williams  
 TRACED - E.M.W. RECOMMENDED - R.H. Williams  
 CHECKED BY - J.E.W. APPROVED - R.H. Williams  
 CHIEF DESIGN ENGINEER  
 DENVER, COLO., SEPT. 15, 1939







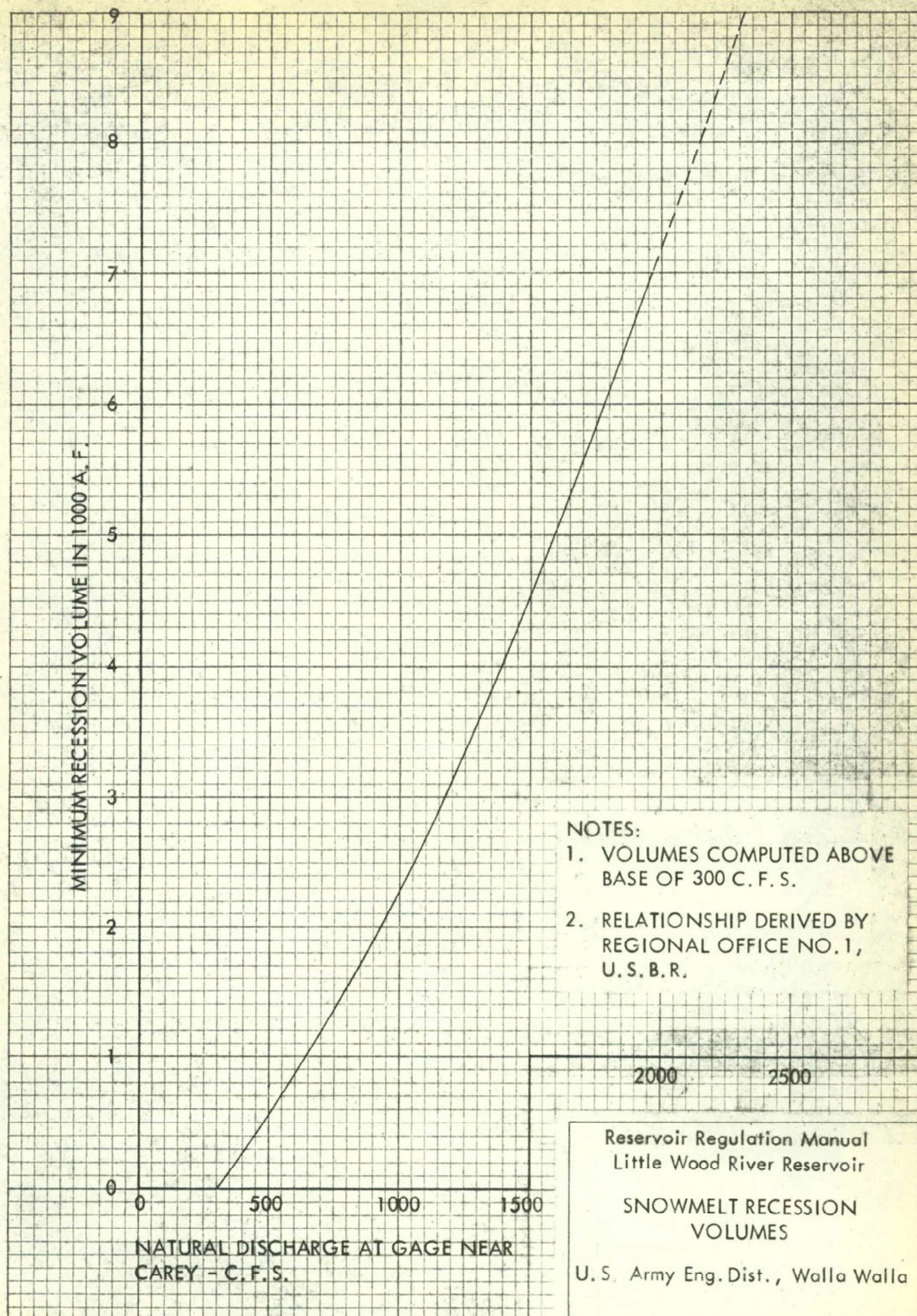


Reservoir Regulation Manual  
Little Wood River Reservoir

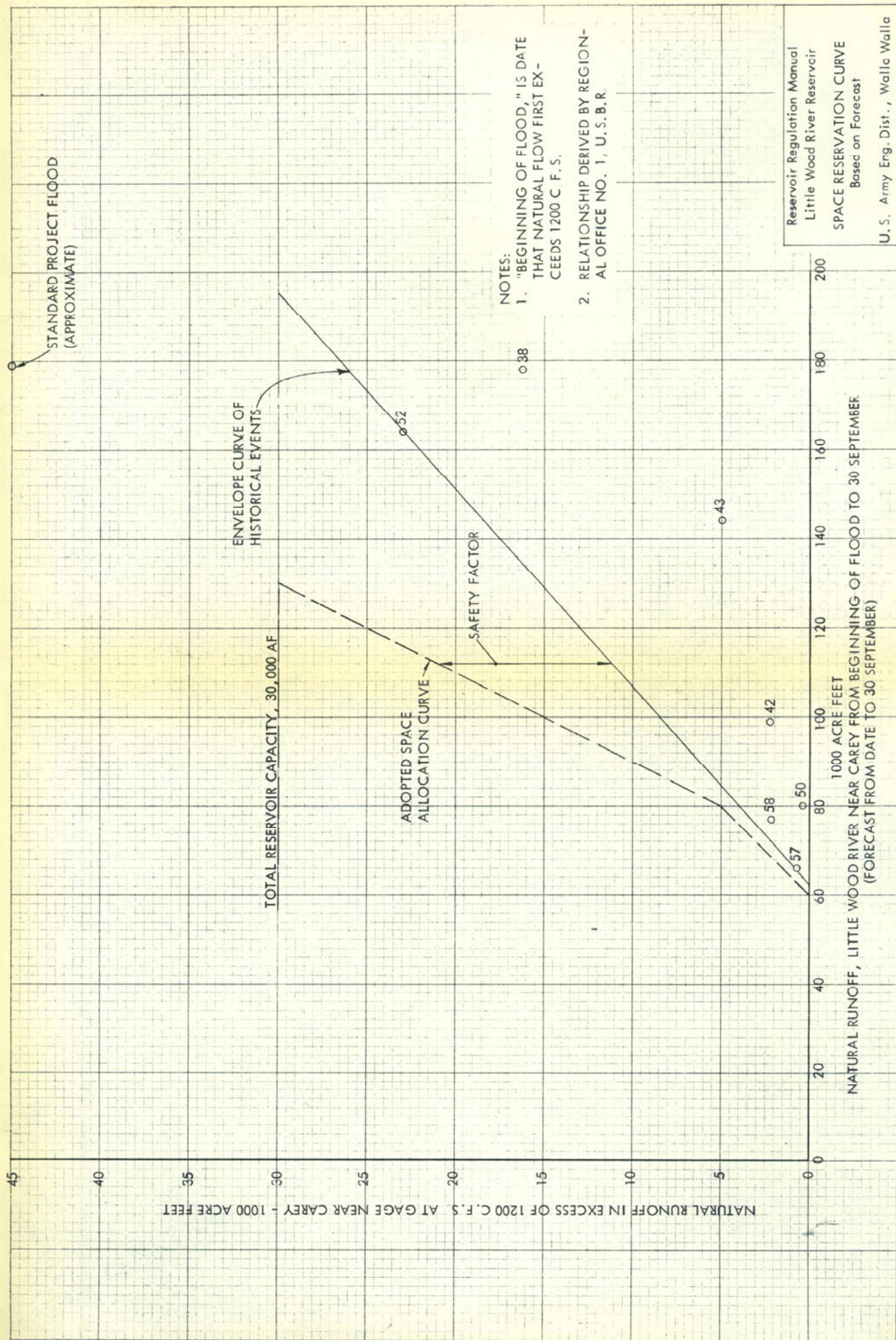
# REGULATION OF STANDARD PROJECT FLOOD

U.S. Army Engr. Dist., Walla Walla  
February 1962

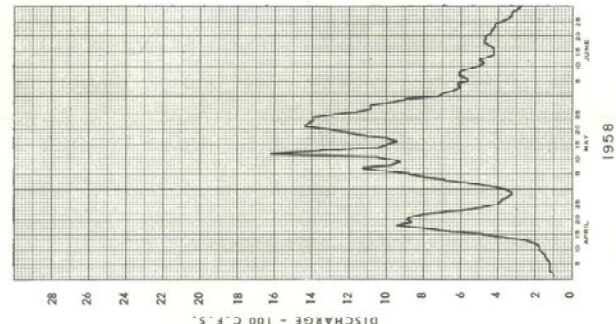
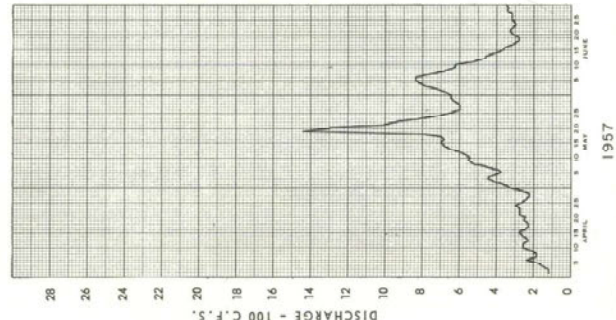
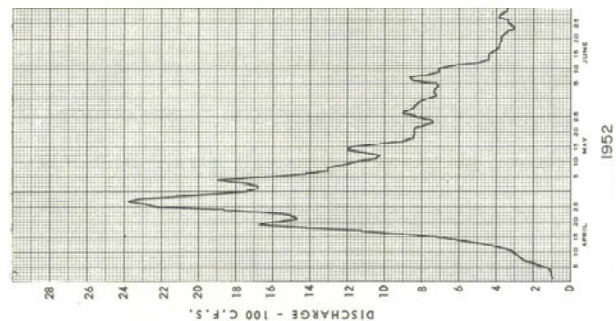
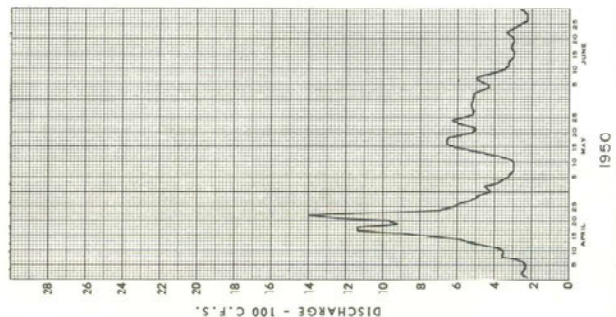
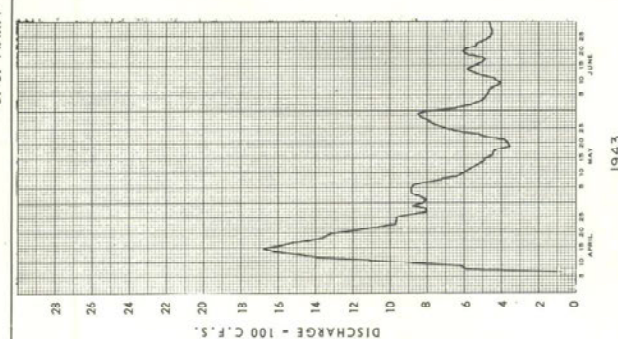
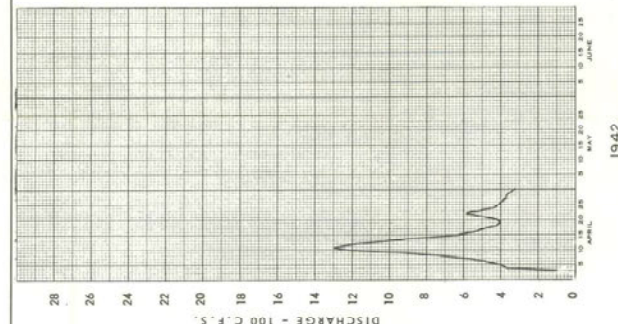
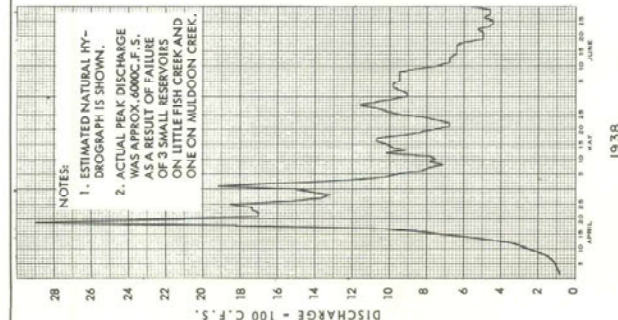
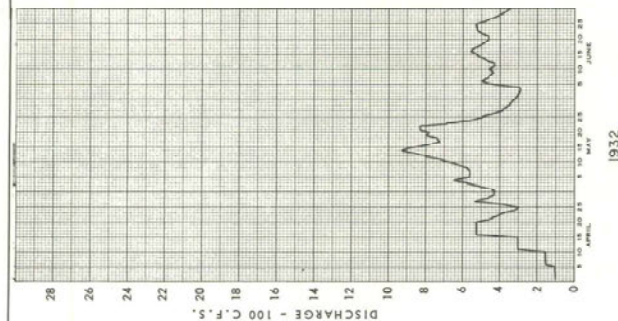
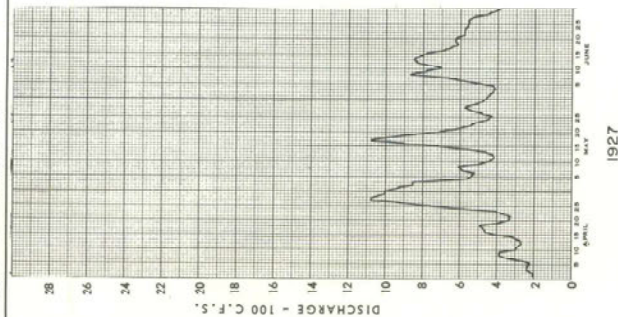












## NOTES:

1. DISCHARGES ARE COMPUTED BY THE METHOD OF UNIT HYDROGRAPHS FOR STATION "LITTLE WOOD RIVER NEAR CAREY, IDAHO."
2. DATA COMPUTED BY REGIONAL OFFICE NO. 1, U.S.A.R., BOISE, IDAHO.
3. ELECTROPLOTTED 14 MARCH 1961 BY U.S. ARMY ENGINEER DISTRICT, WALLA WALLA.

RESERVOIR REGULATION MANUAL  
LITTLE WOOD RIVER RESERVOIR  
FLOOD HYDROGRAPHS

LITTLE WOOD RIVER NEAR CAREY, IDAHO  
U.S. ARMY ENGINEER DISTRICT, WALLA WALLA  
MARCH 1961

APPENDIX A

TITLE 33--NAVIGATION AND NAVIGABLE WATERS  
Chapter II--Corps of Engineers  
Department of the Army

PART 208--FLOOD CONTROL REGULATIONS

LITTLE WOOD RIVER DAM AND RESERVOIR, LITTLE WOOD RIVER, IDAHO

Pursuant to the provisions of Section 7 of the Act of Congress approved December 22, 1944 (58 Stat. 890; 33 U.S.C. 709) the following #208.92 is hereby prescribed to govern the use and operation of Little Wood River Dam and Reservoir on the Little Wood River, Idaho, for flood control purposes.

#208.92 Little Wood River Dam and Reservoir, Little Wood River, Idaho. The Bureau of Reclamation, acting through the Little Wood River Irrigation District, shall operate the Little Wood River Dam and Reservoir in the interest of flood control as follows:

- (a) Storage space in Little Wood River Reservoir will be kept available for flood control purposes in accordance with the Flood Control Storage Space Reservation Schedule currently in force.
- (b) Releases from the Little Wood River Reservoir shall be restricted to quantities which will not cause downstream flows at the Carey gaging station to exceed 1,200 cubic feet per second, insofar as this control can be accomplished using the total active storage capacity (initially 30,000 acre-feet) in the Little Wood River Reservoir between elevations 5127.8 and 5237.3 feet.
- (c) The flood control regulations of this section are subject to temporary modification by the District Engineer, Corps of Engineers, if found necessary in time of emergency. Requests for and action on such modification may be made by any available means of communication, and the action taken by the District Engineer shall be confirmed in writing under date of the same day to the office of the Regional Director of the Bureau of Reclamation in charge of the locality.
- (d) The Flood Control Storage Space Reservation Schedule currently in force as of the promulgation of this section is that dated August 13, 1963, and is on file in the Office of the Chief of Engineers, Department of the Army, Washington, D.C., and in the office of the Commissioner, Bureau of Reclamation, Washington, D.C. Revisions of the Flood Control Storage Space Reservation Schedule may be developed from time to time as necessary by the Corps of Engineers and the Bureau of Reclamation. Each such revision shall be effective upon the date specified in the approval thereof by the Chief of Engineers and the Commissioner of Reclamation, and from



that date until replaced shall be considered as currently in force for purposes of this section. Copies of the Flood Control Storage Space Reservation Schedule currently in force shall be kept on file in, and may be obtained from, the office of the District Engineer, Corps of Engineers, and the Regional Director, Bureau of Reclamation, in charge of the locality.

(e) Nothing in the regulations in this section shall be construed to require dangerously rapid changes in magnitude of releases, or that releases be made at rates or in a manner that would be inconsistent with requirements for protecting the dam and the reservoir from major damage.

(f) The Bureau of Reclamation, acting through the Little Wood River Irrigation District, shall currently procure basic hydrological data, making determinations of required flood control space reservations from the Flood Control Storage Space Reservation Schedule currently in force, and make calculations of permissible releases from the reservoir as are required to accomplish the flood control objectives prescribed in this section.

(g) The Bureau of Reclamation shall keep the District Engineer, Corps of Engineers, advised of hydrological data and other operating criteria which affect the schedule of operation. Also, the Bureau of Reclamation shall keep the Watermaster, Water District 11-C, acting under the control and supervision of the Department of Reclamation, State of Idaho, currently advised of reservoir releases.

(Regs., August 13, 1963 ENGCW-EY) (Sec. 7, 58 Stat. 890; 33 U.S.C. 709)

J. C. LAMBERT,  
Major General, U.S. Army,  
The Adjutant General

(F.R. Doc. 63-9458; filed, Sept. 4, 1963; 8:45 a.m.)

FLOOD CONTROL REGULATIONS (33 CFR 208)  
FLOOD CONTROL STORAGE SPACE RESERVATION SCHEDULE  
LITTLE WOOD RIVER RESERVOIR, IDAHO

The controlling flood control storage space reservation at any time is the maximum space requirement as determined from any one of the applicable parts of this schedule. Reservoir releases shall be planned so as to provide flood control storage space in amounts at least equal to the current flood control space reservation requirement and so as to accomplish this with minimum practical rates and fluctuations in discharge. (The maximum discharge through the outlet works is restricted to 1,100 cubic feet per second.) The flood control space reservation requirement is the maximum as determined by the following three parts.

Part 1. - Flood control storage space reservation based on forecast runoff. This reservation applies during the spring snowmelt flood runoff period beginning on April 1 each year. Releases for necessary evacuation of flood control space will be scheduled in advance on the basis of preliminary runoff forecasts in February and March in order to assure that the required flood control space will be available at the beginning of the flood season about April 1. Forecast to be used is that for total inflow to Little Wood River above the gaging station near Carey, Idaho, from the current date through the following September 30.

| <u>Forecast Runoff</u><br><u>at Gage near Carey—</u><br><u>through September 30</u><br><u>(1,000 acre-feet)</u> | <u>Flood Control</u><br><u>Space Allocation</u><br><u>(1,000 acre-feet)</u> |
|---|---|
| 60  | 0   |
| 80  | 5   |
| 90  | 10  |
| 100   | 15  |
| 110   | 20  |
| 120   | 25  |
| 130 or more   | 30  |

Part 2. - Reservoir filling schedule based on assured refill.

| <u>Date</u>  | <u>Maximum Allowable</u><br><u>Storage Content</u><br><u>(1,000 acre-feet)</u> | <u>Minimum Flood Control</u><br><u>Space Allocation</u><br><u>(1,000 acre-feet)</u> |
|--------------|--|---|
| September 30 | 18.0   | 12.0  |
| October 31   | 19.0   | 11.0  |
| November 30  | 21.0   | 9.0   |
| December 31  | 23.0   | 7.0   |
| January 31   | 25.0   | 5.0   |
| February 28  | 26.5   | 3.5   |
| March 31     | 29.0   | 1.0   |
| April 15     | 30.0   | 0   |



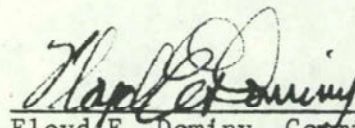
Part 3. - Flood control storage space reservation based on minimum snowmelt recession volumes above 300 cubic feet per second. Applicable for period March 1 through July 31.

| <u>Mean Daily<br/>Inflow above<br/>Carey Gage<br/>cfs</u> | <u>Flood Control<br/>Space Allocation<br/>(1000 acre-feet)</u> |
|---|--|
| 2,000   | 7.19   |
| 1,800   | 6.10   |
| 1,600   | 5.05   |
| 1,400   | 4.05   |
| 1,200   | 3.11   |
| 1,000   | 2.28   |
| 800   | 1.52   |
| 600   | 0.86   |
| 400   | 0.27   |
| 300   | 0  |

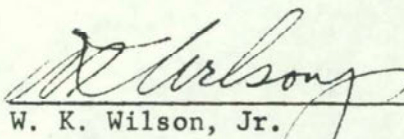
The Watermaster will divide flood flows at each division structure to make full use of all downstream channel capacities.

Prepared pursuant to flood control regulations for Little Wood River Dam and Reservoir (33 CFR 208).

APPROVED:

  
Floyd E. Dominy, Commissioner  
Bureau of Reclamation

APPROVED:

  
W. K. Wilson, Jr.  
Lt. Gen., USA  
Chief of Engineers

Effective Date: August 13, 1963

## APPENDIX B .

### RUNOFF FORECASTING PROCEDURES

1. Introduction. - The Bureau of Reclamation Regional Office No. 1, Boise, Idaho, prepared a seasonal runoff forecasting procedure for Little Wood River near Carey which was reviewed by the Walla Walla Engineer District, Corps of Engineers. The method resulted from the need to make the most reliable forecast from data available on the forecast date. Essentially, the accumulated snow pack and precipitation during the past several months are the basic forecast data available. It was reasoned that the variation of these basic data would have a significant effect upon the effectiveness of precipitation occurring during the forecast period. It was also reasoned that the interrelationship of these two basic data would reflect the ripeness of the snow pack as affecting the runoff yield from water stored in snow. The effectiveness of spring precipitation was also expected to vary with the ripeness of the snowpack.

It is apparent that all the above effects have a significant influence upon the runoff volume received and each effect is somewhat related to the data available on and during the forecast period. The procedure prepared by the USBR approximates these interrelated effects upon runoff volume by evaluation of the interrelationships of snow pack and winter precipitation on April 1 in combination with runoff and precipitation that occurs during the forecast period. The basic forecast equation is a regression equation of the type:



$Y = a X_1 + b X_2 + c X_3 + K$   
 where:  $Y$  = Oct - Sept natural runoff  
 $X_1$  = index of snowpack volume  
 $X_2$  = index of winter precipitation volume  
 $X_3$  = combining factor  
 $K$  = equation constant (+21.91)

2.  $Y$  = Oct - Sept natural runoff. - Records of runoff for Little Wood River near Carey are good but somewhat intermittent. Evaluation of the natural April-July runoff volumes during the period 1936-1958 required estimating the monthly volume for 15 of the 92 months considered because of missing records for the Carey gaging station or missing records for change in contents of Little Wood River Reservoir. Generally, the missing records were estimated by correlation with gaging records for Little Wood River at Campbell Ranch or by correlation with records of Big Wood River and Slough at Hailey.

3.  $X_1$  = Index of snowpack volume. - There are four snow courses located within the drainage basin above Carey which have been measured since 1953. Snow course data of longer record provide greater reliability to a forecast procedure developed from the data. It was decided, therefore, to use snow course stations having records since 1936 even though the stations are not located within the drainage basin but adjacent thereto. The average of five snow courses with long record was used as an index to the snowpack volume. These snow courses are Mascot Mine, Copper Basin, Stickney Mill, Graham Ranch, Mt. Baldy and White Knob. Locations of these snow courses are shown on Plate 1.

4.  $X_2$  = Index of winter precipitation volume. - There are no precipitation measuring stations located in the drainage basin above Little Wood Reservoir. It was assumed that a reasonable approximation of the precipitation volume could be obtained by use of precipitation records from stations located adjacent to the basin. The period of winter precipitation which generally is most closely related to the snowpack accumulation is October through March. It was therefore decided that the average of precipitation reports for the October through March period from stations located at Grouse, Hailey, MacKay Ranger Station, and Sun Valley would be used as an index of winter precipitation volume, ( $X_2$ ).

5.  $X_3$  = Combining factor. - This third term of the equation is designed to account for the effects discussed in paragraph 1 by use of the interrelationships of the first two terms with the following consideration: Emphasis is placed on the April 1 forecast which is based largely on variables  $X_1$  and  $X_2$  which are known as of April 1; the  $X_3$  variable to some extent can be thought of as the term which is an adjustment to the April 1 forecast for subsequent hydrologic events as they occur. The  $X_3$  index is a combination of three components: (1) The measure of spring precipitation, (2) the measure of runoff departures from normal, and (3) the ratio of accumulated snowpack to winter precipitation volume as affecting the first two components. More specifically, the combining  $X_3$  term is modified for progressive forecasts as follows:



#### April 1 Forecast Components

- $X_3 =$  (1) the average of April plus May precipitation at the selected stations from derivation sample.  
 (2) evaluated indirectly by expression of  $f$  and  $S$  of (3)  
 (3)  $f \left[ (M_y) (S-1.00) \right]$

where:  $f$  = statistically derived constant reflecting the relative amount of variance in  $Y$  accounted for by interrelationship of  $X_1$  and  $X_2$ .

$M_y$  = mean of  $Y$  (April-September natural runoff) from derivation sample.

$$S = \frac{a X_1 + b X_2}{a M_1 + b M_2} \quad \text{where } X_1 \text{ and } X_2 \text{ refer}$$

to the individual forecast case, whereas  $M_1$  and  $M_2$  refer to the means of  $X_1$  and  $X_2$  from the derivation sample.

#### May Forecast Components

- $X_3 =$  (1) April precipitation plus average May precipitation  
 (2)  $D_a$  = departure from mean April runoff  
 (3)  $f \left[ \frac{(\sum Y - \sum Y_a)}{n} (S-1.00) + D_a \right]$

where:  $Y_a$  = natural runoff volume for April

#### June Forecast Components

- $X_3 =$  (1) April precipitation plus May precipitation  
 (2)  $D_a$  plus  $D_m$   
 (3)  $f \left[ \frac{(\sum Y - \sum Y_a - \sum Y_m)}{n} (S-1.00) + D_a + D_m \right]$

where:  $D_m$  = departure from mean May runoff

$Y_m$  = natural runoff volume for May

The components are combined in the following manner for each progressive forecast application:

$$\text{April} - X_3 = f \left[ (M_y) (S-1.00) \right] + \text{aver Apr precip} + \text{aver May precip}$$

$$\text{May} - X_3 = f \left[ \left( \frac{\sum Y - \sum Y_a}{n} \right) (S-1.00) + D_a \right] + \text{Apr precip} + \text{aver May precip}$$

$$\text{June} - X_3 = f \left[ \left( \frac{\sum Y - \sum Y_a - \sum Y_m}{n} \right) (S-1.00) + D_a + D_m \right] + \text{Apr precip} + \text{May precip}$$

Table B-1 shows the computation of  $X_1$  (index of snowpack volume) and Table B-2 shows computation of  $X_2$  (index of winter precipitation volume). Progressive forecast verifications are shown on Tables B-3 and B-4.

6. March forecast. - The forecast components are computed by extrapolation of data available on 1 March. A least-square relationship is used to adjust available snow data as shown on Table B-5. The normal March precipitation is added to the accumulated October-February precipitation as shown on Table B-6 for computation of the  $X_2$  term. Normal values are also used for extrapolation of the  $X_3$  term as shown on Table B-7. Application of the extrapolated data to the regression equation and verification results are shown on Table B-8.



Project Little Wood River ReservoirComp. JCPSubject April 1 - Snow Water Content -  $X_1$ Chkd. MEL

Date: \_\_\_\_\_

|  | Year | Mascot<br>Mine | Copper<br>Basin | Stickney<br>Mill | Graham<br>Ranch | Mount<br>Baldy | White<br>Knob |  | Total | Ave.<br>( $X_1$ ) |
|--|------|----------------|-----------------|------------------|-----------------|----------------|---------------|--|-------|-------------------|
|  | 1936 | 17.1           | 9.2             | 9.4              | 14.0            | 23.3           | 10.3          |  | 83.3  | 13.9              |
|  | 37   | 13.0           | 6.2             | 6.5              | 11.4            | 19.1           | 12.2          |  | 68.4  | 11.4              |
|  | 38   | 24.4           | 18.0            | 17.9             | 23.2            | 41.2           | 22.9          |  | 147.6 | 24.6              |
|  | 39   | 8.1            | 4.4             | 0                | 5.9             | 9.0            | 4.8           |  | 32.2  | 5.4               |
|  | 1940 | 16.1           | 10.1            | 7.0              | 9.6             | 18.5           | 5.0           |  | 66.3  | 11.0              |
|  | 41   | 9.3            | 4.7             | 4.2              | 9.1             | 13.2           | 6.8           |  | 47.3  | 7.9               |
|  | 42   | 11.1           | 6.4             | 6.1              | 11.9            | 17.0           | 8.5           |  | 61.0  | 10.2              |
|  | 43   | 24.7           | 4.6             | 11.9             | 22.9            | 33.0           | 10.9          |  | 118.0 | 19.7              |
|  | 44   | 7.9            | 6.4             | 5.8              | 8.7             | 14.4           | 8.4           |  | 51.6  | 8.6               |
|  | 1945 | 10.4           | 7.4             | 8.9              | 9.4             | 17.0           | 7.8           |  | 60.9  | 10.2              |
|  | 46   | 17.1           | 10.3            | 12.4             | 15.9            | 25.5           | 10.2          |  | 91.4  | 15.2              |
|  | 47   | 17.9           | 11.6            | 13.4             | 10.4            | 24.7           | 10.4          |  | 88.4  | 14.7              |
|  | 48   | 13.2           | 8.5             | 8.0              | 9.9             | 18.2           | 7.4           |  | 65.2  | 10.9              |
|  | 49   | 16.1           | 8.0             | 9.8              | 13.3            | 18.0           | 7.3           |  | 72.5  | 12.1              |
|  | 1950 | 20.1           | 9.3             | 9.0              | 15.8            | 26.0           | 11.9          |  | 92.1  | 15.4              |
|  | 51   | 18.6           | 7.3             | 7.2              | 13.1            | 27.1           | 8.0           |  | 81.3  | 13.6              |
|  | 52   | 23.3           | 17.8            | 16.2             | 21.9            | 32.2           | 15.9          |  | 127.3 | 21.2              |
|  | 53   | 15.1           | 11.1            | 10.5             | 13.3            | 23.9           | 8.1           |  | 82.0  | 13.7              |
|  | 54   | 19.1           | 11.2            | 10.9             | 16.2            | 24.1           | 10.5          |  | 92.0  | 15.3              |
|  | 1955 | 10.6           | 4.6             | 5.7              | 8.7             | 13.5           | 6.2           |  | 49.3  | 8.2               |
|  | 56   | 24.1           | 11.9            | 11.9             | 16.8            | 30.2           | 10.4          |  | 105.3 | 17.6              |
|  | 57   | 15.3           | 9.9             | 9.3              | 13.1            | 17.7           | 8.4           |  | 73.7  | 12.3              |
|  | 58   | 16.6           | 9.3             | 9.9              | 14.8            | 29.4           | 11.9          |  | 91.9  | 15.3              |
|  | 59   | 9.6            | 6.0             | 6.3              | 12.9            | 16.6           | 7.1           |  |       |                   |

TABLE B-1



Project Little Wood River Reservoir

Comp. JCP

Subject October - March Precipitation - X<sub>2</sub>

Chkd. MCL

Date: \_\_\_\_\_

[illegible]



# April 1st Seasonal Forecast Worksheet

Little Wood River near Carey, Idaho

| Year      | 1     | 2     | 3      | 4      | 5                     | 6                         | 7        | 8               | 9                                   | 10                 | 11                 | 12     | 13  | 14    | 15  | 16                  |
|-----------|-------|-------|--------|--------|-----------------------|---------------------------|----------|-----------------|-------------------------------------|--------------------|--------------------|--------|-----|-------|-----|---------------------|
| Constants | $X_1$ | $X_2$ | $aX_1$ | $bX_2$ | $\frac{aX_1+bX_2}{n}$ | $\frac{aX_1+bX_2}{n} = S$ | $S-1.00$ | $(S-1.00)(M_t)$ | Average April Precip. + Max Precip. | $\frac{S+1.00}{2}$ | $\frac{S-1.00}{2}$ | $cX_3$ | $K$ | $Y_t$ | $Y$ | $Y-Y_t$             |
| 1         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     | Forecast Deviations |
| 2         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 3         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 4         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 5         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 6         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 7         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 8         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 9         |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 10        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 11        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 12        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 13        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 14        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 15        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 16        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 17        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 18        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 19        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 20        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 21        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 22        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 23        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 24        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 25        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 26        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 27        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 28        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 29        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 30        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 31        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 32        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 33        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 34        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 35        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 36        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 37        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 38        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 39        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 40        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 41        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 42        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 43        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 44        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 45        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 46        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 47        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 48        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 49        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 50        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 51        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 52        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 53        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 54        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 55        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 56        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 57        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 58        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 59        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |
| 60        |       |       |        |        |                       |                           |          |                 |                                     |                    |                    |        |     |       |     |                     |

TABLE B-3



# May 1st Seasonal Forecast Analysis Worksheet

little Wood River near Carey, Idaho

| 17           | 18    | 19                               | 20   | 21   | 22                                    | 23                 | 24                                      | 25    | 26     | 27                              | 28 | 29                           | 30                  |
|--------------|-------|----------------------------------|--|--|---------------------------------------|--------------------|---|-------|--------|---------------------------------|----|------------------------------|---------------------|
| $Y_d$        | $Y_a$ | $D_a$                            | $(5-100)(\frac{EY-EY_a}{n})$                   | $D_a + (5-100)(\frac{EY-EY_a}{n})$           | $f[D_a + (5-100)(\frac{EY-EY_a}{n})]$ | April Precip $P_a$ | Average May Precip $\frac{\sum P_m}{n}$ | $X_3$ | $CX_3$ | $Y_m$                           |    | $Y$                          | $Y - Y_m$           |
| April Runoff |       | Departure from Mean April Runoff | Estimated Departure from Mean May-Sept. Runoff | Estimated Departure from Mean Apr-May Runoff | $T_m$                                 |                    |   |       |        | May Forecast at Oct-Sept Runoff |    | Recorded Oct-Sept Mt. Runoff | Forecast Deviations |
|              |       |                                  |  |  |                                       |                    |   |       |        |                                 |    |                              | 29-27               |
| 23.6         | 36    | -2.5                             | -8.0   | -10.5  | -2.62                                 | 4.43               | 4.85                                    | 6.66  | 13.12  | 92.8                            |    | 79.8                         | 36                  |
| 12.4         | 37    | -13.7                            | -14.4  | -28.1  | -7.02                                 | 2.80               | 4.85                                    | 6.3   | 1.34   | 79.5                            |    | 54.6                         | 37                  |
| 56.1         | 38    | 30.0                             | 46.6   | 76.6   | 19.15                                 | 3.42               | 4.85                                    | 27.42 | 54.02  | 202.5                           |    | 211.2                        | 38                  |
| 13.9         | 39    | -12.2                            | -20.8  | -33.0  | -8.25                                 | 1.81               | 4.85                                    | -1.59 | -3.13  | 67.7                            |    | 66.1                         | 39                  |
| 22.0         | 40    | -4.1                             | -4.8   | -8.9   | -2.22                                 | 7.66               | 4.85                                    | 10.29 | 20.27  | 109.5                           |    | 81.4                         | 40                  |
| 16.4         | 41    | -9.7                             | -13.9  | -23.6  | -5.90                                 | 7.71               | 4.85                                    | 6.66  | 13.12  | 92.0                            |    | 84.0                         | 41                  |
| 32.8         | 42    | 6.7                              | -2.9   | 3.8  | .95                                   | 2.86               | 4.85                                    | 8.66  | 17.06  | 109.5                           |    | 120.9                        | 42                  |
| 46.0         | 43    | 19.9                             | 37.4   | 57.3   | 14.32                                 | 4.15               | 4.85                                    | 23.32 | 45.94  | 183.9                           |    | 171.0                        | 43                  |
| 15.7         | 44    | -10.4                            | -16.1  | -26.5  | -6.62                                 | 9.60               | 4.85                                    | 7.83  | 15.42  | 91.8                            |    | 102.7                        | 44                  |
| 16.1         | 45    | -10.0                            | -6.4   | -16.4  | -4.10                                 | .52                | 4.85                                    | 1.27  | 2.50   | 90.0                            |    | 90.5                         | 45                  |
| 37.3         | 46    | 11.2                             | 7.4  | 18.6   | 4.65                                  | .96                | 4.85                                    | 10.46 | 20.61  | 124.0                           |    | 116.1                        | 46                  |
| 23.0         | 47    | -3.1                             | 5.4  | 2.3  | .58                                   | .61                | 4.85                                    | 6.04  | 11.90  | 113.0                           |    | 116.3                        | 47                  |
| 12.2         | 48    | -13.9                            | -19.2  | -33.1  | -8.28                                 | 3.36               | 4.85                                    | -1.07 | .14    | 72.5                            |    | 83.4                         | 48                  |
| 23.4         | 49    | -2.7                             | -6.7   | -9.4   | -2.35                                 | .36                | 4.85                                    | 2.86  | 5.63   | 92.8                            |    | 82.1                         | 49                  |
| 35.6         | 50    | 9.5                              | 9.1  | 18.6   | 4.65                                  | .92                | 4.85                                    | 10.42 | 20.53  | 125.8                           |    | 117.9                        | 50                  |
| 31.2         | 51    | 5.1                              | -5.3   | -2   | .05                                   | 7.62               | 4.85                                    | 12.42 | 24.47  | 113.2                           |    | 124.3                        | 51                  |
| 60.6         | 52    | 34.5                             | 38.0   | 72.5   | 18.12                                 | 1.48               | 4.85                                    | 24.45 | 48.17  | 186.8                           |    | 201.3                        | 52                  |
| 22.2         | 53    | -3.9                             | -5.3   | -9.2   | -2.30                                 | 4.44               | 4.85                                    | 6.99  | 13.77  | 102.5                           |    | 110.9                        | 53                  |
| 15.8         | 54    | -10.3                            | -7.0   | -17.3  | -4.32                                 | .91                | 4.85                                    | 1.44  | 2.84   | 89.7                            |    | 76.8                         | 54                  |
| 6.7          | 55    | -19.4                            | -30.0  | -49.4  | -12.35                                | 3.46               | 4.85                                    | -3.84 | -7.56  | 52.8                            |    | 62.5                         | 55                  |
| 40.6         | 56    | 14.5                             | 22.7   | 37.2   | 9.30                                  | 1.98               | 4.85                                    | 16.13 | 31.78  | 152.8                           |    | 159.1                        | 56                  |
| 13.4         | 57    | -12.7                            | -7.3   | -20.0  | -5.00                                 | 5.06               | 4.85                                    | 4.91  | 9.67   | 96.0                            |    | 120.7                        | 57                  |
| 23.2         | 58    | -2.9                             | 1.4  | -1.5   | -.38                                  | 7.80               | 4.85                                    | 12.27 | 24.17  | 120.7                           |    | 157.4                        | 58                  |
| 59           | 59    |                                  |  |  |                                       |                    |   |       |        |                                 |    |                              | 59                  |
| 60           | 60    |                                  |  |  |                                       |                    |   |       |        |                                 |    |                              | 60                  |







Project Little Wood River Reservoir

Comp. \_\_\_\_\_

Subject Computation of  $X_2$  for March Forecast

Chkd. \_\_\_\_\_

Date: \_\_\_\_\_

[illegible]







## HYDROLOGIC DATA

Page \_\_\_\_\_

Project LITTLE WOOD RIVER RESERVOIR

Comp. \_\_\_\_\_

Subject Computation of March 1 Forecast

Chkd. \_\_\_\_\_

Date: \_\_\_\_\_

| YEAR         | Computed<br>Snow Index<br>$X_1$                             | 1.84 Snow Index<br>$a X_1$ | Winter Precip.<br>$X_2$ | 6.30 Winter Precip.<br>$b X_2$ | Spring Index<br>$X_3$ | 1.97 Spring Index<br>$c X_3$ | Statistical<br>Constant | Predicted<br>Oct.-Sept. Runoff<br>1000 A.F. | Predicted $\downarrow$<br>Mar.-Sept. Runoff<br>1000 A.F. | Observed<br>Mar.-Sept. Runoff<br>1000 A.F. | Forecast<br>Deviations<br>1000 A.F. |
|--------------|---|----------------------------|-------------------------|--------------------------------|-----------------------|------------------------------|-------------------------|---|--|--|-------------------------------------|
| 1936         | 14.7  | 27.05                      | 7.02                    | 44.23                          | 8.18                  | 16.11                        | 21.91                   | 109.3                                       | 97.7   | 67.2                                       | 30.5                                |
| 1937         | 10.3  | 18.95                      | 4.91                    | 30.93                          | 1.48                  | 2.92                         | 21.91                   | 74.7  | 64.1   | 44.0                                       | 20.1                                |
| 1938         | 19.0  | 34.96                      | 10.49                   | 66.09                          | 17.12                 | 33.73                        | 21.91                   | 156.7                                       | 199.9  | 194.4                                      | -54.5                               |
| 1939         | 10.0  | 18.40                      | 6.89                    | 43.41                          | 5.28                  | 10.40                        | 21.91                   | 94.1  | 73.5   | 45.5                                       | 28.0                                |
| 1940         | 11.2  | 20.61                      | 6.70                    | 42.21                          | 5.50                  | 10.84                        | 21.91                   | 95.6  | 84.8   | 70.6                                       | 14.2                                |
| 1941         | 9.8   | 18.03                      | 7.36                    | 46.37                          | 5.95                  | 11.72                        | 21.91                   | 98.0  | 81.8   | 67.8                                       | 14.0                                |
| 1942         | 10.8  | 19.87                      | 8.96                    | 56.45                          | 9.75                  | 19.21                        | 21.91                   | 117.4                                       | 99.7   | 103.2                                      | -3.5                                |
| 1943         | 23.0  | 42.32                      | 13.04                   | 82.15                          | 24.50                 | 48.26                        | 21.91                   | 150.0                                       | 131.8  | 152.8                                      | -21.0                               |
| 1944         | 10.2  | 18.77                      | 6.21                    | 39.12                          | 3.94                  | 7.76                         | 21.91                   | 87.6  | 70.3   | 85.4                                       | -15.1                               |
| 1945         | 10.4  | 19.14                      | 7.61                    | 47.94                          | 6.84                  | 13.47                        | 21.91                   | 102.5                                       | 85.2   | 73.2                                       | 12.0                                |
| 1946         | 13.6  | 25.02                      | 7.61                    | 47.94                          | 8.63                  | 17.00                        | 21.91                   | 111.9                                       | 93.1   | 97.3                                       | -4.2                                |
| 1947         | 16.7  | 30.73                      | 8.52                    | 53.68                          | 12.21                 | 24.05                        | 21.91                   | 108.5                                       | 87.3   | 95.1                                       | -7.8                                |
| 1948         | 9.7   | 17.85                      | 5.21                    | 32.82                          | 1.70                  | 3.35                         | 21.91                   | 75.9  | 59.0   | 66.5                                       | -7.5                                |
| 1949         | 16.5  | 30.36                      | 7.70                    | 48.51                          | 10.42                 | 20.53                        | 21.91                   | 121.3                                       | 105.9  | 64.7                                       | 41.2                                |
| 1950         | 13.7  | 25.21                      | 8.14                    | 51.28                          | 9.75                  | 19.21                        | 21.91                   | 117.6                                       | 103.1  | 103.4                                      | -.3                                 |
| 1951         | 13.0  | 23.92                      | 7.09                    | 44.67                          | 7.29                  | 14.36                        | 21.91                   | 104.9                                       | 86.6   | 106.0                                      | -19.4                               |
| 1952         | 19.8  | 36.43                      | 12.21                   | 76.92                          | 20.92                 | 41.21                        | 21.91                   | 176.5                                       | 156.8  | 181.6                                      | -24.8                               |
| 1953         | 13.8  | 25.39                      | 6.90                    | 43.47                          | 7.29                  | 14.36                        | 21.91                   | 105.1                                       | 85.4   | 91.2                                       | -5.8                                |
| 1954         | 14.4  | 26.50                      | 5.98                    | 37.67                          | 5.95                  | 11.72                        | 21.91                   | 97.8  | 82.8   | 61.8                                       | 21.0                                |
| 1955         | 7.4   | 13.62                      | 4.52                    | 28.48                          | - .76                 | -1.50                        | 21.91                   | 62.5  | 50.6   | 50.6                                       | 0                                   |
| 1956         | 17.0  | 31.28                      | 11.46                   | 72.20                          | 18.02                 | 35.50                        | 21.91                   | 160.9                                       | 132.0  | 130.2                                      | 1.8                                 |
| 1957         | 11.3  | 20.79                      | 6.85                    | 43.16                          | 5.95                  | 11.72                        | 21.91                   | 97.6  | 80.4   | 103.5                                      | -23.1                               |
| 1958         | 11.8  | 21.71                      | 6.52                    | 41.08                          | 5.50                  | 10.84                        | 21.91                   | 95.5  | 77.8   | 139.7                                      | -61.9                               |
| 1959         | 10.2  | 18.77                      | 5.62                    | 35.41                          | 2.82                  | 5.56                         | 21.91                   | 81.6  | 64.1   | 42.6                                       | 21.5                                |
| $\downarrow$ | Predicted Oct.-Sept. runoff less observed Oct.-Feb. runoff. |                            |                         |                                |                       |                              |                         |   |  |  |                                     |

TABLE B-8