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SURFACE WATER SUPPLY *of the* UNITED STATES 1936

PART 14

PACIFIC SLOPE BASINS IN OREGON
AND LOWER COLUMBIA RIVER BASIN

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PACIFIC SLOPE BASINS IN OREGON AND LOWER COLUMBIA RIVER BASIN, 1936

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the year ending September 30, 1936. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of stream flow have been made at about 7,200 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1936, 3,160 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 14.

DEFINITION OF TERMS

The units in which stream-flow data are presented in this report and other terms used herein are defined as follows:

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot is the rate of discharge of water flowing in a channel when the cross-sectional area is 1 square foot and the average velocity is 1 foot per second.

"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

"Run-off in inches" is the depth to which an area would be covered if all the water flowing from it in a given period were uniformly distributed on the surface. It is used for comparing run-off with rainfall, which is usually expressed in inches.

An "acre-foot", equivalent to 43,560 cubic feet, is the quantity required to cover an acre to the depth of 1 foot. The term is commonly used in connection with storage for irrigation.

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot for 24 hours.

"Stage-discharge relation" is an abbreviation for the term "relation of gage height to discharge."

"Control" is a term used to designate the natural section or reach of the channel or artificial structure below the gage which determines the stage-discharge relation at the gage.

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either

from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. Typical gaging stations, equipped with water-stage recorder and measuring cable and car, are shown on plate 1.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station in the area covered by this report usually comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off. Skeleton rating tables are published except for those stations whose daily discharge for the greater part of the year was determined by shifting-control method or by use of slope or other special methods.

The description of the station gives the type of gage, its latitude and longitude determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Information under "Extremes" gives the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation, and also the minimum discharge if useful; and the minimum gage height except when it is of no importance. Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum represents the lowest discharge unless otherwise qualified.

The table of daily discharge gives, for stations equipped with nonrecording gages, the discharge in second-feet corresponding to once-daily or the mean of twice-daily readings of the gage. For stations equipped with water-stage recorders the table gives the discharge corresponding to the mean daily gage height except for stations on streams subject to sudden or rapid fluctuation. For stations subject to such fluctuation the mean daily gage height may not indicate the true mean daily discharge, which must be obtained by averaging the discharge for intervals of the day or by using the discharge integrator, an instrument for obtaining the mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the discharge given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily (1) on the permanency of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that, in general, the daily records are accurate within



A. ARTIFICIAL CONTROL, RECORDER HOUSE, AND MEASURING CABLE ON OLENTANGY RIVER, DELAWARE, OHIO.



B. RECORDER HOUSE AND MEASURING CABLE ON KAWEAH RIVER, THREE RIVERS, CALIF.

TYPICAL RIVER-MEASUREMENT STATIONS.

5 percent; "good", within 10 percent; "fair", within 15 percent; and "poor", within 20 percent or more.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth in inches may be subject to gross errors caused by the inclusion of large noncontributing districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

Many gaging stations on streams in the irrigated areas of the United States are situated above most of the diversions from those streams, and the discharge recorded does not show the water supply available for further development, as prior appropriations below the station must first be satisfied.

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published, and that greater degrees of refinement in computations and records may be warranted with increased data and use of improved equipment.

PUBLICATIONS

The results of stream-flow measurements are now published annually in 14 parts, each part covering an area whose boundaries coincide with natural drainage features as indicated below:

- Part 1. North Atlantic slope basins (St. John River to York River).
2. South Atlantic slope and eastern Gulf of Mexico basins (James River to Mississippi River).
3. Ohio River Basin.
4. St. Lawrence River Basin.
5. Hudson Bay and upper Mississippi River basins.
6. Missouri River Basin.
7. Lower Mississippi River Basin.
8. Western Gulf of Mexico basins.
9. Colorado River Basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. Pacific slope basins in Washington and upper Columbia River Basin.
13. Snake River Basin.
14. Pacific slope basins in Oregon and lower Columbia River Basin.

Water-supply papers and other publications of the United States Geological Survey containing data in regard to the water resources of the United States may be obtained or consulted as indicated below.

1. Copies may be purchased at nominal cost from the Superintendent of Documents, Government Printing Office, Washington, D. C., who will, on application, furnish lists giving prices.
2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.
3. Sets are available for consultation in the local offices of the water-resources branch of the Geological Survey as follows:

Augusta, Maine, Statehouse.
Boston, Mass., 945 Post Office Building.
Hartford, Conn., 203 Federal Building.
Albany, N. Y., 526 Federal Building.
Trenton, N. J., 228 Federal Building.

Harrisburg, Pa., 490 Education Building.
 Charlottesville, Va., University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 220 Post Office Building.
 Columbia, S. C., 119 United States Courthouse.
 Atlanta, Ga., Georgia School of Technology.
 Ocala, Fla., Post Office Building.
 Montgomery, Ala., Post Office Building.
 Chattanooga, Tenn., 442 Post Office Building.
 Columbus, Ohio, Engineering Experiment Station, Ohio State University.
 Indianapolis, Ind., 319 Federal Building.
 Urbana, Ill., 14 Post Office Annex.
 Madison, Wis., 337N State Capitol.
 St. Paul, Minn., 808 New Post Office Building.
 Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
 St. Louis, Mo., 906 Customhouse, 1114 Market Street.
 Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines
 and Metallurgy.
 Topeka, Kans., 305 Federal Building.
 Fort Smith, Ark., Post Office Building.
 Austin, Tex., State Highway Building.
 Santa Fe, N. Mex., 3 United States Courthouse.
 Tucson, Ariz., 210 Post Office Building.
 Denver, Colo., 403 Post Office Building.
 Salt Lake City, Utah, 303 Federal Building.
 Idaho Falls, Idaho, 228 Federal Building.
 Boise, Idaho, 429 Federal Building.
 Helena, Mont., 421 Federal Building.
 Tacoma, Wash., 406 Federal Building.
 Portland, Oreg., 606 Post Office Building.
 San Francisco, Calif., 303 Customhouse.
 Los Angeles, Calif., 512 Eighth and Figueroa Building.
 Honolulu, Hawaii, 225 Federal Building.

A list of the Geological Survey publications may be obtained by applying to the
 Director, United States Geological Survey, Washington, D. C.

Records of flow of streams in the United States have been published in the reports
 tabulated as follows:

Stream-flow data in reports of the United States Geological Survey
 (A = Annual Report; B = Bulletin; W = Water-Supply Paper)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.....	
11th A, pt. 2	Monthly discharge and descriptive information	1884 to Sept. 1890.
12th A, pt. 2	.....do.....	1884 to June 30, 1891.
13th A, pt. 3	.....do.....	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93)....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.	1893-94.
16th A, pt. 2	Descriptive information only.....	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years)	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.
W 15.....	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years).	1898.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.	1899.
21st A, pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.	1900.
22d A, pt. 4	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.	1901.
W 75.....	Monthly discharge.....	1901.

Note.- The reports which contain records after 1901 are given in the table on page 12.

The records at most of the stations discussed in these reports extend over a series of years. Miscellaneous measurements at many points other than regular gaging stations have been made each year and are published under "Miscellaneous discharge measurements" at the end of each report in the same relative order as the regular gaging stations. An index of the reports containing records obtained prior to 1904 has been published in Water-Supply Paper 119.

The following table gives, by years and drainage basins, the numbers of the papers on surface-water supply published from 1899 to 1936. The data for any particular station will, in general, be found in the reports covering the years during which the station was maintained. For example, data from 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years. Special papers containing compilation of records previously published and also records not contained in the annual series of water-supply papers have been published for some States and drainage basins. For example, stream-flow records for the New-Kanawha River Basin in part 3 from 1895 to 1920 are contained in Water-Supply Paper 536.

Numbers of water-supply papers containing results of stream measurements, 1899-1935
(For basins included see p. 9)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a....	35	b 35, 36	36	36	c 35, 37	37	37	37	d 37, 38	38, e 39	38, f 39	38	38	38
1900 g....	47, h 48	48	48	49	49, j 50	50	50	50	50	51	51	51	51	51
1901 i....	65, 75	65, 75	65, 75	65, 75	k 65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902 m....	82, 83	82, 83	83	83	k 83, 86	84	84	84	84	85	85	85	85	85
1903 n....	97	b 97, 98	98	98	k 98, 99, n 100	99	99	99	99	100	100	100	100	100
1904 o....	124, p 125	q 127	128	128	k 128, 130	130, r 131	131	131	131	132	132	132	132	132
1905 p....	151, 166	q 167	169	170	170	172	172	172	175, t 177	177	177	178	178	178
1906 q....	203	q 203, 204	205	207	208	208	208	208	210, 213	213	214	214	214	214
1907 r....	241	241	243	245	245	246	246	246	246, 250, s 251	251	251	252	252	252
1908 s....	261	262	263	264	265	266	267	268	269, 270, s 271	271	272	272	272	272
1909 t....	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1910 u....	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1911 v....	321	322	323	324	325	326	327	328	329	330	331	332	332	332
1912 w....	341	342	343	344	345	346	347	348	349	350	351	352	352	352
1913 x....	361	362	363	364	365	366	367	368	369	370	371	372	372	372
1914 y....	381	382	383	384	385	386	387	388	389	390	391	392	392	392
1915 z....	401	402	403	404	405	406	407	408	409	410	411	412	413	413
1916 aa....	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917 ab....	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918 ac....	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919 ad....	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1920 ae....	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1921 af....	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1922 ag....	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1923 ah....	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1924 ai....	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1925 aj....	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1926 ak....	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1927 al....	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1928 am....	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1929 an....	696	697	698	699	700	701	702	703	704	705	706	707	708	709
1930 ao....	721	722	723	724	725	726	727	728	729	730	731	732	733	734
1931 ap....	741	742	743	744	745	746	747	748	749	750	751	752	753	754
1932 aq....	756	757	758	759	760	761	762	763	764	765	766	767	768	769
1933 ar....	781	782	783	784	785	786	787	788	789	790	791	792	793	794
1934 as....	801	802	803	804	805	806	807	808	809	810	811	812	813	814

a Rating tables and index to Water-Supply Papers 35-59 contained in Water-Supply

Paper 59, monthly discharge for 1899 in 21st Annual Report, part 4.

b James River only.

c Gallatin River.

d Green and Gunnison Rivers and Colorado River above Gunnison River.

e Mojave River only.

f Kings and Kern Rivers and South Pacific slope basins.

g Kings and Kern Rivers and South Pacific slope basins, and data on precipitation,

well, and irrigation in California and Utah.

h Monthly discharge for 1900 in 22d Annual Report, part 4.

i Wessahickon and Schuykill Rivers to James River.

j Scioto River.

k Loup, Platte, and Elkhorn Rivers and tributaries below Platte River.

l Tributaries of Mississippi River from east.

m Colorado and tributaries to St. Lawrence River proper.

n Hudson Bay only.

o New England rivers only.

p Hudson River to Delaware River, inclusive.

q Susquehanna River to York River, inclusive.

r Platte and Kansas Rivers.

s Platte and Kansas Rivers.

t Below Platte and Kansas Rivers.

u Below Platte and Kansas Rivers.

v Below Platte and Kansas Rivers.

w Below Platte and Kansas Rivers.

x Below Platte and Kansas Rivers.

y Below Platte and Kansas Rivers.

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ak Below Platte and Kansas Rivers.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations for the area covered by this report at which records of discharge were collected during the year ending September 30, 1936, by agencies other than the Geological Survey. The records for these stations are not contained in the publications of the Geological Survey.

Records of discharge collected by agencies other than the Geological Survey			
Stream	Location	Period	Remarks
Abernethy Creek...	1 mile east of Oregon City, Oreg....	1936	Unpublished.
Bear Creek.....	SW $\frac{1}{4}$ sec. 29, T. 4 S., R. 1 E., 1 mile above mouth, Oreg.	1936	Do.
Beaver Creek.....	SE $\frac{1}{4}$ sec. 16, T. 3 S., R. 2 E., 1 $\frac{1}{2}$ miles northwest of Beaver Creek, Oreg.	1936	Do.
Do.....	1 $\frac{1}{2}$ miles northeast of New Era, Oreg.	1936	Do.
Big Butte Springs.	5 miles southeast of Butte Falls, Oreg.	1929-36	Do.
Big Marsh Creek...	Hoey Ranch, near Crescent, Oreg.....	1924, 1928-36	1924, 1928-30 published in State engineer Bull. 8; 1931-36 unpublished.
Buckner Creek.....	Mouth, near Mulino, Oreg.....	1936	Unpublished.
Bull Creek.....	Mouth, 2 miles west of Colton, Oreg.	1936	Do.
Butte Creek.....	Monitor, Oreg.....	1936	Do.
Butter Creek.....	6 miles above Pine City, Oreg. Prior to Apr. 9, 1928, gage was 5 miles downstream.	1921-36	Records to 1930 published in State engineer Bulls. 7 and 8; 1931-36 unpublished.
Cable Creek.....	6 miles east of Ukiah, Oreg.....	*1932-36	Unpublished.
Camas Creek.....	Above Cable Creek, 6 miles east of Ukiah, Oreg.	*1932-36	Do.
Canyon Creek.....	$\frac{1}{2}$ mile east of Colton, Oreg.....	1936	Do.
Clear Creek.....	NW $\frac{1}{4}$ sec. 17, T. 4 S., R. 3 E., 2 miles southwest of Springwater, Oreg.	1936	Unpublished.
Do.....	NW $\frac{1}{4}$ sec. 23, T. 3 S., R. 3 E., at Viola, Oreg.	1936	Do.
Do.....	Mouth, near Carver, Oreg.....	1936	Do.
Do.....	Above Wapinitia Irrigation Co.'s canal, near Wapinitia, Oreg.	1934-36	Do.
Deep Creek.....	1 mile east of Barton, Oreg.....	1936	Do.
Deschutes River...	1 $\frac{1}{2}$ miles southwest of Cline Falls, Oreg.	*1928-36	1928-29 published in State engineer Bull. 8; 1930-36 unpublished.
Dorn Creek.....	3 $\frac{1}{2}$ miles northeast of Colton, Oreg..	1936	Unpublished.
Eagle Creek.....	Log Cabin Camp, near Estacada, Oreg.	1933-36	Do.
Fivemile Creek....	Sec. 27, T. 4 S., R. 29 E., 7 miles southwest of Gurdane, Oreg.	1928-30 1932-33 1935-36	1928-30 published in State engineer Bull. 8; 1932-33, 1935-36 unpublished.
Grave Creek.....	1 mile below Placer, Oreg.....	*1929-36	1929-30 published in State engineer Bull. 8; 1931-36 unpublished.
Hocumb Creek.....	2 miles east of Oregon City, Oreg...	1936	Unpublished.
Jackson Creek.....	Mouth, 2 miles northeast of Colton, Oreg.	1936	Do.
Johnson Creek.....	Mouth, at Milwaukie, Oreg.....	1936	Do.
Jumpoff Joe Creek.	6 miles northeast of Merlin, Oreg...	*1929-36	1929 published in State engineer Bull. 8; 1930-36 unpublished.
Little Butte Creek	Lake Creek, Oreg.....	1927-36	1927-30 published in State engineer Bull. 8; 1931-36 unpublished.
Little Clear Creek	S $\frac{1}{2}$ sec. 15, T. 3 S., R. 3 E., 1 mile northwest of Viola, Oreg.	1936	Unpublished.
Little Walla Walla River.	George Street in Milton, Oreg.....	1935-36	Do.
McKay Creek.....	Feeder canal intake near Prineville, Oreg.	1936	Do.
Milk Creek.....	$\frac{1}{2}$ mile east of Mulino, Oreg.....	1936	Do.
Mill Creek.....	Hager Grove, 1 mile southeast of Salem, Oreg.	1936	Do.
Mill Creek.....	2 $\frac{1}{2}$ miles northeast of Colton, Oreg..	1936	Do.
Nate Creek.....	Near mouth, 2 $\frac{1}{2}$ miles west of Colton, Oreg.	1936	Do.

*Records for some earlier years published in water-supply papers of U. S. Geological Survey.

Records of discharge collected by agencies other than the Geological Survey--
Continued

Stream	Location	Period	Remarks
North Fork of Big Butte Creek.	2 miles northeast of Butte Falls, Oreg.	1928-36	1928-30 published in State engineer Bull. 8; 1931-36 unpublished.
North Fork of Deep Creek.	1/3 mile south of Boring, Oreg.....	1936	Unpublished.
North Fork of Little Butte Creek.	Above Rogue River Valley Canal, near Lakecreek, Oreg.	*1931-36	Do.
North Fork of Walla Walla River.	Near mouth, 5 miles southeast of Milton, Oreg.	1929-36	1929-30 published in State engineer Bull. 8; 1931-36 unpublished.
Ochoco Creek.....	Below Ochoco Reservoir, near Prineville, Oreg.	1919-36	1919-30 published in State engineer Bull. 8; 1931-36 unpublished.
Ochoco Reservoir..	6 miles east of Prineville, Oreg....	1918-36	1918-19, 1931-36 unpublished; 1920-30 published in State engineer Bull. 8.
Parrott Creek....	New Era, Oreg.....	1936	Unpublished.
Rancheria Creek...	Mouth, near Butte Falls, Oreg.....	1935-36	Do.
Rock Creek.....	Near mouth, 1 mile northwest of Carver, Oreg.	1936	Do.
Rock Creek.....	Sec. 7, T. 5 S., R. 1 E., 2 miles southwest of Needy, Oreg.	1936	Do.
Rock Creek.....	Near Wanic, Oreg.....	1936	Do.
South Fork of Little Butte Creek.	Big Elk Ranger Station, Oreg.....	*1931-36	Do.
South Fork of Walla Walla River.	Above Milton power diversion, 5 miles southeast of Milton, Oreg.	*1929-36	1929-30 published in State engineer Bull. 8; 1931-36 unpublished.
Umatilla River....	Above former Furnish Reservoir, near Yaakum, Oreg.	*1935-36	Unpublished.
Woodcock Creek....	2 1/2 miles northeast of Molalla, Oreg.	1936	Do.

*Records for some earlier years published in water-supply papers of U. S. Geological Survey.

Note.- Records for stations listed in above table were collected by Oregon State engineer.

COOPERATION

The work was done under cooperative agreements as follows: In Oregon with the State engineer, Charles E. Stricklin; and in Washington with the Department of Conservation and Development, E. F. Banker, succeeded by J. B. Fink, director, and Charles J. Bartholet, supervisor of hydraulics.

Acknowledgments are also due to the Corps of Engineers, United States Army, and United States Weather Bureau for financial assistance in collecting records published herein.

Assistance in collecting records was also rendered by the following municipalities, organizations, corporations and individuals: In Oregon by Deschutes, Jackson, Josephine, and Umatilla Counties; cities of Eugene, McMinnville, and Portland; The California Oregon Power Co., Pacific Power & Light Co., and Portland General Electric Co.; and in Washington by Backus-Brooks Co., Inland Power & Light Co., and Northwestern Electric Co.

DIVISION OF WORK

The data for stations in Oregon were collected and prepared for publication under the supervision of G. H. Canfield, district engineer, the work being done in collaboration with Charles E. Stricklin, State engineer; in Washington under the supervision of G. L. Parker, district engineer.

COLUMBIA RIVER

Columbia River at The Dalles, Oreg.

Location.— Water-stage recorder, lat. 45°39', long. 120°58', in NE¼ sec. 20, T. 2 N., R. 15 E., above Celilo Falls. Gage readings are elevations above mean sea level (general adjustment of 1929). Prior to October 1931, records based on staff gage at the Dalles, 13 miles downstream, supplemented for a few short periods by gage-height records at Umatilla and Cascade Locks.

Drainage area.— 237,000 square miles (above The Dalles).

Records available.— June 1878 to September 1936; maximum stages 1858 to 1877, from readings of gage at Lower Cascades Landing.

Average discharge.— 58 years (1878-1936), 199,800 second-feet.

Extremes.— Maximum discharge during year 529,000 second-feet May 17 (gage height on gage above Celilo Falls, 142.74 feet); minimum, 43,200 second-feet Feb. 11 (gage height, 126.81 feet).

1858-1936: Maximum discharge, 1,170,000 second-feet June 6, 1894 (gage height, 59.6 feet on gage at The Dalles and 180.1 feet, present datum, on gage above Celilo Falls); minimum, 40,000 second-feet Jan. 18, 21, 1930, Feb. 3, 4, 1932 (gage height, 126.4 feet, present datum, on gage above Celilo Falls).

Remarks.— Records good. Storage and diversions for irrigation are only a small part of total run-off. Records obtained in cooperation with U. S. Weather Bureau and Corps of Engineers, U. S. Army.

Rating table, water year 1935-36 (gage height, at Celilo, in feet, and discharge, in second-feet)

126.8	43,200	130	101,000	135	247,000
127.4	49,500	131	126,000	137	318,000
128.1	59,900	132	153,000	139	390,000
129.0	77,300	133	181,000	141	465,000
129.5	86,800	134	212,000	143	541,000

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92,400	69,000	60,800	67,400	54,200	81,800	76,200	354,000	450,000	279,000	167,000	116,000
2	90,000	69,000	60,800	67,400	52,800	77,800	75,200	354,000	457,000	272,000	161,000	113,000
3	87,600	71,000	59,200	59,900	51,400	81,800	73,100	358,000	472,000	268,000	158,000	111,000
4	86,600	70,100	59,000	60,800	52,800	83,600	71,100	368,000	495,000	261,000	156,000	111,000
5	85,400	68,100	58,200	64,300	54,200	108,000	70,100	379,000	522,000	254,000	153,000	111,000
6	84,100	69,100	56,600	64,300	52,800	108,000	70,100	401,000	526,000	250,000	153,000	111,000
7	83,000	68,100	56,600	65,200	52,100	105,000	69,100	420,000	514,000	245,000	150,000	111,000
8	80,600	67,100	56,600	66,200	50,900	98,500	69,100	415,000	507,000	240,000	147,000	111,000
9	78,400	67,100	56,600	64,300	46,100	96,000	70,100	401,000	518,000	233,000	145,000	108,000
10	76,200	66,200	56,600	64,300	47,200	96,000	76,200	394,000	518,000	230,000	145,000	106,000
11	76,200	65,200	58,200	64,300	45,100	103,000	87,600	394,000	503,000	226,000	142,000	106,000
12	75,200	65,200	59,000	63,400	48,300	106,000	101,000	409,000	490,000	223,000	139,000	105,000
13	75,200	65,200	59,000	67,100	48,300	98,500	125,000	435,000	457,000	219,000	136,000	105,000
14	76,200	65,200	59,000	71,100	47,200	98,500	158,000	461,000	438,000	212,000	136,000	101,000
15	74,200	65,200	59,000	75,200	48,300	99,800	184,000	480,000	427,000	216,000	136,000	103,000
16	74,200	65,200	59,900	73,100	46,300	96,000	203,000	507,000	420,000	209,000	136,000	101,000
17	75,200	65,200	59,000	70,100	49,500	91,200	212,000	529,000	413,000	206,000	136,000	98,500
18	75,200	64,300	57,400	68,100	48,300	86,400	230,000	510,000	401,000	203,000	134,000	98,500
19	75,200	63,400	56,600	65,200	48,900	85,200	254,000	498,000	385,000	200,000	134,000	96,000
20	75,200	63,400	55,000	64,300	50,800	84,100	279,000	476,000	368,000	195,000	131,000	94,800
21	73,100	62,500	53,500	64,300	52,800	84,100	300,000	472,000	358,000	190,000	131,000	91,200
22	72,600	61,600	52,800	65,200	53,500	87,600	311,000	465,000	347,000	187,000	131,000	88,800
23	72,100	61,600	52,100	64,300	55,600	92,400	329,000	450,000	336,000	184,000	128,000	87,600
24	72,000	61,600	53,500	62,500	62,500	93,600	347,000	435,000	332,000	181,000	128,000	85,000
25	72,000	60,800	52,800	61,600	61,600	90,000	361,000	427,000	322,000	178,000	126,000	81,800
26	72,000	61,600	53,500	60,800	62,500	83,000	368,000	424,000	311,000	175,000	126,000	80,600
27	72,000	61,600	54,200	59,000	68,800	80,600	376,000	424,000	300,000	175,000	123,000	78,400
28	73,600	60,800	55,800	59,000	94,800	80,600	372,000	427,000	293,000	175,000	121,000	77,300
29	73,600	60,800	56,600	57,400	91,200	78,400	365,000	435,000	289,000	175,000	121,000	77,300
30	71,300	60,800	56,600	55,000	-	80,600	358,000	442,000	282,000	173,000	118,000	76,200
31	70,000	-	56,600	55,000	-	80,600	-	442,000	-	170,000	116,000	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,389,600	92,400	70,000	77,080	0.325	0.37	4,740,000
November.....	1,946,000	71,000	60,800	64,870	.274	.31	5,602,000
December.....	1,761,500	60,800	52,100	56,530	.240	.28	3,494,000
Calendar year 1935.....	60,091,700	476,000	52,100	164,600	.695	9.45	119,200,000
January.....	1,970,100	75,200	55,000	63,550	.268	.31	3,908,000
February.....	1,620,900	94,800	45,100	55,690	.236	.25	3,215,000
March.....	2,624,200	108,000	77,300	91,100	.354	.44	5,602,000
April.....	6,038,900	376,000	69,100	201,500	.849	.95	11,950,000
May.....	13,374,000	529,000	354,000	431,400	1.82	2.10	26,530,000
June.....	12,439,000	526,000	282,000	414,600	1.75	1.95	24,670,000
July.....	6,500,000	279,000	170,000	212,900	.898	1.04	13,090,000
August.....	4,264,000	167,000	116,000	137,500	.580	.67	8,458,000
September.....	2,936,000	116,000	76,200	97,870	.413	.46	5,823,000
Water year 1935-36.....	58,164,500	529,000	45,100	158,900	.670	9.13	115,400,000

WALLA WALLA RIVER BASIN

South Fork of Walla Walla River near Milton, Oreg.

Location.- Water-stage recorder, lat. 45°50', long. 118°10', in NE¼ sec. 15, T. 4 N., R. 37 E., 1 mile above Pacific Power & Light Co.'s penstock intake and 13 miles south-east of Milton. Zero of gage is about 2,050 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 67 square miles.

Records available.- February to October 1903 (gage heights only); August 1906 to November 1917 (incomplete); May 1931 to September 1936. At station 7 miles downstream November 1903 to May 1906.

Average discharge.- 13 years, (1904-5, 1908-15, 1931-36), 170 second-feet.

Extremes.- Maximum stage during year, 2.84 feet Apr. '12 (discharge not determined); minimum discharge observed, 94 second-feet Oct. 1, 2, Nov. 4-9; minimum gage height observed, 0.92 foot Oct. 1, 2, Nov. 4.

1903-17, 1931-36: Maximum discharge recorded, 1,650 second-feet Apr. 14, 1904 (flood of May 30, 31, 1906, which washed out gage, was probably much higher); minimum, 72 second-feet Feb. 14, 1932.

Maximum stage known, about 6 feet, referred to present gage, Mar. 31, 1931.

Remarks.- Records good except those estimated, those for period Apr. 23 to May 4, and those above 500 second-feet, which are fair. No diversions or regulation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	*97	96	133	*108	356	135	351	*232	120	103	104
2	95	*96	96	186	*106	382	135	422	*225	118	106	*105
3	96	*95	*96	162	107	428	135	428	*220	117	104	*107
4	96	94	*95	198	107	351	133	449	*215	117	103	*108
5	96	*94	*95	257	106	303	133	404	*205	115	101	*108
6	96	*94	*96	186	107	287	150	320	*197	115	101	*106
7	96	*94	*96	158	*108	246	217	303	*190	117	101	*105
8	96	*94	*99	135	*106	243	264	320	186	*116	101	*104
9	96	*94	*98	*130	*105	350	271	346	176	*114	101	*103
10	96	*95	*98	*150	*104	283	382	398	167	*112	101	*102
11	96	96	*99	*250	*103	236	560	448	167	*110	99	*102
12	*96	98	*119	*260	*103	224	848	441	165	*109	99	*103
13	*100	*99	*118	279	*102	211	796	448	160	109	99	*104
14	*106	*98	*110	211	*101	198	712	454	165	110	99	*105
15	*107	*98	*104	172	*98	176	736	415	158	110	99	*106
16	*106	*97	101	*145	*98	167	915	415	154	110	99	*105
17	*104	*97	100	*135	*97	165	930	351	145	110	100	*106
18	*102	96	99	*130	*95	165	874	324	143	109	100	*105
19	*101	96	*99	*140	*95	172	666	307	143	109	100	*103
20	*101	96	*99	268	*96	195	617	253	139	109	100	101
21	*101	98	*99	224	*100	233	528	268	139	107	101	*101
22	*102	98	*99	178	*105	203	520	253	135	106	101	*101
23	*101	99	99	*160	*120	181	480	246	135	107	101	*100
24	*100	*99	*99	*145	124	167	434	246	135	107	101	*100
25	*99	99	*99	*135	120	154	410	250	133	106	101	*100
26	*98	100	*98	*130	117	147	376	253	131	106	101	*99
27	*98	100	103	126	128	160	346	*253	128	106	101	99
28	*98	99	*115	120	162	162	342	*248	126	106	101	99
29	*98	99	*113	112	220	160	356	*240	124	106	100	100
30	*98	98	120	112	-	150	342	*238	124	104	101	100
31	*98	-	135	109	-	145	-	*235	-	104	100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	3,067	107	95	98.9	1.48	1.71	6,030
November.....	2,907	100	94	96.9	1.45	1.62	5,770
December.....	3,192	135	95	103	1.54	1.78	6,530
Calendar year 1935	54,208	448	94	149	2.22	30.07	107,500
January.....	5,254	279	109	169	2.52	2.90	10,380
February.....	3,251	220	95	112	1.67	1.80	6,450
March.....	7,013	428	145	226	3.37	3.68	13,910
April.....	13,741	950	133	458	6.84	7.63	27,250
May.....	10,336	448	255	333	4.97	5.73	20,500
June.....	4,882	232	124	162	2.42	2.70	9,640
July.....	3,421	120	104	110	1.64	1.89	6,790
August.....	3,125	106	99	101	1.51	1.74	6,200
September.....	3,090	108	99	103	1.54	1.72	6,130
Water year 1935-36	63,239	930	94	173	2.58	35.10	128,400

*Estimated from weather records, recorded range in stage, and unpublished record of discharge for station above Milton City intake.

Umatilla River above Meacham Creek, near Gibbon, Oreg.

Location.— Water-stage recorder, lat. 45°43', long. 118°20', in sec. 21, T. 3 N., R. 36 E., at highway bridge $2\frac{3}{4}$ miles above Meacham Creek and 3 miles northeast of Gibbon.

Records available.— April 1933 to September 1936.

Extremes.— Maximum discharge during year, 2,120 second-feet Apr. 12 (gage height, 2.95 feet); minimum, 30 second-feet Oct. 2; minimum gage height, 0.03 foot Aug. 28 to Sept. 1.

1935-36: Maximum discharge, that of Apr. 12, 1936; minimum, 28 second-feet Sept. 27, 1935.

Remarks.— Records good except those for periods of ice effect and no gage-height record and those above 1,200 second-feet, which are fair. Discharge for periods of ice effect Feb. 3-21, computed on basis of one discharge measurement, weather records, and records for station at Pendleton. Discharge for periods of no gage-height record, Apr. 1-3, 21-30, computed on basis of recorded range in stage and records for station at Pendleton; for July 1-31, Aug. 1, 2, interpolated. No diversions or regulation above station.

Rating tables, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Feb. 22 to Mar. 31, May 1-6)

Oct. 1 to Apr. 12

Apr. 13 to Sept. 30

0.1	31	1.5	600	0	38	1.2	428
.3	66	2.0	1,050	.2	64	1.6	682
.6	141	2.6	1,690	.5	129	2.0	1,040
1.0	295			.8	234	2.5	1,580

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	41	43	135	107	680	195	597	214		49	42
2	31	41	43	367	104	874	195	639	203		49	43
3	31	41	43	332	98	950	195	660	188		49	44
4	35	38	43	423	90	801	190	668	178		50	44
5	33	36	45	531	87	664	190	668	167		49	45
6	33	36	45	309	84	632	252	557	160		48	45
7	33	36	45	220	80	481	435	484	181		46	45
8	33	38	46	168	70	447	616	467	192		46	45
9	33	40	46	158	65	555	756	473	167		45	45
10	40	40	46	224	67	624	980	514	154		45	45
11	40	40	48	640	70	447	1,350	557	144		45	45
12	41	41	92	554	67	399	1,690	544	138		45	45
13	46	41	104	569	65	388	1,640	551	129		45	45
14	45	41	92	393	63	336	1,470	538	121		44	45
15	43	41	83	266	62	286	1,420	520	121		44	45
16	41	41	74	232	61	252	1,520	473	116		44	44
17	40	41	70	194	60	248	1,580	407	108		44	44
18	40	41	66	158	61	236	1,420	365	101		44	44
19	41	41	66	161	63	248	1,140	350	90		44	44
20	43	41	64	516	66	323	974	316	83		44	44
21	46	41	64	441	80	417	940	292	81		44	44
22	43	41	62	323	236	336	900	269	79		44	44
23	41	45	59	256	175	282	830	252	74		44	44
24	41	43	57	208	155	244	820	238	74		44	44
25	41	41	57	179	138	212	760	234	72		44	45
26	41	41	57	158	124	194	700	252	76		44	44
27	41	41	59	141	132	232	640	260	71		44	45
28	41	40	76	129	228	269	590	252	67		43	44
29	41	40	79	115	351	236	580	234	64		42	44
30	43	40	85	112	-	212	590	214	61		42	44
31	41	-	124	110	-	205	-	203	-		42	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,213	46	31	39.1	2,410		
November.....						1,207	43	36	40.2	2,390		
December.....						1,985	124	43	64.0	3,940		
Calendar year 1935.....						55,906	1,190	30	153	110,900		
January.....						8,742	640	110	282	17,340		
February.....						3,111	351	60	107	6,170		
March.....						13,010	950	194	420	25,800		
April.....						25,558	1,690	190	852	50,690		
May.....						13,048	668	203	421	25,880		
June.....						3,674	214	61	122	7,290		
July.....						1,705	-	-	*55	3,380		
August.....						1,395	50	42	45.0	2,770		
September.....						1,330	45	42	44.3	2,640		
Water year 1935-36.....						75,978	1,690	31	208	150,700		

*Estimated.

Umatilla River at Pendleton, Oreg.

Location.- Water-stage recorder, lat. 45°40', long. 118°48', in NE¼ sec. 10, T. 2 N., R. 32 E., at Pendleton, 2½ miles above mouth of McKay Creek.

Records available.- February 1891 to July 1892, May 1903 to June 1905, October 1934 to September 1935. Comparable records about 2½ miles downstream May 1921 to September 1934.

Average discharge.- 13 years (1923-1935), 443 second-feet.

Extremes.- Maximum discharge during year, 6,740 second-feet Apr. 13 (gage height, 5.2 feet); minimum, 19 second-feet Aug. 29.

1891-92, 1903-6, 1921-36: Maximum discharge (estimated), 13,500 second-feet Apr. 1, 1931 (gage height, 10.7 feet, former site and datum); minimum, 7 second-feet Aug. 14, 1924.

The flood of May 30-31, 1906, was somewhat greater than that of Apr. 1, 1931 (gage height, about 11.0 feet, present datum).

Remarks.- Records good except those for period of ice effect, Feb. 9-21, which are fair and were computed on basis of one discharge measurement, gage heights, and weather records. Discharge during period of no gage-height record, Mar. 5-10, computed on basis of records for station near Gibbon. Small diversions for irrigation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	52	65	167	246	2,560	594	1,100	280	57	27	31
2	27	46	65	359	232	2,550	581	1,120	250	46	27	44
3	26	46	60	568	209	2,710	594	1,120	256	46	35	46
4	29	44	63	720	196	2,550	581	1,130	237	44	33	44
5	33	44	63	840	184	2,100	568	1,110	214	46	29	46
6	35	46	63	655	184	2,000	568	1,000	192	44	27	44
7	37	49	63	516	175	1,500	890	912	246	41	26	41
8	35	49	65	430	136	1,350	1,130	856	275	46	27	37
9	33	52	68	364	120	2,100	1,990	825	227	46	27	35
10	33	57	68	418	122	1,600	2,710	810	192	49	29	33
11	37	54	68	848	127	1,350	3,600	848	188	49	31	31
12	39	54	90	1,290	123	1,240	4,560	848	167	52	29	33
13	54	60	114	1,190	120	1,180	4,880	818	159	44	26	35
14	60	63	114	1,060	110	1,060	3,720	810	167	37	26	37
15	63	63	107	750	105	912	3,370	795	167	33	26	39
16	60	63	97	600	102	765	3,370	735	163	33	26	39
17	49	63	90	529	100	705	3,600	655	159	31	26	37
18	44	63	87	454	103	705	3,600	562	144	37	26	35
19	41	63	87	424	110	712	2,890	510	129	37	26	35
20	46	63	84	825	130	832	2,330	466	118	35	24	31
21	49	63	84	992	200	1,160	2,120	436	104	33	22	22
22	57	63	81	940	265	1,130	2,120	394	84	33	22	24
23	54	63	78	690	607	920	1,800	364	74	29	22	27
24	49	63	78	568	496	780	1,740	337	78	33	24	29
25	46	63	74	503	442	698	1,620	326	74	33	24	35
26	46	63	74	436	424	607	1,440	326	65	33	26	35
27	44	63	74	382	555	581	1,270	332	65	31	24	33
28	41	63	64	359	888	676	1,130	320	65	33	24	33
29	46	65	97	305	1,280	669	1,060	295	63	31	22	31
30	52	65	111	275	-	594	1,050	275	63	31	26	31
31	52	-	118	260	-	594	-	260	-	29	26	-
Month	Second-foot-days			Maximum		Minimum		Mean		Run-off in acre-feet		
October.....	1,344			65		26		43.4		2,670		
November.....	1,728			65		44		57.6		3,430		
December.....	2,534			118		60		51.7		5,030		
Calendar year 1935.....	110,360			2,940		15		302		218,900		
January.....	18,637			1,290		167		601		36,970		
February.....	8,091			1,280		100		279		16,050		
March.....	38,890			2,710		581		1,255		77,140		
April.....	61,435			4,890		568		2,048		121,800		
May.....	20,895			1,130		260		668		41,050		
June.....	4,695			280		63		156		9,310		
July.....	1,202			57		29		38.8		2,380		
August.....	815			35		22		26.3		1,620		
September.....	1,053			46		22		35.1		2,090		
Water year 1935-36.....	161,120			4,880		22		440		319,600		

Umatilla River at Yoakum, Oreg.

Location.- Water-stage recorder, lat. 45°40', long. 119°2', in SW¹/₄ sec. 2, T. 2 N., R. 30 E., at highway bridge 2½ miles below former Furnish Reservoir and half a mile north-east of Yoakum station.

Drainage area.- 1,280 square miles.

Records available.- May 1903 to August 1916 (flow slightly affected by storage in Furnish Reservoir since about 1910), October 1934 to September 1936. At site 5 miles up-stream, above Furnish Reservoir, June 1915 to September 1934.

Average discharge.- 33 years, 672 second-feet.

Extremes.- Maximum discharge during year, 6,600 second-feet Apr. 13 (gage height, 7.4 feet); minimum, 27 second-feet Oct. 1, 2.

1903-36: Maximum discharge, about 20,000 second-feet May 30, 1906 (gage height, about 15.0 feet, from floodmarks, former datum); minimum, 12 second-feet Aug. 10-12, 1908.

Remarks.- Records good except those for periods of ice effect, Nov. 1-4, Dec. 26, Jan. 30 to Feb. 20, and those for periods of no gage-height record, Oct. 22, 31, Mar. 5-10, May 21-25, July 12-14, 19-21, which are fair and are based on weather records and daily discharge at other stations on Umatilla River. Diversions for irrigation above station. Flow regulated to some extent by operation of mills at Pendleton, and since 1927 by storage in McKay Reservoir. Furnish Reservoir Dam was built about 1910; capacity increased to 5,500 acre-feet in 1915; dam removed in 1934.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 20					Feb. 21 to Sept. 30						
0.9	27	1.7	208	2.8	700	0.6	28	1.6	260	4.0	1,740
1.1	53	2.0	316	3.2	960	.8	50	2.0	414	5.0	2,860
1.4	115	2.4	484	3.7	1,340	1.0	84	2.5	669	6.0	4,280
						1.3	162	3.0	965	6.8	5,550

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	60	69	155	255	2,370	675	1,160	450	299	284	152
2	30	60	73	292	240	2,920	647	1,200	432	288	284	73
3	30	60	71	612	220	2,920	658	1,160	410	295	288	65
4	29	60	71	724	205	2,670	669	1,160	401	314	281	62
5	29	58	69	960	190	2,200	663	1,160	376	314	274	60
6	32	57	69	799	190	2,100	647	1,090	340	317	278	54
7	33	57	71	574	185	1,600	935	965	339	314	278	52
8	36	57	71	462	160	1,450	1,310	875	393	288	288	48
9	32	58	75	392	140	2,200	1,840	815	360	288	288	45
10	31	62	77	396	145	1,750	2,320	815	325	288	321	43
11	31	64	75	842	150	1,520	3,260	845	306	288	325	40
12	31	67	89	1,300	143	1,350	4,430	845	325	288	321	43
13	37	69	113	1,100	140	1,270	5,550	815	360	284	314	44
14	52	75	126	995	135	1,200	4,430	815	302	283	310	45
15	62	75	121	786	130	1,060	3,900	733	284	261	306	45
16	62	75	118	658	127	905	3,980	732	281	278	302	45
17	60	75	109	563	125	845	3,900	647	267	270	302	44
18	57	75	101	489	128	845	3,960	554	261	274	299	43
19	53	69	96	444	150	815	3,120	497	288	273	288	42
20	55	73	93	773	180	955	2,430	469	284	272	284	39
21	55	67	89	1,140	260	1,230	2,100	477	281	271	274	37
22	57	67	83	960	288	1,270	2,040	447	278	270	274	35
23	62	67	83	773	808	1,060	1,840	425	328	270	260	32
24	62	67	83	634	755	905	1,700	400	336	275	264	35
25	60	67	83	537	669	815	1,650	376	314	284	274	36
26	58	71	84	457	613	744	1,560	372	314	286	270	40
27	58	71	85	409	709	698	1,390	397	317	281	270	42
28	57	69	85	367	998	755	1,270	406	310	292	246	42
29	57	69	82	324	1,520	755	1,150	395	310	286	196	38
30	60	69	110	290	-	726	1,060	414	310	284	187	40
31	60	-	121	270	-	703	-	436	-	288	187	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,454	62	27	46.9	2,880
November.....	1,890	75	57	66.3	3,950
December.....	2,758	126	69	89.0	5,470
Calendar year 1935.....	137,846	5,030	17	378	273,400
January.....	19,477	1,300	155	628	36,630
February.....	9,958	1,520	125	344	19,610
March.....	42,617	2,920	698	1,375	84,530
April.....	65,114	5,550	647	2,170	129,200
May.....	21,935	1,200	372	706	43,510
June.....	9,952	450	267	332	19,740
July.....	8,888	317	270	287	17,630
August.....	5,617	325	187	278	17,090
September.....	1,460	152	32	46.7	2,900
Water year 1935-36.....	194,250	5,550	27	531	385,300

Umatilla River near Umatilla, Oreg.

Location.- Water-stage recorder, lat. 45°54', long. 119°20', in NW¼ sec. 21, T. 5 N., R. 28 E., 1½ miles below West Division Main Canal of Umatilla project and 2 miles above Umatilla and mouth of river.

Drainage area.- 2,290 square miles.

Records available.- October 1903 to September 1936.

Average discharge.- 32 years (1904-36), 508 second-feet.

Extremes.- Maximum discharge during year, 4,350 second-feet Apr. 14 (gauge height, 5.77 feet); minimum, 0.5 second-foot (estimated) Aug. 9-13.
1903-36: Maximum discharge, 19,600 second-feet May 31, 1906 (gauge height, 11.0 feet); no flow at times.

Remarks.- Records fair. Discharge interpolated for Oct. 31, Nov. 1, 3-5, July 24, Sept. 15, 17. Discharge for Jan. 29, 30, Feb. 4-25 based on one discharge measurement Feb. 17 and on records at Yaakum and on diversions from river; discharge for Aug. 10-12 based on field estimate Aug. 10. Several diversions for irrigation above station; Brownell Canal diverts below. Records Dec. 3 to Jan. 3 include 40 second-feet diverted in West Division Main Canal but returned to river below river gauge. Flow regulated by storage in McKay and Cold Springs Reservoirs.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	122	95	110	327	1,620	470	527	13	12	12	11
2	12	121	95	115	327	2,460	430	604	13	12	12	11
3	12	117	90	213	313	2,640	408	633	14	12	12	11
4	12	112	98	400	300	2,550	430	595	14	12	13	11
5	12	108	100	614	290	2,070	348	604	14	12	13	11
6	13	104	94	740	285	1,780	272	652	14	12	13	11
7	13	95	92	478	246	1,620	299	486	14	12	13	11
8	13	101	92	306	240	1,320	633	348	14	12	13	11
9	13	104	92	541	265	1,300	1,020	209	13	12	9	11
10	13	95	92	233	215	1,640	1,520	162	14	12	.5	11
11	13	91	94	279	220	1,470	2,070	147	14	12	.5	11
12	12	114	92	996	226	1,350	2,830	121	14	12	.5	11
13	12	125	91	936	220	1,260	3,720	72	14	12	5	11
14	12	125	98	900	205	1,190	3,720	37	14	12	10	11
15	12	134	96	700	190	1,050	3,210	36	14	12	10	11
16	12	125	100	527	185	790	2,830	29	14	12	10	11
17	12	101	96	430	184	633	2,920	20	14	12	10	11
18	12	101	100	334	180	510	3,020	17	14	12	10	11
19	12	98	100	266	175	494	2,740	17	14	12	11	11
20	12	95	100	259	175	510	2,140	16	14	12	11	11
21	12	95	102	634	180	790	1,710	16	13	13	11	11
22	11	101	96	812	192	1,250	1,500	15	13	13	11	11
23	11	98	102	633	300	964	1,400	12	13	13	11	11
24	11	95	102	486	760	760	1,140	11	13	13	11	11
25	11	98	107	378	650	570	1,060	11	13	13	11	11
26	11	95	107	292	438	527	948	12	13	12	11	11
27	11	91	112	214	494	470	812	13	12	12	11	11
28	11	91	110	170	770	494	662	13	12	12	11	11
29	24	95	110	165	1,210	561	566	13	12	12	11	11
30	125	95	110	165	-	527	544	13	12	12	11	11
31	124	-	110	299	-	486	-	13	-	12	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	609	125	11	19.6	1,210
November.....	3,142	134	91	105	6,230
December.....	3,075	112	90	99.2	6,100
Calendar year 1935.....	65,382	2,550	8	179	129,700
January.....	13,625	996	110	440	27,020
February.....	9,782	1,210	175	337	19,400
March.....	35,866	2,640	470	1,157	71,140
April.....	45,392	3,720	272	1,513	90,030
May.....	5,494	652	11	177	10,900
June.....	403	14	12	13.4	799
July.....	377	13	12	12.2	748
August.....	309.5	13	.5	10.0	614
September.....	330	11	11	11.0	655
Water year 1935-36.....	118,404.5	3,720	.5	324	234,800

McKay Creek near Pilot Rock, Oreg.

Location.- Water-stage recorder, lat. 45°33', long. 118°46', in SE¼ sec. 23, T. 1 N., R. 32 E., 1 mile above backwater from McKay Dam and 6 miles northeast of Pilot Rock.

Records available.- May to August 1921, October 1926 to September 1936 (incomplete 1927-29).

Extremes.- Maximum discharge during year, 830 second-feet Mar. 1 (gage height, 3.72 feet); no flow at times.
1921, 1926-36: Maximum discharge, 6,000 second-feet Apr. 1, 1931 (gage height, 10.4 feet); no flow at times.

Remarks.- Records good except those for period Nov. 12 to Feb. 22, which are fair.
Numerous small diversions for irrigation above station; none between station and McKay Reservoir.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	2	17	*30	688	94	155	7			
2		0	1	74	*25	710	104	148	10			
3		0	†1	77	*27	666	121	129	10			
4		0	†1	178	*30	545	123	116	10			
5		0	†1	158	31	446	121	121	10			
6		0	†1	106	26	392	129	110	8			
7		0	1	90	17	328	203	94	8			
8		0	1	66	*14	292	273	82	13			
9		0	2	56	*17	378	344	72	13			
10		0	3	63	*25	316	410	63	12			
11		0	3	143	†27	256	475	61	9			
12			3	143	*26	242	525	49	7			
13				114	*21	230	510	42	7			
14			11	102	*16	197	436	38	6			
15			11	91	*10	168	374	33	4			
16												
17		†1	†11	86	*6	148	348	32	8			
18			†10	74	†7	141	324	31	7			
19			†9	67	*10	129	292	26	5			
20			†8	66	*18	125	245	23	4			
21			†8	256	*22	138	200	23	4			
22				8	273	*38	170	173	22	3		
23				8	223	201	150	163	20	3		
24		2		8	181	369	129	141	17	2		
25		2	7	148	230	114	153	17	2			
26		3	7	118	173	106	165	16	2			
27		4	7	91	143	92	146	12	1			
28		3	8	77	176	89	121	11	1			
29		2	8	67	378	106	121	11	†1			
30		2	12	58	480	106	121	10	1			
31		2	13	*40	-	98	118	8	†1			
		-	14	*35	-	106	-	7	-			
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						31	4	0	1.0	61		
December.....						196	14	1	6.3	389		
Calendar year 1935.....						15,902.3	436	0	43.6	31,540		
January.....						3,328	273	17	107	6,600		
February.....						2,595	480	7	89.5	5,150		
March.....						7,801	710	89	252	15,470		
April.....						7,078	525	94	236	14,040		
May.....						1,600	155	7	51.6	3,170		
June.....						180	13	1	6.0	357		
July.....						15.5	-	-	*.5	31		
August.....						0	0	0	0	0		
September.....						0	0	0	0	0		
Water year 1935-36.....						22,824.5	710	0	62.4	45,270		

*Computed on basis of weather records and records of discharge of Birch Creek at Rieth.

†Interpolated.

‡Discharge measurement.

UMATILLA RIVER BASIN

McKay Reservoir near Pendleton, Oreg.

Location.- Staff gage, lat. 45°36', long. 118°48', at reservoir dam in SE $\frac{1}{4}$ sec. 34, T. 2 N., R. 32 E., 4 miles south of Pendleton. Gage readings are elevations above mean sea level.

Records available.- October 1930 to September 1936.

Extremes.- Maximum contents observed during year, 48,010 acre-feet May 20 (elevation, 1,298.0 feet); minimum observed contents, 3,051 acre-feet Oct. 1, Nov. 1, Dec. 1 (elevation, 1,217.6 feet).

1930-36: Maximum contents, 69,920 acre-feet Mar. 22, 1932 (gage height, 1,318.85 feet); minimum, that of Oct. 1, Nov. 1, Dec. 1, 1935.

Remarks.- Records good except those for January and February, which are fair. Gage read to tenths of a foot at beginning of each month. Summer flow above reservoir entirely diverted for irrigation. McKay Reservoir, completed in 1927 by the Bureau of Reclamation, has a capacity of 67,700 acre-feet at elevation of 1,317.0 feet and stores water for irrigation of lands along Umatilla River near Echo, Stanfield, and Hermiston. Gage-height record furnished by U. S. Bureau of Reclamation.

Elevation and contents, water year 1935-36

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1	1,217.6	3,051	-
Nov. 1	1,217.6	3,051	0
Dec. 1	1,217.6	3,051	0
Jan. 1	1,218.0	3,153	+102
Feb. 1	1,240.0	11,060	+7,907
Mar. 1	1,254.0	17,630	+6,570
Apr. 1	1,277.5	31,800	+14,170
May 1	1,296.0	46,220	+14,420
June 1	1,296.0	46,220	0
July 1	1,285.0	35,700	-10,520
Aug. 1	1,269.0	20,320	-15,380
Sept. 1	-	*3,600	-16,720
Oct. 1	1,218.85	3,365	-115
The year			+334

*Estimated from reading of 1,219.0 feet Sept. 2 (contents, 3,427 acre-feet).

McKay Creek near Pendleton, Oreg.

Location.- Water-stage recorder, lat. 45°37', long. 118°48', in sec. 34, T. 2 N., R. 32 E., just above irrigation diversion dam, a quarter of a mile below McKay Dam, and 4 miles south of Pendleton.

Records available.- November 1918 to September 1923, October 1924 to September 1936. Diversions of irrigation canal at gage not included since 1932.

Average discharge.- 15 years (1919-23, 1924-27, 1928-36), 91.5 second-feet.

Extremes.- Maximum discharge during year, 314 second-feet Aug. 9 (gage height, 1.33 feet); no flow Oct. 1 to Apr. 15, Sept. 2-30.
1918-36: Maximum discharge, 3,250 second-feet Feb. 10, 1921; no flow at times.

Remarks.- Records good. Diversions for irrigation above McKay Reservoir use total summer flow. Flow completely regulated since 1927 by storage in McKay Reservoir.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0	0
.2	9
.4	36
.6	71
.8	117
1.0	177
1.2	252
1.4	350

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	9	123	240	261	41
2							0	9	117	244	261	0
3							0	9	128	257	261	0
4							0	9	128	256	252	0
5							0	9	131	266	252	0
6							0	9	102	266	257	0
7							0	9	100	257	261	0
8							0	9	71	244	280	0
9							0	8	94	244	284	0
10							0	2	88	244	308	0
11							0	2	114	244	303	0
12							0	2	125	248	303	0
13							0	2	161	244	298	0
14							0	2	102	240	289	0
15							0	2	88	236	284	0
16							4	2	77	236	275	0
17							9	2	79	240	270	0
18							9	2	107	240	270	0
19							9	2	125	244	252	0
20							9	43	177	244	248	0
21							9	67	174	244	236	0
22							9	69	205	236	236	0
23							9	75	270	236	236	0
24							9	77	248	244	232	0
25							9	64	236	252	228	0
26							9	67	240	252	224	0
27							9	82	244	257	224	0
28							9	84	240	261	177	0
29							9	94	240	261	151	0
30							9	151	240	261	148	0
31							-	171	-	261	145	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							0	0	0	0	0	
November.....							0	0	0	0	0	
December.....							0	0	0	0	0	
Calendar year 1935.....							18,911	270	0	51.8	37,520	
January.....							0	0	0	0	0	
February.....							0	0	0	0	0	
March.....							0	0	0	0	0	
April.....							130	9	0	4.3	258	
May.....							1,144	171	2	36.9	2,270	
June.....							4,574	270	71	152	9,070	
July.....							7,709	266	236	249	15,290	
August.....							7,706	308	145	249	15,280	
September.....							41	41	0	1.4	61	
Water year 1935-36.....							21,304	308	0	58.2	42,250	

Birch Creek at Rieth, Oreg.

Location.- Water-stage recorder, lat. 45°39', long. 118°53', in SE $\frac{1}{4}$ sec. 13, T. 2 N., R. 31 E., a quarter of a mile above mouth and half a mile southwest of Rieth.

Records available.- May 1921 to September 1923, April 1927 to September 1936; incomplete prior to 1929.

Extremes.- Maximum discharge observed during year, 395 second-feet Apr. 13 (gage height, 5.30 feet); no flow Oct. 1 to Jan. 12, July 1 to Sept. 30.

1921-23, 1927-36: Maximum discharge, 1,640 second-feet Jan. 29, 1928 (gage height, 6.00 feet, former site and datum); no flow at times.

Remarks.- Records fair. Stage affected by ice or float frozen in well Jan. 29 to Feb. 20. Discharge for Jan. 13, Jan. 29 to Feb. 20, Apr. 9-12, May 9-12, June 23-30 based on weather records at Pilot Rock and Pendleton, discharge records of McKay Creek near Pilot Rock, field estimates Feb. 12, 19, June 24, 30, and discharge measurements Feb. 17, 21.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0	8	130	46	88	5			
2				0	9	152	48	86	5			
3				0	10	161	49	85	9			
4				0	11	156	52	77	12			
5				0	12	139	53	69	12			
6												
7				0	10	129	53	59	11			
8				0	7	118	53	48	11			
9				0	5	106	58	37	13			
10				0	6	104	110	29	12			
11				0	7	101	160	23	12			
12				0	7	92	240	22	12			
13				0	7	81	320	12	11			
14				2.3	7	77	341	8	10			
15				2	7	74	300	9	10			
16				2	6	70	258	7	12			
17				4	6	63	239	5	24			
18				5	6	60	223	.5	13			
19				6	7	59	204	3	8			
20				6	8	55	176	2	4			
21				6	10	57	136	4	.5			
22				8	13	64	107	4	.8			
23				12	34	72	94	4	.8			
24				15	114	68	87	6	.1			
25				16	80	63	86	6	.1			
26				17	66	60	101	3	.1			
27				17	61	56	92	.8	.1			
28				18	67	50	83	2	.1			
29				19	94	49	78	2	.1			
30				16	116	48	85	2	.1			
31				12	-	43	82	4	.1			
				8	-	49	-	5	-			
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						0	0	0	0	0		
December.....						0	0	0	0	0		
Calendar year 1935.....						5,203.7	230	0	14.3	10,320		
January.....						189.3	19	0	6.11	375		
February.....						801	116	5	27.6	1,590		
March.....						2,806	161	43	84.1	5,170		
April.....						4,062	341	45	135	8,040		
May.....						712.3	86	.5	23.0	1,410		
June.....						208.9	24	.1	6.96	414		
July.....						0	0	0	0	0		
August.....						0	0	0	0	0		
September.....						0	0	0	0	0		
Water year 1935-36.....						8,569.5	341	0	25.4	17,000		

Diversions from Umatilla River between Furnish Reservoir and Umatilla, Oreg.

Furnish Canal diverts from right bank of Umatilla River in sec. 36, T. 3 N., R. 29 E. Umatilla project feed canal diverts water from right bank of Umatilla River in SW $\frac{1}{4}$ sec. 22, T. 3 N., R. 29 E., to feed Cold Springs Reservoir of U. S. Bureau of Reclamation. Western Land & Irrigation Co.'s canal diverts from left bank of Umatilla River in NE $\frac{1}{4}$ sec. 21, T. 3 N., R. 29 E.; gage 1 mile below intake. Allen Canal diverts from right bank of Western Land & Irrigation Co.'s canal half a mile below head gate of that canal. Maxwell Canal diverts from right bank of Umatilla River in SW $\frac{1}{4}$ sec. 28, T. 4 N., R. 28 E., and also at times receives water from Cold Springs Reservoir. West Division Main Canal diverts from left bank of Umatilla River in SW $\frac{1}{4}$ sec. 28, T. 5 N., R. 28 E. Brownell Canal diverts from right bank of Umatilla River 2 miles below West Division Main Canal diversion and $1\frac{1}{2}$ miles above mouth of Umatilla River.

Water diverted by all of these canals is used for irrigation of lands on both sides of Umatilla River near and below Echo, except that diverted by West Division Main Canal, which is applied to lands along Columbia River in vicinity of Irrigon.

Records are available from March 1926 to September 1936; records for some of the canals published separately prior to 1936.

Divisions, in acre-feet, water year October 1935 to September 1936

	Furnish Canal	Umatilla project feed canal	Western Land & Irrigation Co.'s canal	Allen Canal	Maxwell Canal	West Division Main Canal	Brownell Canal
October	-	81	923	1,190	1,360	5,050	536
November	-	2,960	44	(*)	454	0	0
December	-	4,000	647	(*)	(*)	0	0
January	-	15,040	1,070	(*)	(*)	0	0
February	-	974	(*)	(*)	(*)	0	0
March	-	7,820	(*)	(*)	(*)	2,970	0
April	2,060	12,230	8,940	1,070	3,300	9,280	541
May	7,080	12,510	10,780	1,300	4,970	9,390	742
June	5,850	2,220	8,670	1,100	2,850	8,170	768
July	6,060	0	9,610	928	1,790	6,540	683
August	5,330	0	10,200	1,220	1,780	6,290	666
September	0	0	1,770	1,110	1,650	6,550	730
The year or period	26,340	57,855	-	-	-	58,230	4,866

*Probably some flow; records fragmentary or lacking.

John Day River at Prairie City, Oreg.

Location.- Staff gage, lat. 44°27', long. 118°43', in NE¼ sec. 10, T. 13 S., R. 33 E., above outlet of Prairie power canal at power plant three-quarters of a mile southwest of Prairie City. Zero of gage is 3,492.55 feet above sea level (general adjustment of 1929).

Records available.- October 1926 to September 1936. At station below outlet of Prairie power canal October 1918 to September 1917 (gage heights only), March 1925 to September 1926.

Average discharge.- 11 years, 98.6 second-feet, including Prairie power canal.

Extremes.- Maximum discharge observed during year, 246 second-feet Apr. 18 (gage height, 1.76 feet); minimum, 4 second-feet Aug. 28, 29.
1926-36: Maximum discharge (estimated), 1,550 second-feet Mar. 19, 1932 (gage height, 4.7 feet); minimum, 2 second-feet Dec. 8, 21, 22, 1932, Aug. 10, 1934.

Remarks.- Records good except those for period October to February, which are fair. Method of shifting control used Oct. 1 to Feb. 21. Diversions above station for irrigation and for power. (See record for Prairie power canal.) Gage readings made by employee of West Coast Power Co.

Rating table, Feb. 22 to Sept. 30, 1936 (gage height, in feet, and discharge, in second-feet)

0.2	3.1
.4	12.5
.6	35
.9	75
1.2	126
1.6	207
2.0	317

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	10	6	5	6	100	18	135	184	7	23	6
2	30	10	6	11	6	117	20	117	117	8	22	10
3	26	7	6	6	6	163	22	106	80	8	18	10
4	15	6	6	11	7	135	38	117	66	10	14	9
5	12	8	6	10	7	135	26	163	50	10	9	11
6	12	9	6	7	7	117	27	163	52	11	8	11
7	11	8	6	7	6	89	33	135	81	11	6	10
8	10	7	6	6	6	91	42	117	95	16	6	10
9	11	8	6	7	8	101	47	95	68	25	6	7
10	11	8	6	8	8	80	62	50	46	34	6	7
11	12	7	6	24	8	64	96	95	36	31	6	6
12	13	8	12	15	12	63	154	117	34	30	7	7
13	12	8	10	14	11	57	196	154	42	26	6	9
14	12	7	8	10	10	50	196	184	43	22	6	10
15	11	7	6	8	7	42	196	207	41	22	6	10
16	11	7	6	8	7	34	220	174	42	18	5	10
17	11	7	6	8	6	31	232	144	34	13	5	10
18	11	7	6	7	7	27	246	108	31	13	5	9
19	10	7	5	7	7	27	232	81	21	14	5	8
20	10	7	5	8	8	37	196	88	14	15	5	7
21	11	7	5	7	11	47	174	86	11	15	5	6
22	12	7	5	7	105	38	184	62	10	16	5	6
23	12	7	5	7	50	38	196	47	8	19	5	6
24	12	7	5	6	30	30	207	40	14	22	6	6
25	12	7	5	5	26	26	184	34	11	21	6	5
26	12	7	6	5	18	26	163	27	8	23	6	5
27	12	7	6	7	18	26	154	27	7	25	5	6
28	13	7	6	7	19	30	163	27	6	28	4	6
29	16	7	6	5	23	22	135	27	6	16	4	6
30	16	7	6	6	-	15	126	31	6	21	5	6
31	11	-	6	6	-	21	-	46	-	25	6	-

Month	River only				River and Prairie power canal			
	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	Maximum	Minimum	Mean
October.....	420	31	10	13.5	833	62	29	45.2
November.....	223	10	6	7.4	442	63	49	59.4
December.....	191	12	5	6.2	379	70	53	57.9
Calendar year 1935	9,083	210	5	24.9	18,000	264	5	65.9
January.....	255	24	5	8.2	506	88	38	61.5
February.....	451	105	6	15.6	895	169	32	67.8
March.....	1,879	163	15	60.6	3,730	233	77	125
April.....	3,985	246	18	133	7,900	313	79	199
May.....	3,035	207	27	97.9	6,020	277	94	167
June.....	1,262	184	6	42.1	2,600	251	12	84.7
July.....	577	34	7	18.6	1,140	37	13	23.6
August.....	231	23	4	7.5	458	30	8	12.4
September.....	235	11	5	7.8	466	37	10	30.2
Water year 1935-36	12,744	246	4	34.8	25,270	313	8	77.7

John Day River at Picture Gorge, near Dayville, Oreg.

Location.-- Water-stage recorder, lat. 44°31'20", long. 119°37'30", in sec. 20, T. 12 S., R. 28 E., on John Day highway, 0.7 mile above Rock Creek Bridge and 7 miles northwest of Dayville. Zero of gage is 2,232.10 feet above mean sea level (general adjustment of 1929).

Records available.-- April 1926 to September 1936.

Extremes.-- Maximum discharge during year, 2,360 second-feet Apr. 14 (gage height, 8.76 feet); minimum, 1.0 second-foot Aug. 8, 9 (gage height, 0.98 feet).

1926-36: Maximum discharge, about 6,000 second-feet Mar. 19, 1932 (gage height, 14.0 feet); minimum, 1 second-foot several days in August and September 1930, Aug. 8, 9, 1936.

Remarks.-- Records excellent except those for periods Nov. 3, 4, 30, Dec. 1-6, 16-27, Feb. 1-10, 16-20, 26-28, which are fair, and which, because of ice or lack of gage height record, are based on records at Prairie City and Service Creek. Numerous diversions for irrigation above station.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.0	1.2	2.8	181	5.5	840
1.2	6.0	3.2	251	6.0	1,020
1.4	19	3.6	329	7.0	1,450
1.7	44	4.0	415	8.0	1,900
2.0	75	4.5	535	9.0	2,480
2.4	120	5.0	675		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	56	98	126	106	496	360	945	206	22	1.8	2.2
2	4.0	65	94	130	110	928	349	875	402	21	1.8	2.2
3	4.4	60	90	148	120	1,020	360	840	349	16	2.0	2.2
4	5.0	70	92	154	125	1,000	415	822	319	13	1.6	2.4
5	5.3	78	100	181	135	945	424	822	299	11	1.4	2.6
6	4.4	85	108	170	135	1,020	402	910	280	11	1.4	2.7
7	4.7	92	110	151	130	858	465	922	329	9.0	1.2	2.6
8	4.0	96	114	144	125	770	572	735	360	9.0	1.1	2.4
9	4.7	100	115	144	120	928	705	660	391	8.4	1.4	2.4
10	5.7	100	115	149	135	822	875	600	360	8.4	1.8	2.4
11	6.6	99	116	233	151	690	1,260	600	319	8.4	2.1	2.4
12	5.7	96	120	280	170	690	1,750	615	280	8.4	2.1	2.7
13	6.7	96	127	280	219	752	2,180	645	280	8.4	2.0	3.7
14	6.6	95	126	280	220	645	2,240	645	251	8.4	2.0	4.0
15	7.2	99	114	261	200	560	2,180	645	242	6.6	1.6	4.0
16	6.4	100	100	226	195	555	2,180	650	235	6.0	1.4	4.0
17	8.4	101	105	210	190	560	2,240	548	215	5.7	1.2	4.7
18	9.6	95	90	191	180	560	2,240	510	196	4.7	1.2	5.3
19	10	86	80	181	200	548	2,060	460	178	4.4	1.2	5.3
20	11	91	75	181	250	615	1,850	415	155	3.7	1.2	5.3
21	13	94	78	175	690	752	1,610	402	134	2.7	2.2	5.3
22	15	100	62	165	720	690	1,520	380	126	3.7	2.2	5.7
23	15	105	90	160	915	615	1,520	349	116	2.7	1.5	6.0
24	19	114	96	159	548	560	1,560	289	96	2.6	1.4	6.0
25	26	119	110	137	402	510	1,520	260	76	2.6	1.5	6.0
26	32	114	120	123	370	472	1,500	233	56	3.4	1.5	6.6
27	36	106	126	137	350	448	1,180	200	43	2.7	1.6	7.2
28	40	106	126	152	360	448	1,180	171	34	3.0	1.6	7.2
29	40	107	126	128	391	424	1,100	170	29	2.4	1.2	5.3
30	45	102	126	108	-	380	980	165	25	2.1	1.1	5.3
31	51	-	127	108	-	380	-	159	-	2.0	1.5	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						455.4	51	4.0	14.7	903		
November.....						2,827	119	56	94.2	5,610		
December.....						3,294	127	75	106	6,530		
Calendar year 1935.....						64,655.8	1,380	1.6	177	128,300		
January.....						5,355	280	103	173	10,620		
February.....						7,972	915	106	275	15,810		
March.....						20,623	1,020	380	665	40,910		
April.....						36,595	2,240	349	1,286	76,550		
May.....						16,820	945	159	533	32,770		
June.....						6,365	402	25	212	12,680		
July.....						223.4	22	2.0	7.21	443		
August.....						46.8	2.2	1.1	1.57	97		
September.....						126.1	7.2	2.2	4.20	250		
Water year 1935-36.....						102,404.7	2,240	1.1	280	203,100		

John Day River at Service Creek, Oreg.

Location.- Water-stage recorder, lat. 44°48', long. 120°0', in NE½ sec. 18, T. 9 S., R. 23 E., a quarter of a mile below Service Creek and three-quarters of a mile southwest of Service Creek post office. Zero of gage is 1,635.83 feet above mean sea level (general adjustment of 1929).

Records available.- October 1929 to September 1936.

Extremes.- Maximum discharge during year, 10,600 second-feet Apr. 18 (gage height, 10.43 feet); minimum, 32 second-feet Aug. 29, 30.
1929-36: Maximum discharge, 28,900 second-feet Mar. 19, 1932 (gage height, 16.75 feet); minimum, 20 second-feet Sept. 6, 1931.

Remarks.- Records excellent. Many diversions for irrigation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.2	20	3.5	1,060
.4	39	4.0	1,380
.7	75	5.0	2,120
1.0	123	6.0	3,040
1.3	179	7.0	4,180
1.6	245	8.0	5,600
2.0	365	10.0	9,600
2.5	560	12.0	14,800
3.0	780		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	126	179	303	276	1,620	1,210	5,290	1,240	268	54	35
2	38	113	169	354	337	3,260	1,060	5,140	1,660	243	51	40
3	39	92	165	414	340	3,700	1,120	5,140	1,680	227	50	42
4	41	90	167	560	368	3,700	1,210	5,140	1,420	218	49	56
5	40	113	171	530	386	3,370	1,310	5,140	1,340	204	48	60
6	42	142	175	658	404	3,480	1,280	5,140	1,210	194	60	65
7	46	140	192	530	407	3,260	1,450	4,670	1,240	185	60	90
8	50	181	204	421	344	2,840	2,040	3,940	1,520	171	54	78
9	63	169	248	404	337	3,370	2,840	3,890	1,560	165	51	80
10	67	194	270	414	379	3,480	3,320	3,480	1,420	171	51	71
11	63	200	265	452	382	2,740	5,290	3,700	1,210	187	54	61
12	67	231	270	1,420	432	2,560	7,410	3,940	1,090	211	43	58
13	68	240	282	1,150	462	2,740	9,360	4,060	1,000	196	47	55
14	68	254	300	1,150	470	2,460	9,950	4,060	1,000	179	46	56
15	70	218	236	680	424	2,040	9,130	3,820	970	155	46	58
16	75	245	179	730	455	1,840	9,130	3,480	940	138	44	62
17	80	240	196	658	421	1,800	9,600	3,040	940	123	42	71
18	75	224	159	590	428	1,920	10,100	2,640	855	114	41	76
19	78	186	142	530	435	1,920	9,600	2,460	789	106	39	78
20	76	167	120	530	438	2,120	8,230	2,280	730	103	38	76
21	78	173	126	510	502	2,840	7,210	2,120	658	98	38	72
22	80	181	148	498	2,080	2,840	7,020	1,960	570	92	37	70
23	81	209	155	460	3,040	2,290	7,020	1,760	530	87	36	67
24	82	255	183	452	1,920	2,000	7,410	1,620	510	81	35	67
25	87	260	227	407	1,310	1,800	8,020	1,520	482	81	34	61
26	90	243	250	327	1,060	1,620	6,830	1,480	494	75	34	61
27	90	248	297	348	970	1,520	5,930	1,480	442	74	34	61
28	100	236	288	379	940	1,480	5,760	1,450	358	70	33	58
29	121	234	300	354	1,200	1,620	5,600	1,380	324	63	33	56
30	125	200	321	270	-	1,340	5,140	1,280	297	61	32	57
31	125	-	309	306	-	1,150	-	1,210	-	57	34	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,243	125	38	72.4	4,450		
November.....						5,763	260	90	192	11,430		
December.....						6,693	321	120	216	13,280		
Calendar year 1935.....						323,071	7,020	27	885	640,900		
January.....						16,959	1,420	270	547	33,640		
February.....						20,917	3,040	276	721	41,490		
March.....						74,600	3,700	1,150	2,406	148,000		
April.....						170,990	10,100	1,060	5,699	359,100		
May.....						97,310	5,290	1,210	3,139	193,000		
June.....						28,450	1,660	297	948	56,430		
July.....						4,397	268	57	142	8,720		
August.....						1,348	60	32	43.5	2,670		
September.....						1,896	90	35	63.2	3,760		
Water year 1935-36.....						431,556	10,100	32	1,179	856,000		

John Day River at McDonald Ferry, Oreg.

Location.- Water-stage recorder, lat. 45°35', long. 120°25', in NW¼ sec. 11, T. 1 N., R. 19 E., at McDonald Ferry, half a mile below mouth of Rock Creek and 10 miles east of Klondike. Zero of gage is 392.02 feet above mean sea level.

Drainage area.- 7,580 square miles.

Records available.- December 1904 to September 1936.

Average discharge.- 31 years (1905-36), 1,912 second-feet.

Extremes.- Maximum discharge during year, 9,900 second-feet Apr. 19 (gage height, 6.58 feet); minimum, 18 second-feet Aug. 31, Sept. 1 (gage height, 0.98 foot).

1904-36: Maximum discharge, 24,900 second-feet Mar. 20, 1932 (gage height, 10.6 feet); minimum, 4 second-feet Aug. 31, 1931 (gage height, 0.68 foot).

Maximum stage known, 12.8 feet probably in 1894 (estimated discharge, 33,000 second-feet).

Remarks.- Records good except those for periods of ice effect, Nov. 1-6, Dec. 20-23, Feb. 10-21, which are fair and which were estimated from weather records, gage heights, and discharge records of John Day River at Service Creek. Diversions for irrigation above station.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.9	10	1.2	320	3.2	1,740	5.0	5,280
1.1	33	2.1	520	3.6	2,360	5.5	6,620
1.3	84	2.4	775	4.0	3,070	6.0	9,060
1.5	160	2.8	1,210	4.5	4,090	7.0	11,200

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	90	258	320	438	1,560	1,290	5,280	1,250	368	60	19
2	35	90	258	356	368	1,690	1,200	5,410	1,190	350	60	20
3	39	95	236	368	356	2,970	1,190	5,160	1,360	338	57	24
4	44	95	215	400	380	3,660	1,100	5,030	1,680	332	54	32
5	46	90	200	576	498	3,970	1,160	4,910	1,450	297	50	32
6	46	110	185	592	512	3,560	1,250	5,030	1,340	289	46	33
7	46	144	190	552	452	3,560	1,290	5,160	1,370	258	41	35
8	46	127	200	676	445	3,460	1,230	4,440	1,220	242	39	35
9	46	151	205	584	420	2,980	1,800	3,970	1,340	231	37	37
10	46	148	210	512	400	3,360	2,620	3,560	1,530	231	35	41
11	46	156	226	600	370	3,760	3,660	3,460	1,430	215	32	46
12	54	170	274	634	360	2,880	5,280	3,660	1,280	200	32	60
13	54	205	303	697	400	2,700	7,040	3,980	1,140	195	41	69
14	69	210	297	1,340	440	2,680	6,560	4,090	1,020	205	39	69
15	61	242	297	1,220	470	2,700	8,970	4,090	975	215	32	69
16	81	258	309	1,080	460	2,280	8,660	3,870	975	226	30	63
17	79	252	320	891	440	1,960	8,660	3,560	975	200	30	57
18	75	236	263	775	420	1,880	9,280	3,160	922	180	29	52
19	75	252	226	721	420	1,960	9,280	2,700	922	165	25	52
20	72	258	160	634	430	1,960	8,970	2,440	832	148	25	52
21	78	247	140	576	440	2,040	8,060	2,360	775	135	28	52
22	81	231	130	560	888	2,700	7,180	2,120	730	119	25	57
23	78	205	140	560	3,860	3,070	6,900	1,960	660	108	25	60
24	78	195	156	544	2,980	2,440	7,040	1,800	592	98	26	63
25	81	210	200	512	2,200	2,120	7,470	1,640	528	94	26	60
26	81	226	236	505	2,850	1,890	7,760	1,520	512	94	26	60
27	84	263	242	490	2,790	1,700	6,900	1,460	468	88	28	60
28	88	266	269	432	2,440	1,590	6,070	1,450	460	78	25	57
29	84	269	297	380	2,200	1,500	5,940	1,420	468	75	23	54
30	91	269	326	419	-	1,540	5,670	1,360	412	75	20	54
31	91	-	314	475	-	1,450	-	1,330	-	66	19	-
Month						Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet	
October.....						2,026		91	32	65.4	4,020	
November.....						5,760		286	90	192	11,420	
December.....						7,282		326	130	235	14,440	
Calendar year 1935.....						325,683		6,760	21	892	645,900	
January.....						16,999		1,340	320	613	37,680	
February.....						29,127		3,860	356	1,004	57,770	
March.....						77,870		3,870	1,450	2,512	154,600	
April.....						161,340		9,280	1,100	5,378	320,000	
May.....						103,280		5,410	1,330	3,287	200,900	
June.....						29,806		1,680	412	994	59,120	
July.....						5,895		368	66	160	11,690	
August.....						1,065		60	19	34.4	2,110	
September.....						1,474		69	19	49.1	2,920	
Water year 1935-36.....						441,924		9,280	19	1,207	976,600	

Strawberry Creek above South Fork, near Prairie City, Oreg.

Location.- Water-stage recorder, lat. 44°20', long. 118°39', in SW $\frac{1}{4}$ sec. 20, T. 14 S., R. 34 E., 100 feet above mouth of South Fork of Strawberry Creek and 8 $\frac{1}{2}$ miles south of Prairie City.

Records available.- October 1930 to September 1936.

Extremes.- Maximum discharge during year, 89 second-feet May 14 (gage height, 2.16 feet); minimum, 1.4 second-feet Dec. 26.

1930-36: Maximum discharge, 150 second-feet June 9, 1933; minimum, 1.4 second-feet Jan. 8, 19, Oct. 7-21, 23, 24, 26-28, 1931, Oct. 13-17, 1934, Dec. 26, 1935.

Remarks.- Records good except those below 10 second-feet and those for June 18-21, which are fair. Discharge estimated because of ice Dec. 15, Jan. 25-27, 29, 30, Feb. 1-3, Mar. 30, Apr. 1 and because of lack of gage-height record Jan. 8-17, June 18-21. No diversions above station. Some natural regulation by Strawberry Lake.

Rating tables, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 1

Apr. 2 to Sept. 30

0.9	0.9
1.1	4.0
1.3	8.7
1.6	18
1.7	33
1.9	55
2.2	102

0.9	1.0
1.1	4.0
1.3	8.7
1.6	16.5
1.7	30.5
1.9	51
2.2	96

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.1	1.7	1.8	1.6	1.8	1.7	1.8	30	44	13	6.7	3.8
2	2.1	1.7	1.8	1.7	1.8	1.7	1.8	30	41	12	6.7	3.8
3	2.1	1.9	1.8	1.6	2.0	1.7	1.9	32	38	12	6.4	3.8
4	2.1	2.4	1.8	1.7	2.2	1.7	1.9	34	35	12	6.4	3.8
5	2.1	2.1	1.8	1.7	1.9	1.7	1.8	37	33	11	6.4	4.0
6	2.1	1.9	1.8	1.7	1.8	1.7	1.8	38	32	11	6.2	3.8
7	2.1	2.1	1.8	1.7	1.7	1.8	1.9	37	32	11	6.0	3.7
8	2.1	2.1	1.8	1.7	1.6	1.8	1.9	37	32	10	6.0	3.7
9	1.9	2.1	1.8	1.7	1.7	1.8	1.9	36	31	10	5.8	3.7
10	1.9	1.9	1.8	1.9	1.6	1.7	2.2	38	30	10	5.8	3.5
11	1.9	1.9	1.9	2.0	1.7	1.7	3.0	45	30	10	5.5	3.5
12	1.9	2.1	1.9	1.9	1.8	1.7	4.4	55	28	10	5.5	3.5
13	1.9	2.1	1.8	1.9	1.7	1.7	6.4	72	27	9.7	5.3	3.5
14	2.1	1.9	1.8	1.8	1.6	1.7	8.2	82	26	9.7	5.3	3.5
15	1.9	2.1	1.8	1.8	1.6	1.7	10	82	25	9.3	5.3	3.3
16	1.9	2.1	1.8	1.8	1.6	1.7	14	70	24	9.3	5.3	3.3
17	1.8	1.9	1.9	1.8	1.6	1.7	19	64	23	9.3	5.1	3.3
18	1.8	1.9	2.1	1.8	1.6	1.7	21	59	23	9.0	4.7	3.3
19	1.8	1.9	1.9	1.8	1.6	1.7	21	56	23	8.7	4.4	3.3
20	1.8	1.9	2.2	1.8	1.6	1.8	20	52	22	8.4	4.4	3.3
21	1.8	1.9	2.4	1.7	1.8	1.8	22	49	22	8.2	4.4	3.3
22	1.8	1.9	1.9	1.7	1.7	1.8	27	44	22	8.2	4.2	3.3
23	1.7	1.9	1.7	1.7	1.7	1.9	29	41	20	8.0	4.2	3.3
24	1.7	1.9	1.7	1.7	1.6	1.8	34	41	20	7.7	4.2	3.2
25	1.7	1.9	1.6	1.6	1.6	1.8	37	42	18	7.7	4.0	3.2
26	1.7	1.9	1.6	1.7	1.7	1.8	37	46	16	7.4	3.8	3.2
27	1.7	1.9	1.6	1.8	1.7	1.8	37	53	16	7.4	3.8	3.2
28	1.8	1.9	1.6	1.8	1.7	1.8	35	54	15	7.4	3.8	3.2
29	1.7	1.9	1.6	1.8	1.7	1.8	32	52	14	7.2	3.8	3.2
30	1.7	1.8	1.6	1.8	-	1.8	31	49	13	7.0	3.8	3.0
31	1.7	-	1.6	1.8	-	1.8	-	45	-	7.0	4.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	58.4	2.1	1.7	1.88	116
November.....	56.6	2.4	1.7	1.95	116
December.....	56.0	2.4	1.6	1.81	111
Calendar year 1935.....	3,330.2	60	1.6	9.12	6,600
January.....	54.5	2.0	1.6	1.76	108
February.....	49.7	2.2	1.6	1.71	99
March.....	54.3	1.9	1.7	1.75	108
April.....	466.9	37	1.8	15.6	926
May.....	1,500	82	3.0	48.4	2,980
June.....	775	44	13	25.8	1,540
July.....	288.8	13	7.0	9.31	572
August.....	157.2	6.7	3.8	5.07	312
September.....	103.5	4.0	3.0	3.45	205
Water year 1935-36.....	3,622.7	82	1.6	9.90	7,190

Prairie power canal at Prairie City, Oreg.

Location.- Staff gage, lat. $44^{\circ}27'$, long. $118^{\circ}42'$, in sec. 11, T. 13 S., R. 33 E., above county road bridge over canal and 1 mile south of Prairie City.

Records available.- May 1925 to September 1936.

Average discharge.- 11 years, 44.1 second-feet.

Extremes.- Maximum discharge observed during year, 70 second-feet May 7 (gage height, 2.52 feet); no flow at times.
1925-36: Maximum discharge, 71 second-feet Dec. 10, 1929; no flow at times.

Remarks.- Records good. Discharge for Sept. 30 interpolated. Canal diverts from John Day River in SE $\frac{1}{4}$ sec. 7, T. 13 S., R. 34 E. Water is used by power plant at Prairie City and is returned to river below gaging station on John Day River at Prairie City.
Gage readings made by employee of West Coast Power Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	53	50	53	36	64	61	70	67	6	7	4
2	0	53	53	56	36	64	64	67	70	6	8	6
3	12	53	50	61	34	70	64	70	70	6	9	11
4	18	43	53	64	34	67	64	67	67	4	9	17
5	19	43	50	67	36	67	67	70	70	4	6	24
6	17	53	53	61	34	64	64	67	70	4	6	24
7	23	53	53	61	26	64	64	70	67	4	6	24
8	25	53	53	56	30	61	67	70	67	1	6	24
9	24	53	50	58	53	64	64	70	64	0	5	24
10	24	53	53	61	61	64	67	70	67	0	5	26
11	25	50	53	64	58	64	64	67	61	0	5	28
12	26	53	58	61	64	67	67	70	61	0	5	26
13	41	53	53	61	58	64	64	70	58	0	4	28
14	39	50	50	64	56	64	67	67	56	0	4	24
15	39	53	50	64	58	64	64	70	56	0	4	24
16	39	53	50	61	53	64	67	70	56	5	4	26
17	36	53	50	56	58	64	67	70	53	0	4	24
18	36	53	48	58	56	64	67	70	30	0	4	22
19	36	53	50	56	56	64	67	70	30	0	4	22
20	34	53	50	58	64	64	67	67	22	7	4	24
21	36	53	50	53	58	61	67	70	18	11	4	24
22	39	53	48	53	64	64	64	70	14	10	4	24
23	39	53	50	48	61	64	67	70	14	11	4	24
24	39	53	53	46	61	64	67	67	13	10	4	22
25	43	53	53	43	64	64	70	70	12	10	4	24
26	43	53	53	34	64	64	67	67	14	11	4	26
27	43	50	56	32	61	64	67	70	12	9	4	24
28	43	53	53	34	58	67	70	67	9	9	4	24
29	46	50	53	36	64	61	67	70	6	9	4	24
30	46	53	53	32	-	64	70	67	6	9	4	24
31	50	-	53	36	-	56	-	70	-	9	4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	980	50	0	31.6	1,940
November.....	1,558	53	43	51.9	3,090
December.....	1,605	58	48	51.8	3,180
Calendar year 1935.....	14,978	65	0	41.0	29,690
January.....	1,650	67	32	53.2	3,270
February.....	1,516	64	26	52.3	3,010
March.....	1,985	70	56	64.0	3,940
April.....	1,983	70	61	66.1	3,930
May.....	2,140	70	67	69.0	4,240
June.....	1,280	70	6	42.7	2,540
July.....	155	11	0	5.0	307
August.....	153	9	4	4.9	303
September.....	672	23	4	22.4	1,330
Water year 1935-36.....	15,677	70	0	42.8	31,080

North Fork of John Day River near Dale, Oreg.

Location.- Water-stage recorder, lat. $45^{\circ}0'$, long. $118^{\circ}57'$, in SE $\frac{1}{4}$ sec. 25, T. 6 S., R. 31 E., three-eighths of a mile below Desolation Creek and $\frac{1}{4}$ mile northeast of Dale. Zero of gage is 2,775.85 feet above mean sea level (general adjustment of 1929).

Records available.- October 1929 to September 1936.

Extremes.- Maximum discharge during year, 2,690 second-feet Apr. 24 (gage height, 7.0 feet); minimum, 12 second-feet Nov. 4.
1929-36: Maximum discharge, 4,990 second-feet May 14, 1932 (gage height, 8.4 feet); minimum, 10 second-feet Dec. 11, 12, 1932.

Remarks.- Records good except those for Apr. 18 to May 16, which are fair, and those for periods of ice effect, Nov. 4-16, Nov. 20 to Mar. 7, which are poor and which are estimated from gage heights, weather records, discharge measurements on Jan. 23, Feb. 14, and other gaging-station records in John Day River Basin.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 16 to May 16)

1.5	9	5.4	390
1.7	18	5.8	560
1.9	33	4.2	765
2.1	54	4.6	1,010
2.4	96	5.0	1,810
2.7	159	6.0	2,250
3.0	240	7.0	3,380

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	34	50	65	30	170	85	1,950	792	134	43	31
2	31	24	45	70	35	175	109	2,000	710	128	51	41
3	31	20	40	80	45	190	107	2,150	610	119	60	46
4	34	15	40	95	50	180	104	2,300	610	119	59	46
5	41	20	35	115	55	195	94	2,300	533	107	52	52
6	51	35	35	100	55	205	94	1,900	538	104	46	56
7	42	30	40	90	50	195	128	1,620	685	102	47	52
8	39	35	50	85	50	195	176	1,520	635	117	46	41
9	39	40	65	85	45	220	234	1,570	570	126	46	39
10	36	55	80	100	45	206	264	1,950	502	150	45	40
11	37	65	75	115	50	192	426	2,100	459	132	48	38
12	38	85	75	130	55	195	556	2,250	434	117	51	39
13	43	95	80	110	60	184	846	2,250	442	104	48	41
14	45	80	80	100	61	162	1,150	2,200	442	94	45	47
15	46	70	65	90	60	148	1,190	2,000	402	88	44	54
16	50	80	45	80	60	130	1,620	1,650	438	83	44	52
17	45	76	40	70	55	130	1,950	1,350	366	76	41	51
18	43	61	30	70	50	128	2,250	1,190	362	73	40	47
19	42	56	25	65	55	123	2,250	1,150	316	74	37	46
20	45	47	20	65	60	136	2,100	975	282	69	37	44
21	43	45	25	70	65	166	2,150	890	261	65	37	41
22	47	50	35	80	200	182	2,360	765	237	64	36	40
23	43	60	45	61	150	176	2,360	738	230	65	37	41
24	33	90	55	50	80	166	2,520	710	217	62	36	41
25	43	80	70	40	70	154	2,300	738	282	62	35	38
26	48	75	90	45	70	143	2,150	755	220	60	40	39
27	47	85	80	50	65	134	2,000	792	189	58	40	40
28	45	75	80	60	60	130	2,000	738	166	53	39	38
29	53	60	85	50	125	123	1,850	665	152	51	33	37
30	33	55	80	40	-	90	1,850	635	145	48	31	39
31	28	-	70	30	-	115	-	635	-	46	51	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,259	53	28	40.9	2,520		
November.....						1,698	95	15	56.6	3,370		
December.....						1,730	90	20	55.8	3,430		
Calendar year 1935.....						94,678	1,620	15	259	187,800		
January.....						2,356	130	30	76.0	4,670		
February.....						1,931	200	30	66.6	3,830		
March.....						5,041	220	90	163	10,000		
April.....						37,273	2,520	85	1,242	73,930		
May.....						44,566	2,300	635	1,431	88,000		
June.....						12,218	792	145	407	24,250		
July.....						2,750	150	46	88.7	5,450		
August.....						1,527	60	31	42.8	2,630		
September.....						1,297	56	31	43.2	2,570		
Water year 1935-36.....						113,256	2,520	15	309	224,600		

North Fork of John Day River at Monument, Oreg.

Location.— Water-stage recorder, lat. 44°49', long. 119°26', in E½ sec. 1, T. 9 S., R. 27 E., just below entrance to canyon three-quarters of a mile west of Monument.

Records available.— March 1925 to September 1936.

Average discharge.— 10 years (1925-27, 1928-36), 879 second-feet.

Extremes.— Maximum discharge during year, 7,590 second-feet Apr. 18 (gage height, 8.45 feet); minimum, 9 second-feet during period when recorder was stopped, probably Nov. 4 (gage height, 1.02 feet).

1925-36: Maximum discharge, 22,000 second-feet Mar. 18, 1932 (gage height, 14.8 feet); minimum, 7 second-feet Nov. 24, 1931 (gage height, 0.78 foot).

Remarks.— Records good except those for periods of ice or no gage height record, which are poor and are estimated from weather records, discharge measurements on Jan. 22, Feb. 13, and flow at other stations in John Day River Basin. Several small diversions for irrigation above station.

Rating table, water year 1935-36 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.0	8	2.8	515	5.0	2,550
1.3	33	3.2	770	6.0	3,900
1.6	78	3.6	1,110	7.0	5,250
2.0	177	4.0	1,490	8.0	6,890
2.4	325	4.5	2,000	9.0	8,680

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	*70	*80	*160	*130	1,220	612	4,080	1,100	203	51	53
2	49	*48	*72	*180	*150	2,180	594	3,940	1,200	187	49	58
3	48	*34	*72	*240	*160	2,240	658	3,940	1,010	177	48	56
4	52	*20	*72	*370	*170	2,060	707	3,940	939	165	56	55
5	53	*35	*67	*320	*180	1,840	721	4,080	866	160	64	86
6	52	*54	*66	*450	*170	2,000	693	3,670	810	151	61	84
7	*60	*45	*78	*350	*150	1,690	1,050	2,970	957	143	55	78
8	*65	*50	*84	*270	*140	1,640	1,440	2,610	1,060	140	51	78
9	*70	*60	*120	*250	*150	2,550	2,160	2,440	966	154	49	58
10	*70	*90	*150	*250	*170	1,840	3,080	2,610	842	171	49	66
11	*65	*100	*140	*350	*160	1,540	4,500	3,030	728	203	49	53
12	*70	*130	*140	*900	*200	1,640	6,040	3,280	665	180	49	52
13	*70	*140	*150	*740	*215	1,640	7,050	3,280	651	157	51	56
14	*75	*130	*160	*680	*220	1,290	6,710	3,280	644	140	51	59
15	80	*110	*110	*500	*210	1,110	6,200	2,970	630	126	46	66
16	73	*130	*75	*400	*220	1,030	6,370	2,390	618	116	44	71
17	76	*130	*80	*340	*200	1,080	6,710	1,940	568	111	43	73
18	76	*120	*64	*290	*200	1,160	7,050	1,940	532	102	43	71
19	74	*100	*50	*280	*190	1,160	6,370	1,740	520	93	40	71
20	71	*70	*45	*250	*170	1,490	5,560	1,590	460	93	41	66
21	*71	*70	*50	*240	*300	2,000	4,950	1,440	410	91	40	64
22	*71	*75	*60	223	1,230	1,540	5,100	1,290	379	32	39	62
23	*74	*100	*65	*210	1,520	1,240	4,950	1,200	343	78	38	56
24	*72	137	*78	*200	786	1,080	5,720	1,110	325	74	38	56
25	*72	*130	*110	*180	606	966	5,720	1,100	361	73	37	56
26	*70	*120	*120	*160	510	582	4,950	1,110	394	71	37	56
27	*66	*130	*160	177	495	818	4,220	1,160	296	69	38	53
28	*70	*120	*150	*200	510	890	4,360	1,100	256	66	41	55
29	*80	*115	*160	*170	826	826	4,080	1,050	251	62	41	55
30	*82	*90	*185	*150	-	693	3,900	939	216	58	41	53
31	*74	-	*170	*140	-	665	-	906	-	53	37	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						2,102	82	45	67.8		4,170	
November.....						2,753	140	20	91.8		5,460	
December.....						3,183	185	45	105		6,310	
Calendar year 1935.....						238,374	5,600	20	653		472,800	
January.....						9,600	900	140	310		19,040	
February.....						10,358	1,520	130	357		20,540	
March.....						44,000	2,550	665	1,419		67,270	
April.....						122,135	7,050	594	4,071		242,500	
May.....						72,015	4,080	906	2,523		142,800	
June.....						18,967	1,200	216	633		37,680	
July.....						3,749	203	53	121		7,440	
August.....						1,421	64	37	45.6		2,820	
September.....						1,875	86	52	62.5		3,720	
Water year 1935-36.....						292,178	7,050	20	798		579,500	

*Estimated.

159045 O-37—3

Middle Fork of John Day River at Ritter, Oreg.

Location.— Water-stage recorder, lat. 44°53', long. 119°8', in NW¼ sec. 8, T. 8 S., R. 30 E., at bridge half a mile south of Ritter.

Records available.— October 1929 to September 1936.

Extremes.— Maximum discharge during year, 2,020 second-feet Apr. 13 (gauge height, 5.60 feet); minimum, 5 second-feet Dec. 18 (gauge height, 1.50 feet).
1929-36: Maximum discharge, 4,000 second-feet Mar. 19, 1932 (gauge height, 7.78 feet); minimum, 1.0 second-foot Dec. 10, 1932.

Remarks.— Records good October, March to September; poor November to February. Daily discharge for period of ice effect, Jan. 28 to Feb. 20, estimated on basis of gage heights, weather records, and discharge records at other stations. A few small diversions for irrigation above station.

Rating tables, water year 1935-36 except period of ice effect (gauge height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 22

Feb. 23 to Sept. 30

1.5 4.8
1.8 18
2.1 41
2.4 80
2.8 154
3.2 255

1.5 6
1.8 17
2.1 39
2.4 79
2.8 154
3.4 320
4.0 580
4.5 930
5.0 1,420
5.6 2,020

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	20	20	38	20	285	148	759	272	41	12	7
2	12	12	16	41	25	285	160	724	279	38	13	8
3	15	10	19	45	35	316	158	731	227	36	16	10
4	15	12	14	49	40	292	180	759	219	34	16	12
5	16	17	19	58	45	330	171	794	193	36	14	16
6	16	22	26	49	45	355	169	731	186	34	13	19
7	17	27	36	42	42	310	247	622	216	32	12	25
8	17	30	40	39	38	313	371	565	227	29	11	18
9	17	35	36	38	35	399	616	555	221	36	11	18
10	17	32	34	38	40	320	608	592	189	47	11	16
11	17	30	36	66	45	285	1,190	654	167	47	11	15
12	17	31	46	74	50	282	1,570	731	156	39	11	15
13	17	32	44	66	52	306	1,970	752	156	34	9	16
14	20	30	31	61	55	247	1,720	745	184	30	9	19
15	19	30	14	58	55	211	1,620	675	148	29	9	19
16	20	31	14	50	51	196	1,670	565	162	23	8	19
17	22	34	6	44	47	198	1,720	480	142	26	7	19
18	22	25	10	43	45	214	1,720	435	134	25	8	19
19	23	19	20	41	45	236	1,570	415	123	26	7	18
20	22	29	31	41	55	327	1,520	363	109	25	6	17
21	23	31	26	52	76	453	1,180	530	98	21	7	18
22	26	38	21	56	258	352	1,170	296	84	21	7	16
23	26	38	24	46	206	282	1,120	275	78	20	7	15
24	24	36	53	32	102	238	1,220	259	79	20	8	15
25	23	32	58	20	82	216	1,150	256	79	19	7	14
26	26	34	52	23	92	196	957	253	70	13	8	14
27	24	34	51	30	79	184	850	247	59	18	8	14
28	28	29	49	40	94	203	874	233	51	16	8	15
29	28	37	50	30	136	193	808	214	49	15	7	15
30	26	22	39	20	-	160	738	196	47	15	7	15
31	22	-	38	15	-	177	-	201	-	14	6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	630	28	12	20.3	1,250
November.....	837	38	10	27.9	1,660
December.....	973	58	6	31.4	1,930
Calendar year 1935.....	48,159	1,240	4	132	95,520
January.....	1,350	74	15	43.5	2,680
February.....	1,980	258	20	68.3	3,930
March.....	3,369	453	160	270	16,600
April.....	29,065	1,870	148	969	57,650
May.....	15,407	794	198	497	30,580
June.....	4,373	279	47	146	8,670
July.....	869	47	14	28.0	1,720
August.....	294	16	6	9.5	583
September.....	476	25	7	15.9	944
Water year 1935-36.....	64,623	1,870	6	177	128,200

Fox Creek at gorge near Fox, Oreg.

(The lower portion of this stream is named Cottonwood Creek)

Location.- Water-stage recorder, lat. 44°37', long. 119°16', in NW¼ sec. 17, T. 11 S., R. 29 E., at head of gorge 6 miles southwest of Fox.

Records available.- October 1930 to September 1936.

Extremes.- Maximum discharge during year, 331 second-feet Mar. 3 (gage height, 3.03 feet); no flow at times.
1930-36: Maximum discharge, 800 second-feet Mar. 18, 1932 (gage height, 4.55 feet); no flow at times.

Remarks.- Records Mar. 1 to June 20 fair; others poor. Discharge estimated for periods of very small flow, Oct. 1 to Feb. 21, July to September. Stage affected by ice Dec. 12 to Feb. 21. Several diversions for irrigation in valley above station.

Rating table, Feb. 22 to June 30, 1936 (gage height, in feet, and discharge, in second-feet)

0.4	0
.6	.8
.8	3.2
1.0	8.0
1.5	38
2.0	99
2.5	201
3.0	323

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						96	12	59	2.9			
2						194	19	51	4.6			
3						300	31	47	4.4			
4						245	50	40	3.2			
5						192	44	44	2.9			
6						190	50	48	2.9			
7						108	85	40	4.4			
8						90	66	32	5.0			
9						123	52	28	4.4			
10					0.1	65	55	24	3.6			
11						60	70	12	2.4			
12						79	89	22	1.7			
13						54	106	16	1.7			
14						37	104	13	2.2			
15						36	103	11	1.6			
16						36	110	11	2.2			
17	*0.01					32	119	9.6	1.8			
18						24	113	7.7	1.6			
19						23	106	6.3	1.2			
20						30	87	5.8	.9			
21					1.0	30	73	5.8	.7			
22					100	20	72	5.8	.4		*0.1	
23					188	17	97	4.8	.3			
24				*0.1	203	20	129	4.0	.3			
25					206	20	129	3.0	.4			
26					171	17	89	2.4	.2			
27					135	23	78	2.3	.1			
28					117	25	104	2.2	.1			
29					110	20	80	1.6	.1			
30					-	14	67	1.3	0			
31					-	10	-	1.5	-			
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0.31	-	-	0.01	0.6		
November.....						.30	-	-	.01	.6		
December.....						3.1	-	-	.1	6.1		
Calendar year 1935.....						2,345.71	183	0	6.43	4,650		
January.....						31.0	-	-	1.0	61		
February.....						1,233.0	206	0.1	42.5	2,450		
March.....						2,230	300	10	71.9	4,420		
April.....						2,389	129	12	79.6	4,740		
May.....						582.1	59	1.3	18.1	1,110		
June.....						58.2	5.0	0	1.94	115		
July.....						31	-	-	.01	.6		
August.....						3.1	-	-	.1	6.1		
September.....						3.0	-	-	.1	6.0		
Water year 1935-36.....						6,513.42	300	0	17.8	12,920		

*Field estimate.

Crane Prairie Reservoir near Lapine, Oreg.

Location.- Staff gage, lat. 43°45', long. 121°47', at reservoir dam in NW¼ sec. 16, T. 21 S., R. 8 E., 15 miles northwest of Lapine. Zero of gage is 4,400.0 feet above mean sea level.

Records available.- November 1922 to September 1936.

Extremes.- Maximum contents during year, 44,280 acre-feet June 7-10, 13, 14 (gage height, 42.70 feet); minimum, 6,582 acre-feet Oct. 1-5 (gage height, 32.50 feet).
1922-36: Maximum contents, 50,830 acre-feet Jan. 10-13, 1924 (gage height, 44.10 feet); no storage at times.

Remarks.- Records good. Gage not read Dec. 16 to Apr. 11. Reservoir was completed by North Canal Co. in 1922; gates were first closed Nov. 4, 1922. Capacity of reservoir is 56,200 acre-feet at spillway crest at gage height 45 feet. Contents given are those above gage height 28.4 feet. Stored water is used for irrigation of lands near Bend and Redmond.

Stage and contents, water year October 1935 to September 1936

Date	Gage height (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	32.50	6,582	-
Oct. 31	33.80	10,220	+3,638
Nov. 30	37.14	21,410	+11,190
Dec. 15	38.40	26,140	+4,730
Apr. 12	41.46	38,740	+12,600
30	42.20	42,020	+3,280
May 31	42.60	43,820	+1,800
June 30	41.50	38,920	-4,900
July 31	38.40	26,140	-12,780
Aug. 31	36.04	17,490	-8,650
Sept. 30	36.30	18,400	+910
The year			+11,818

Deschutes River at Crane Prairie, near Lapine, Oreg.

Location.- Water-stage recorder, lat. 43°45', long. 121°47', in NW¼ sec. 16, T. 21 S., R. 8 E., 200 yards below Crane Prairie Dam and 15 miles northwest of Lapine.

Records available.- January 1914 to June 1917, February 1922 to September 1936.

Average discharge.- 15 years (1914-15, 1922-36), 203 second-feet.

Extremes.- Maximum discharge during year, 501 second-feet Aug. 6, 7 (gage height, 2.18 feet); minimum observed, 13 second-feet Oct. 27 to Nov. 11 (gage height, 0.40 foot).
1914-17, 1922-36: Maximum discharge, 604 second-feet Apr. 18, 1924 (gage height, 2.40 feet); minimum, 2.5 second-feet Apr. 24, 1923, caused by closing of dam (gage height, 0.05 foot).

Remarks.- Records good except those for Oct. 15-18, Jan. 11 to Apr. 11, which are fair and which are based on gaging-station records below. Flow partly regulated since Nov. 4, 1922, by storage in Crane Prairie Reservoir.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 4-30)

Oct. 1 to Jan. 10

Apr. 12 to Sept. 30

0.4	13
.6	36
.6	89
1.2	161
1.6	279

0.4	13
.6	33
.9	84
1.2	159
1.5	250
1.8	352
2.2	510

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	276	13	21	23				179	247	475	480	396
2	270	13	21	23				194	250	476	475	392
3	264	13	21	23				200	247	475	475	394
4	243	13	22	24				200	250	467	471	330
5	245	13	22	24				200	250	467	480	253
6	242	13	22	24			20	200	250	463	501	253
7	239	13	21	26			203	203	257	463	459	253
8	236	13	21	26			203	203	253	461	345	257
9	230	13	21	26			203	203	256	430	395	253
10	224	13	21	26			206	206	270	399	465	253
11	221	14	21					203	256	399	463	250
12	215	15	21				20	203	270	403	459	247
13	212	15	21				20	191	280	403	463	247
14	212	15	21				20	185	286	426	467	250
15	214	15	21				20	182	297	434	467	247
16	216	15	21				20	185	303	434	467	247
17	217	15	21				20	182	290	438	467	247
18	219	15	21				20	182	290	446	463	247
19	221	15	20				20	182	303	442	469	244
20	224	14	20				20	182	328	446	446	244
21	218	13	21	23			20	182	334	446	442	244
22	140	14	21				20	182	359	459	442	247
23	109	15	22				19	185	399	467	442	247
24	100	16	22				25	185	399	480	438	247
25	89	17	22				33	188	403	488	438	247
26	65	18	22				34	203	418	488	434	247
27	28	20	23				36	244	459	468	425	247
28	13	20	23				46	240	480	493	407	247
29	13	20	23				80	240	484	488	403	247
30	13	21	23				154	244	480	484	399	250
31	13	-	23				-	250	-	484	399	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,436	276	13	175	10,780
November.....	452	21	13	15.1	897
December.....	665	23	20	21.5	1,320
Calendar year 1935.....	60,979	536	13	165	119,200
January.....	728	26	-	23.5	1,440
February.....	580	-	-	20	1,150
March.....	620	-	-	20	1,230
April.....	897	154	-	28.9	1,726
May.....	6,208	250	179	200	12,310
June.....	9,578	484	247	323	19,200
July.....	14,104	493	399	455	27,970
August.....	13,838	501	345	446	27,450
September.....	7,964	396	244	265	15,800
Water year 1935-36.....	61,141	501	13	167	121,300

Deschutes River at Pringle Falls, near Lapine, Oreg.

Location.- Water-stage recorder, lat. 43°44', long. 121°37', in SW¼ sec. 23, T. 21 S., R. 9 E., half a mile above bridge at Pringle Falls and 7 miles northwest of Lapine.

Records available.- December 1915 to June 1917, June 1922 to September 1936.

Average discharge.- 13 years (1923-36), 714 second-feet.

Extremes.- Maximum discharge during year, 1,080 second-feet Aug. 8, 7 (gage height, 2.50 feet); minimum, 539 second-feet Dec. 20 (gage height, 1.45 feet).
1915-17, 1922-36: Maximum discharge, 1,170 second-feet June 21-27, 29, 30, 1917; minimum, 341 second-feet during period when recorder was stopped, Feb. 1-14, 1932.

Remarks.- Records excellent except those interpolated or estimated, which are good. Discharge for Nov. 3-5, Jan. 29-31 interpolated; discharge for period Feb. 8 to Mar. 23 based on records at Benham Falls. No diversions above station. Flow regulated to small extent since 1922 by storage in Crane Prairie Reservoir.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 7

Mar. 24 to Sept. 30

1.4 590
1.6 598
1.8 685
2.0 775

1.4 561
1.6 633
1.8 720
2.0 815
2.2 920
2.5 1,080

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	795	550	547	554	566	600	592	729	815	1,070	1,060	997
2	790	547	547	590	566	610	592	742	815	1,070	1,060	992
3	785	546	547	562	566	615	599	756	815	1,070	1,080	992
4	779	545	547	594	570	620	592	756	815	1,060	1,060	970
5	770	544	547	570	570	625	588	765	815	1,060	1,060	882
6	770	543	554	566	570	630	588	770	835	1,060	1,070	865
7	770	543	550	562	566	630	592	765	835	1,060	1,080	855
8	770	543	550	562	565	620	592	760	830	1,060	988	855
9	770	547	550	570	565	620	592	760	835	1,050	920	855
10	762	543	558	566	565	615	599	760	835	1,010	1,050	850
11	766	543	558	578	560	615	599	760	835	997	1,060	850
12	766	550	562	570	560	615	599	760	840	992	1,060	850
13	757	547	554	590	560	615	603	756	860	992	1,050	855
14	762	547	550	578	560	620	603	756	865	1,000	1,070	855
15	748	550	550	570	560	620	603	752	887	1,020	1,070	840
16	744	547	550	578	560	620	603	747	882	1,020	1,070	835
17	739	547	550	566	560	620	599	742	882	1,020	1,060	830
18	739	547	547	566	560	620	599	747	860	1,020	1,060	830
19	739	547	547	566	560	615	595	747	876	1,040	1,060	830
20	734	547	547	566	570	615	595	752	904	1,040	1,050	830
21	734	547	547	566	580	610	599	752	920	1,040	1,050	830
22	703	547	547	566	585	605	599	752	925	1,040	1,040	830
23	627	547	550	566	585	605	599	752	968	1,050	1,040	830
24	623	547	550	566	585	603	618	752	992	1,060	1,040	830
25	615	547	550	566	585	599	610	752	992	1,070	1,040	825
26	602	547	550	566	585	595	610	756	1,010	1,070	1,030	825
27	570	547	558	566	585	599	614	805	1,030	1,070	1,030	825
28	550	547	554	566	585	599	622	805	1,070	1,070	1,020	825
29	550	547	558	566	590	599	641	810	1,070	1,070	1,010	825
30	554	547	558	566	-	592	688	820	1,070	1,070	997	825
31	558	-	558	566	-	595	-	815	-	1,070	997	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	21,937	795	550	708	43,510
November.....	16,393	550	543	546	32,520
December.....	17,092	562	547	551	33,900
Calendar year 1935.....	249,783	1,060	506	684	495,400
January.....	17,650	594	554	569	35,010
February.....	16,544	590	560	570	32,810
March.....	18,961	630	592	612	37,610
April.....	18,124	688	588	604	35,950
May.....	23,653	820	729	763	46,920
June.....	27,002	1,070	815	900	53,560
July.....	32,391	1,070	992	1,045	64,250
August.....	32,310	1,080	920	1,042	64,090
September.....	25,788	997	825	860	51,150
Water year 1935-36.....	267,845	1,080	543	732	531,300

Deschutes River at Benham Falls, near Bend, Oreg.

Location.— Water-stage recorder, lat. $43^{\circ}56'$, long. $121^{\circ}25'$, in SE $\frac{1}{4}$ sec. 9, T. 19 S., R. 11 E., 50 yards above head of Benham Falls, $\frac{1}{4}$ miles below dam site for proposed Benham Falls Reservoir, and 10 miles southwest of Bend.

Records available.— March 1909 to September 1914, August 1920 to September 1921, February 1924 to September 1936.

Average discharge.— 20 years (1905-13, 1924-36), 1,381 second-feet.

Extremes.— Maximum discharge during year, 1,710 second-feet May 2 (gage height, 2.05 feet); minimum, 784 second-feet Nov. 3, 4, Dec. 21 (gage height, 0.18 foot).

1909-13, 1920-21, 1924-36: Maximum discharge (estimated), 5,000 second-feet Nov. 27, 1909 (gage height not determined); minimum, 690 second-feet Feb. 8, 9, 1933 (gage height, -0.14 foot).

Remarks.— Records excellent except those for period of no gage-height record, Jan. 12 to Mar. 2, which are good and were computed on basis of records for stations below Lava Island and on Arnold Canal. Minor diversions for irrigation above station. Some regulation since 1922 caused by storage in Crane Prairie and Crescent Lake Reservoirs.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.1	760	1.2	1,240
.3	825	1.6	1,440
.5	905	2.1	1,740
.8	1,040		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,140	901	889	933	1,000	1,000	986	1,680	1,470	1,560	1,620	1,360
2	1,140	873	897	976	980	1,040	981	1,710	1,470	1,560	1,620	1,360
3	1,120	837	897	1,020	960	1,060	990	1,710	1,440	1,590	1,620	1,390
4	1,120	604	897	1,020	960	1,090	1,020	1,680	1,420	1,620	1,620	1,360
5	1,120	941	897	1,040	960	1,090	1,020	1,650	1,420	1,620	1,620	1,340
6	1,120	1,040	909	1,020	960	1,120	1,020	1,620	1,420	1,620	1,620	1,290
7	1,120	963	921	990	955	1,120	1,020	1,590	1,420	1,620	1,620	1,240
8	1,120	913	921	990	940	1,140	1,040	1,560	1,440	1,620	1,620	1,240
9	1,120	917	909	1,020	950	1,140	1,060	1,560	1,440	1,620	1,590	1,220
10	1,120	913	917	990	950	1,140	1,060	1,560	1,420	1,620	1,500	1,220
11	1,120	921	933	1,020	940	1,120	1,090	1,530	1,420	1,620	1,530	1,220
12	1,120	929	954	1,030	940	1,120	1,120	1,500	1,390	1,590	1,560	1,220
13	1,120	929	933	1,040	950	1,140	1,140	1,470	1,390	1,590	1,590	1,220
14	1,140	917	917	1,030	950	1,120	1,160	1,470	1,420	1,590	1,590	1,220
15	1,140	925	909	1,010	950	1,120	1,220	1,470	1,440	1,590	1,560	1,220
16	1,120	929	909	995	950	1,120	1,240	1,470	1,440	1,590	1,560	1,220
17	1,120	925	905	980	950	1,120	1,240	1,470	1,440	1,590	1,560	1,190
18	1,120	925	901	970	950	1,120	1,260	1,500	1,420	1,590	1,530	1,190
19	1,120	917	897	965	950	1,120	1,290	1,500	1,420	1,590	1,530	1,190
20	1,120	913	893	960	955	1,120	1,320	1,500	1,390	1,590	1,530	1,190
21	1,120	909	804	960	980	1,140	1,340	1,500	1,420	1,590	1,530	1,190
22	1,090	917	865	960	1,000	1,140	1,340	1,470	1,420	1,590	1,500	1,190
23	1,090	925	937	960	1,000	1,120	1,390	1,440	1,420	1,590	1,500	1,190
24	1,020	925	976	960	1,010	1,120	1,420	1,440	1,420	1,620	1,470	1,190
25	981	921	968	960	1,010	1,090	1,440	1,420	1,440	1,620	1,470	1,190
26	972	913	917	960	1,000	1,060	1,470	1,390	1,440	1,620	1,470	1,190
27	963	913	925	960	995	1,060	1,500	1,390	1,440	1,620	1,470	1,190
28	941	913	925	960	1,000	1,040	1,530	1,420	1,440	1,620	1,470	1,160
29	917	897	929	950	1,000	1,040	1,590	1,420	1,470	1,620	1,440	1,160
30	905	889	929	910	-	1,020	1,620	1,440	1,530	1,620	1,420	1,160
31	905	-	933	970	-	1,020	-	1,470	-	1,620	1,390	-
Month					Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet		
October.....					33,384		1,140	905	1,077	66,220		
November.....					27,454		1,040	804	915	54,450		
December.....					28,313		976	804	913	56,160		
Calendar year 1935.....					413,495		1,650	730	1,133	820,200		
January.....					30,509		1,040	910	984	60,510		
February.....					28,095		1,010	940	969	55,730		
March.....					34,010		1,140	1,000	1,097	67,460		
April.....					36,917		1,620	981	1,231	73,220		
May.....					47,000		1,710	1,390	1,516	93,220		
June.....					42,970		1,530	1,390	1,432	85,230		
July.....					49,710		1,620	1,560	1,604	98,600		
August.....					47,720		1,620	1,390	1,539	94,650		
September.....					36,910		1,390	1,160	1,250	78,210		
Water year 1935-36.....					442,992		1,710	804	1,210	878,700		

DESCHUTES RIVER BASIN

Deschutes River below Lava Island, near Bend, Oreg.

Location.- Water-stage recorder, lat. 44°0', long. 121°22', in SW¼ sec. 23, T. 18 S., R. 11 E., three-quarters of a mile below Lava Island, 1 mile below intake of Arnold Canal, and 6 miles southwest of Bend.

Records available.- March 1926 to September 1936.

Average discharge.- 10 years, 1,048 second-feet.

Extremes.- Maximum discharge during year, 1,490 second-feet July 20 (gage height, 1.34 feet); minimum, 730 second-feet Nov. 2, 3, Dec. 21, Jan. 30.
1926-36: Maximum discharge, 1,780 second-feet Jan. 3, 1928 (gage height, 1.55 feet); minimum, 612 second-feet Feb. 9, 1933 (gage height, 0.16 foot).

Remarks.- Records good. Discharge for period of ice effect, Nov. 3, and for period of no gage-height record, Dec. 18 to Jan. 3, computed on basis of records for station at Benham Falls. Arnold Canal diverts water for irrigation above station. Flow regulated by storage in Crescent Lake and Crane Prairie Reservoirs.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 25 to Sept. 30)

0.3	680
.5	795
.7	940
.9	1,100
1.1	1,270
1.4	1,550

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,040	837	816	850	910	865	895	1,400	1,240	1,320	1,400	1,210
2	1,020	769	823	890	888	910	880	1,420	1,240	1,340	1,400	1,200
3	1,010	770	823	940	872	948	902	1,430	1,250	1,350	1,400	1,210
4	1,000	753	823	940	872	972	925	1,410	1,220	1,360	1,400	1,200
5	996	823	823	956	872	988	925	1,360	1,200	1,370	1,400	1,180
6	996	956	837	925	844	1,000	918	1,360	1,200	1,380	1,400	1,130
7	996	948	844	918	851	996	918	1,350	1,220	1,380	1,400	1,090
8	988	872	844	918	851	1,000	932	1,310	1,220	1,390	1,400	1,080
9	988	865	837	918	858	1,010	948	1,310	1,220	1,390	1,380	1,070
10	988	865	837	910	858	1,020	956	1,310	1,220	1,400	1,310	1,070
11	988	865	830	932	830	1,000	972	1,300	1,210	1,390	1,320	1,060
12	996	872	830	948	823	1,000	988	1,270	1,190	1,380	1,360	1,060
13	988	860	823	948	837	1,010	1,010	1,230	1,190	1,370	1,370	1,060
14	996	865	823	940	858	996	1,040	1,220	1,200	1,360	1,370	1,060
15	996	865	830	925	851	988	1,060	1,220	1,220	1,360	1,360	1,060
16	988	872	837	918	851	996	1,060	1,220	1,230	1,370	1,360	1,060
17	980	844	837	902	851	996	1,100	1,220	1,230	1,370	1,350	1,050
18	972	823	835	888	858	996	1,120	1,240	1,220	1,380	1,340	1,050
19	972	816	832	860	851	954	1,120	1,250	1,200	1,380	1,340	1,040
20	996	837	850	872	858	956	1,120	1,260	1,190	1,440	1,350	1,040
21	1,040	844	740	872	872	956	1,130	1,250	1,200	1,380	1,320	1,050
22	1,030	851	830	872	910	980	1,150	1,230	1,210	1,380	1,310	1,050
23	1,010	865	920	872	902	996	1,160	1,230	1,210	1,380	1,300	1,040
24	956	865	1,000	872	902	988	1,190	1,220	1,270	1,380	1,290	1,040
25	940	858	990	872	910	972	1,220	1,200	1,240	1,390	1,290	1,040
26	925	851	810	872	895	948	1,250	1,180	1,230	1,400	1,290	1,040
27	918	851	800	880	895	940	1,240	1,170	1,230	1,400	1,280	1,030
28	895	851	815	872	880	932	1,270	1,190	1,230	1,400	1,280	1,030
29	865	837	820	872	865	940	1,310	1,200	1,270	1,400	1,270	1,030
30	858	823	835	823	-	918	1,360	1,210	1,290	1,400	1,250	1,030
31	851	-	850	865	-	910	-	1,220	-	1,400	1,220	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						30,182	1,040	851	974	59,870		
November.....						25,513	956	753	850	50,800		
December.....						26,024	1,000	740	839	51,620		
Calendar year 1935.....						371,368	1,440	722	1,017	736,600		
January.....						27,862	956	823	899	55,260		
February.....						25,182	910	823	868	49,950		
March.....						30,063	1,020	865	970	59,870		
April.....						32,068	1,360	880	1,069	63,610		
May.....						39,390	1,430	1,170	1,271	78,130		
June.....						35,670	1,290	1,190	1,222	72,730		
July.....						42,790	1,440	1,320	1,380	84,870		
August.....						41,490	1,400	1,220	1,338	82,290		
September.....						32,360	1,210	1,030	1,079	64,190		
Water year 1935-36.....						389,615	1,440	740	1,065	772,800		

Deschutes River below Bend, Oreg.

Location.- Water-stage recorder, lat. 44°5', long. 121°18', in SE¼ sec. 20, T. 17 S., R. 12 E., half a mile below North Canal Dam and 2 miles north of Bend.

Records available.- October 1914 to September 1936.

Average discharge.- 22 years, 704 second-feet.

Extremes.- Maximum discharge during year, 1,280 second-feet Feb. 3 (gage height, 3.18 feet); minimum, 14 second-feet June 5 (gage height, 0.84 foot).
1914-36: Maximum discharge, 2,500 second-feet Dec. 7, 1921 (gage height, 3.9 feet); minimum, 1 second-foot Aug. 25, 1930.
Maximum discharge of river in this vicinity since 1905, 4,820 second-feet Nov. 27, 1909.

Remarks.- Records good except those for periods of no gage-height record, Nov. 3-5, Dec. 22-25, which are fair and were computed on basis of records of canal diversions. Six large canals divert above station. Flow regulated by hydroelectric plant at Bend and since 1922 by storage in Crescent Lake and Crane Prairie Reservoirs.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.2	51
1.5	112
1.7	179
2.0	325
2.2	460
2.5	680
2.9	1,030

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	105	832	769	886	958	712	940	832	128	115	105	128	
2	98	814	769	940	976	744	922	940	161	124	105	154	
3	95	840	814	958	958	823	940	931	157	124	105	217	
4	105	865	859	985	940	985	958	922	154	121	95	240	
5	95	930	859	1,010	931	994	967	841	121	128	110	318	
6	95	994	877	976	886	1,020	949	922	168	312	115	245	
7	105	976	886	976	895	1,010	949	781	213	128	628	163	
8	107	877	886	949	922	1,010	859	418	240	128	628	161	
9	107	877	859	958	922	1,030	728	370	250	137	605	161	
10	110	877	832	949	931	1,030	744	332	259	137	605	157	
11	112	877	841	994	895	1,030	752	303	250	128	124	187	
12	110	877	859	1,020	823	1,050	787	217	235	121	121	112	
13	100	895	868	1,020	845	1,050	778	161	208	110	131	118	
14	112	886	859	1,020	590	922	545	121	196	102	107	131	
15	115	877	877	769	752	832	575	118	187	107	105	134	
16	147	895	877	568	778	850	432	131	192	107	95	128	
17	161	868	877	575	832	868	390	134	172	112	107	118	
18	124	841	877	530	832	931	344	150	150	105	105	105	
19	107	778	841	739	832	994	250	168	107	105	107	128	
20	154	481	832	922	850	976	280	165	107	137	107	161	
21	217	404	832	913	868	886	259	168	107	102	105	150	
22	208	453	832	913	877	760	245	157	112	98	102	150	
23	213	502	720	904	868	796	250	140	100	100	105	121	
24	161	612	590	877	895	805	259	134	137	100	107	107	
25	131	877	530	895	985	787	280	157	105	100	107	112	
26	128	805	474	922	976	904	297	93	98	110	102	107	
27	121	796	488	931	958	949	314	78	95	115	107	107	
28	105	796	650	922	949	949	325	82	152	112	105	107	
29	88	787	736	931	859	949	364	88	552	110	105	102	
30	95	769	877	868	-	949	446	93	424	107	107	100	
31	280	-	886	922	-	958	-	105	-	107	86	-	
Month						Second-foot-days		Maximum		Minimum		Mean	Run-off in acre-feet
October.....						4,011		280		88		129	7,960
November.....						23,958		994		404		799	47,520
December.....						24,633		886		474		795	48,860
Calendar year 1935.....						155,033		994		65		425	307,500
January.....						27,742		1,020		530		895	55,030
February.....						25,285		985		545		872	50,150
March.....						23,563		1,050		712		921	56,950
April.....						17,128		967		245		571	33,970
May.....						10,252		940		78		331	20,330
June.....						5,537		552		95		185	10,980
July.....						3,749		312		98		121	7,440
August.....						5,178		628		86		167	10,270
September.....						4,389		318		100		146	8,710
Water year 1935-36.....						180,413		1,050		78		493	357,800

Deschutes River near Madras, Oreg.

Location.- Water-stage recorder, lat. 44°43', long. 121°14', in NE¼ sec. 13, T. 10 S., R. 12 E., 1 mile below Pelton dam site, 4 miles above mouth of Shitike Creek, and 9 miles northwest of Madras. Zero of gage is about 1,404 feet above mean sea level from river profile.

Records available.- October 1923 to September 1936.

Average discharge.- 13 years, 4,131 second-feet.

Extremes.- Maximum discharge during year, 8,280 second-feet Apr. 15 (gage height, 4.66 feet); minimum, 3,220 second-feet Sept. 21 (gage height, 1.62 feet).
1923-36: Maximum discharge, 10,700 second-feet Feb. 6, 1925 (gage height, 6.54 feet, former site and datum); minimum, 2,960 second-feet Aug. 15, 1931.

Remarks.- Records good except those computed on basis of records for Deschutes River at Moody and Crooked River near Culver, which are fair. Diversions for irrigation in upper river basin.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.6	3,190
1.9	3,610
2.2	4,050
2.6	4,680
3.0	5,340
3.5	6,190
4.0	7,040
5.0	8,820

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,360	3,550	4,050	4,200	4,280	4,520	4,750	45,000	43,850	3,900	3,430	3,440
2	3,360	3,980	4,050	4,600	4,280	4,600	4,600	45,140	43,850	3,680	3,430	3,440
3	3,370	3,900	4,050	4,520	4,200	5,000	4,700	45,340	43,850	3,610	3,430	3,470
4	3,370	3,980	4,050	4,920	4,360	5,260	4,700	45,300	43,850	3,680	3,430	3,540
5	3,360	3,980	4,120	4,840	4,360	5,260	4,680	45,300	43,850	3,610	3,440	3,580
6	3,390	4,120	4,120	4,600	4,360	5,170	4,750	45,100	44,050	3,610	3,440	3,680
7	3,380	4,200	4,200	4,600	4,280	5,340	4,800	44,900	4,120	3,750	3,430	3,580
8	3,360	4,200	4,200	4,520	4,200	5,260	4,900	44,700	44,120	3,680	3,900	3,530
9	3,360	4,120	4,200	4,440	4,200	5,260	4,500	44,120	3,580	3,900	3,460	3,470
10	3,360	4,120	4,120	4,520	4,200	4,500	4,500	4,360	4,120	3,580	3,900	3,470
11	3,360	4,120	4,200	4,840	4,280	4,500	4,450	4,120	3,580	3,750	3,460	3,440
12	3,370	4,200	4,120	4,840	4,280	4,500	4,600	4,450	4,050	3,570	3,470	3,440
13	3,470	4,120	4,200	5,170	4,120	4,500	4,700	4,450	4,050	3,540	3,440	3,430
14	3,410	4,120	4,120	5,000	3,900	4,500	4,700	4,450	4,050	3,510	3,460	3,440
15	3,410	4,200	4,120	4,920	3,980	4,500	4,500	4,450	4,050	3,500	3,440	3,440
16	3,400	4,200	4,120	4,520	4,120	4,500	4,800	4,400	4,050	3,500	3,430	3,440
17	3,400	4,200	4,120	4,280	4,120	4,500	4,700	4,400	4,050	3,510	3,430	3,440
18	3,430	4,120	4,120	4,200	4,120	4,900	7,380	4,050	3,900	3,510	3,410	3,440
19	3,410	4,120	4,120	4,200	4,200	4,500	6,870	4,000	3,800	3,480	3,410	3,430
20	3,370	4,050	4,050	4,440	4,280	4,500	6,360	4,300	3,750	3,500	3,410	3,440
21	3,400	3,750	3,950	4,440	4,440	4,500	6,020	3,860	3,750	3,510	3,410	3,440
22	3,470	3,750	3,900	4,440	4,840	5,510	5,680	3,800	3,750	3,510	3,400	3,440
23	3,460	3,820	4,120	4,440	7,040	4,500	5,510	3,750	3,820	3,460	3,400	3,430
24	3,440	3,820	4,000	4,360	6,360	4,500	4,600	3,700	3,320	3,460	3,390	3,400
25	3,430	3,980	4,150	4,360	5,080	4,500	4,600	3,700	3,750	3,440	3,390	3,370
26	3,370	4,120	4,000	4,360	4,840	4,900	4,500	3,800	3,680	3,440	3,390	3,360
27	3,360	4,050	3,950	4,360	4,680	4,500	4,500	3,850	3,680	3,440	3,390	3,360
28	3,360	4,050	4,000	4,360	4,600	4,500	4,060	4,000	3,580	3,460	3,400	3,360
29	3,340	4,050	4,050	4,280	4,520	4,900	4,500	3,950	3,610	3,440	3,410	3,360
30	3,330	4,050	4,200	4,280	-	4,850	4,500	3,950	3,980	3,440	3,400	3,360
31	3,330	-	4,200	4,280	-	4,750	-	4,900	-	3,430	3,400	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						104,970	3,470	3,330	3,386	208,200		
November.....						121,040	4,200	3,550	4,035	240,100		
December.....						126,950	4,200	3,900	4,095	251,800		
Calendar year 1935.....						1,482,490	6,090	3,330	4,062	2,940,000		
January.....						140,050	5,170	4,120	4,518	277,800		
February.....						130,520	7,040	3,900	4,501	258,900		
March.....						158,630	5,510	4,620	5,117	314,600		
April.....						174,480	8,000	4,680	5,315	346,000		
May.....						154,780	5,340	3,700	4,348	267,500		
June.....						117,170	4,120	3,580	3,906	232,400		
July.....						106,510	3,900	3,430	3,542	217,800		
August.....						107,760	3,900	3,390	3,476	213,700		
September.....						103,470	3,680	3,260	3,449	205,200		
Water year 1935-36.....						1,529,610	8,000	3,330	4,179	3,034,000		

*Computed on basis of records of Deschutes River at Moody and Crooked River near Culver.

Deschutes River at Moody, near Biggs, Oreg.

Location.- Water-stage recorder, lat. 45°37', long. 120°54', in SE½ sec. 26, T. 2 N., R. 15 E., at Moody, 1½ miles above mouth and 5 miles southwest of Biggs. Zero of gage is 167.43 feet above mean sea level (general adjustment of 1929).

Drainage area.- 10,500 square miles.

Records available.- July 1906 to September 1936. October 1897 to December 1899 at station near Moro, 10 miles above mouth.

Average discharge.- 31 years (1898-99, 1906-36), 5,879 second-feet.

Extremes.- Maximum discharge during year, 11,200 second-feet Apr. 16 (gage height, 4.33 feet); minimum, 3,730 second-feet Oct. 31 (gage height, 2.21 feet).
1897-99, 1906-36: Maximum discharge, 43,600 second-feet Jan. 7, 1923 (gage height, 10.2 feet); minimum, 3,360 second-feet Sept. 16-19, 1931 (gage height, 2.06 feet).

Remarks.- Records excellent. Diversions for irrigation in upper river basin. Water-stage recorder inspected by agent of Eastern Oregon Land Co.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 15				Apr. 16 to Sept. 30			
2.2	3,710	3.3	7,080	2.2	3,830	3.3	7,130
2.4	4,210	3.6	8,210	2.4	4,340	3.6	8,220
2.6	4,780	4.0	9,800	2.6	4,890	4.0	9,800
2.8	5,390	4.5	12,000	2.8	5,480	4.5	12,000
3.0	6,030			3.0	6,110		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,780	3,780	4,350	4,780	4,930	6,540	5,540	7,130	5,180	4,750	3,980	3,900
2	3,780	4,110	4,350	5,380	4,930	6,540	5,540	7,130	5,040	4,560	3,980	4,000
3	3,780	4,350	4,350	6,200	4,930	6,540	5,540	7,310	5,040	4,370	3,980	3,980
4	3,780	4,210	4,350	7,020	4,930	6,900	5,540	7,490	5,040	4,370	3,980	4,000
5	3,810	4,350	4,490	8,600	5,080	6,900	5,540	7,490	5,040	4,370	3,980	4,080
6	3,810	4,490	4,490	6,720	5,080	6,900	5,380	7,490	5,040	4,340	3,980	4,130
7	3,810	4,640	4,490	6,030	5,080	6,720	5,540	7,310	5,180	4,310	3,980	4,110
8	3,780	4,640	4,640	5,700	4,780	6,720	5,540	7,130	5,330	4,420	4,000	4,030
9	3,780	4,640	4,640	5,540	4,640	6,720	5,700	6,960	5,330	4,290	4,370	4,000
10	3,760	4,640	4,640	5,860	4,780	6,900	6,030	6,610	5,330	4,290	4,390	3,980
11	3,780	4,490	4,640	7,450	4,780	6,900	6,900	6,440	5,330	4,290	4,370	3,980
12	3,810	4,640	4,640	7,260	4,780	6,900	7,830	6,610	5,330	4,260	4,160	3,980
13	3,880	4,640	4,640	7,450	4,780	6,720	9,000	6,610	5,180	4,240	3,980	3,960
14	4,030	4,640	4,640	7,450	4,640	6,540	10,200	6,610	5,180	4,180	3,980	3,960
15	3,930	4,640	4,490	7,080	4,350	6,540	10,800	6,610	5,180	4,160	3,960	3,980
16	3,880	4,640	4,490	6,720	4,490	6,200	11,000	6,780	5,180	4,130	3,930	3,980
17	3,880	4,640	4,490	5,860	4,490	6,030	11,000	6,610	5,180	4,110	3,930	3,980
18	3,880	4,640	4,490	5,540	4,490	6,030	11,000	6,280	5,180	4,110	3,900	3,980
19	3,900	4,490	4,490	5,380	4,640	5,860	10,800	6,110	4,890	4,110	3,930	3,960
20	3,850	4,490	4,490	5,380	4,780	6,200	10,200	5,960	4,750	4,060	3,900	3,960
21	3,830	4,350	4,350	5,700	4,930	6,200	9,600	5,790	4,610	4,060	3,930	3,960
22	3,880	4,110	4,350	5,380	5,540	6,370	9,000	5,640	4,610	4,110	3,930	3,980
23	3,930	4,130	4,350	5,380	6,900	6,540	8,600	5,480	4,610	4,060	3,900	3,960
24	3,900	4,210	4,640	5,230	8,400	6,370	8,410	5,330	4,750	4,000	3,900	3,960
25	3,900	4,210	4,490	5,230	6,720	6,030	8,600	5,180	4,610	4,000	3,900	3,930
26	3,880	4,490	4,640	5,230	6,900	5,860	8,600	5,180	4,560	4,000	3,900	3,900
27	3,850	4,490	4,490	5,080	8,210	5,700	8,220	5,330	4,460	4,000	3,900	3,880
28	3,830	4,490	4,350	5,080	7,640	5,860	7,850	5,330	4,420	4,000	3,900	3,880
29	3,830	4,490	4,490	5,080	7,640	5,860	7,490	5,490	4,370	4,000	3,900	3,880
30	3,830	4,490	4,490	4,780	-	5,700	7,310	5,330	4,480	4,000	3,900	3,990
31	3,780	-	4,780	4,930	-	5,700	-	5,330	-	3,980	3,900	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						119,130	4,030	3,760	3,843	236,300		
November.....						133,260	4,640	3,780	4,442	284,300		
December.....						139,710	4,780	4,550	4,507	277,100		
Calendar year 1935.....						1,761,020	7,300	3,760	4,825	3,493,000		
January.....						184,500	8,600	4,780	5,952	366,000		
February.....						158,260	8,400	4,350	5,457	313,900		
March.....						197,490	6,900	5,700	6,371	391,700		
April.....						238,300	11,000	5,580	7,943	472,700		
May.....						196,060	7,490	5,180	6,328	388,900		
June.....						148,400	5,330	4,370	4,947	294,300		
July.....						129,930	4,750	3,980	4,191	257,700		
August.....						123,620	4,390	3,900	3,988	245,200		
September.....						119,160	4,130	3,880	3,972	236,400		
Water year 1935-36.....						1,897,820	11,000	3,760	5,158	3,744,000		

Odell Creek near Crescent, Oreg.

Location.- Water-stage recorder, lat. 43°33', long. 121°58', in SW $\frac{1}{4}$ sec. 25, T. 23 S., R. 6 E., at outlet of Odell Lake, 3 $\frac{1}{2}$ miles north of Crescent Lake and 14 miles north-west of Crescent.

Drainage area.- 39 square miles.

Records available.- August 1911 to August 1914 (incomplete), December 1923 to June 1924, May 1933 to September 1936.

Extremes.- Maximum discharge during year, 390 second-feet Jan. 4 (gage height, 1.45 feet); minimum, 22 second-feet Oct. 1, 2 (gage height, 0.38 foot). - 1911-14, 1923-24, 1933-36: Maximum discharge, 390 second-feet June 14, 1912, Jan. 4, 1936; minimum, 12 second-feet in period Sept. 7-30, 1934, while clock was stopped.

Remarks.- Records fair. No diversions above station. Discharge regulated at times by debris collecting on fish racks or by boards used to change lake level at summer resort docks at outlet of Odell Lake.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 20 to Sept. 30)

0.3	17
.5	36
.7	76
.9	142
1.2	265
1.5	415

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	44	39	59	54	71	62	118	165	85	38	29
2	23	41	39	95	52	66	59	121	153	82	36	33
3	24	39	36	95	50	64	62	118	153	76	38	32
4	28	36	36	161	52	62	118	146	76	38	33	
5	28	38	36	196	54	59	57	150	142	74	38	33
6	28	38	39	165	62	57	52	161	153	71	38	32
7	28	36	42	146	66	57	50	146	157	69	38	33
8	28	39	44	146	64	54	50	135	161	66	36	33
9	28	47	44	176	59	57	49	128	150	64	36	32
10	28	41	47	157	59	54	47	124	146	64	35	32
11	30	39	52	172	57	52	46	128	142	64	34	30
12	33	47	66	172	59	54	46	142	138	62	35	30
13	36	50	59	238	62	59	44	160	146	59	35	30
14	39	49	57	275	59	52	44	169	146	57	33	30
15	39	52	52	256	57	50	46	188	146	54	32	29
16	39	52	49	280	54	47	47	196	146	54	32	29
17	36	50	47	260	52	47	50	196	142	54	29	29
18	36	49	46	212	52	46	54	192	135	52	28	30
19	38	47	44	180	54	44	59	192	128	50	27	30
20	36	46	41	146	54	44	64	196	124	50	27	33
21	39	47	41	124	71	50	69	188	121	50	27	33
22	36	47	39	107	76	49	74	172	121	50	27	33
23	35	47	39	95	82	47	82	161	121	49	26	33
24	34	49	39	85	95	49	107	153	121	46	25	34
25	34	47	41	76	95	50	124	153	118	42	25	32
26	34	46	41	74	82	50	132	161	107	42	24	29
27	34	42	47	71	79	54	135	176	101	42	23	27
28	36	41	46	66	82	64	138	192	95	41	25	29
29	36	41	50	62	76	66	128	192	92	41	27	29
30	36	39	54	59	-	62	121	192	88	39	26	29
31	41	-	57	57	-	57	-	176	-	38	27	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	1,027	41	23	33.1	0.849	0.98	2,040
November.....	1,328	52	36	44.3	1.14	1.27	2,630
December.....	1,408	66	36	45.4	1.16	1.34	2,790
Calendar year 1935.....	20,666	180	22	56.6	1.45	19.71	40,990
January.....	4,466	280	57	144	3.69	4.25	8,860
February.....	1,870	95	50	64.5	1.65	1.78	3,710
March.....	1,694	71	44	54.6	1.40	1.61	3,360
April.....	2,160	138	44	72.0	1.55	2.06	4,280
May.....	4,984	196	119	161	4.13	4.76	9,890
June.....	4,004	165	93	133	3.41	3.80	7,940
July.....	1,763	85	38	56.9	1.46	1.68	3,500
August.....	967	38	23	31.2	.800	.92	1,920
September.....	930	34	27	31.0	.795	.89	1,840
Water year 1935-36.....	26,601	280	23	72.7	1.86	26.34	52,760

Little Deschutes River near Lapine, Oreg.

Location.— Water-stage recorder, lat. 43°41', long. 121°30', in SW¼ sec. 2, T. 22 S., R. 10 E., at bridge at former town of Rosland, 1½ miles north of Lapine. Zero of gage is 4,192.81 feet above mean sea level (general adjustment of 1929).

Records available.— September 1910 to October 1913 (incomplete), June to November 1918, August to October 1920, May 1924 to September 1936.

Average discharge.— 12 years (1924-36), 144 second-feet.

Extremes.— Maximum discharge during year, 693 second-feet Apr. 27 (gage height, 5.89 feet); minimum daily discharge, 30 second-feet (estimated), Nov. 3 (gage height affected by ice).

1910-13, 1918, 1920, 1924-36: Maximum discharge, 792 second-feet June 13, 1933 (gage height, 6.43 feet); minimum, 8 second-feet Sept. 2, 3, 1931 (gage height, 0.71 foot).

Remarks.— Records good except those during periods of ice effect, Nov. 1-9, Dec. 19 to Mar. 7, which are poor and were estimated on basis of gage-height, weather records, one discharge measurement, and comparison with records at Benham Falls and Pringle Falls. Small diversions for irrigation above station. Flow regulated since August 1922 by storage in Crescent Lake Reservoir.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	40	70	130	*57	80	82	626	315	209	244	66
2	44	32	69			90	93	578	286	251	244	65
3	45	30	65			110	114	530	265	258	244	62
4	46	40	69			130	116	498	244	258	244	62
5	50	50	68			140	112	466	230	258	237	61
6	50	50	70	130	*57	145	111	466	237	251	230	58
7	48	50	70			150	104	482	265	244	230	57
8	46	60	69			159	144	498	265	244	223	54
9	44	70	75			170	156	466	261	272	223	52
10	44	75	87			160	176	435	237	300	223	52
11	44	66	81	75	*57	163	196	405	223	300	223	52
12	46	82	89			176	230	390	202	300	216	52
13	47	81	76			170	265	375	216	293	202	52
14	54	71	90			158	293	390	230	286	196	52
15	56	82	88			158	322	420	230	286	182	52
16	57	73	80	75	*57	155	352	450	223	293	176	51
17	54	72	76			158	375	466	216	286	170	49
18	51	67	74			153	420	466	196	279	163	48
19	50	67				170	450	450	182	272	156	47
20	48	62				176	482	420	176	265	153	45
21	48	65		70	*57	189	530	390	163	258	149	46
22	48	64				182	562	390	155	265	144	42
23	49	61				170	578	368	144	258	137	42
24	49	60				150	594	338	136	258	133	42
25	50	52				138	610	308	132	258	132	42
26	50	57		70	*57	130	642	286	127	258	130	39
27	50	57				125	693	279	124	251	129	38
28	50	51				125	676	272	123	251	124	38
29	50	61				104	659	286	189	251	87	38
30	51	74				90	642	315	202	251	73	36
31	47	-				76	-	330	-	251	69	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,510	57	44	48.7	3,000		
November.....						1,842	86	30	61.4	3,550		
December.....						2,273	90	65	73.3	4,510		
Calendar year 1935.....						54,602	410	21	150	108,300		
January.....						3,150	-	-	102	6,280		
February.....						2,030	-	-	70	4,030		
March.....						4,450	189	76	144	8,830		
April.....						10,799	693	82	360	21,420		
May.....						12,839	626	272	414	25,470		
June.....						6,184	315	123	206	12,270		
July.....						8,215	300	209	265	16,290		
August.....						5,486	244	69	177	10,880		
September.....						1,492	66	36	49.7	2,960		
Water year 1935-36.....						60,270	693	30	165	119,600		

*Discharge measurement.

Crescent Lake Reservoir near Crescent, Oreg.

Location.- Staff gage, lat. $43^{\circ}30'$, long. $121^{\circ}58'$, at reservoir dam in sec. 11, T. 24 S., R. 6 E., 14 miles west of Crescent. Zero of gage is 4,826.0 feet above mean sea level.

Records available.- August 1922 to September 1936.

Extremes.- Maximum contents observed during year, 43,440 acre-feet June 26-28 (gage height, 12.0 feet); minimum, 19,450 acre-feet Oct. 1, 2 (gage height, 5.5 feet).
1922-36: Maximum contents observed, 72,460 acre-feet July 15, 1923 (gage height, 19.55 feet); minimum, 9,640 acre-feet Oct. 21, 1931 (gage height, 2.75 feet).

Remarks.- Records good. Contents estimated for Dec. 31, July 31, Aug. 31, by study of reservoir elevation and outflow on nearby days. Contents given are those above zero of gage and elevation of gate sill. Water stored in Crescent Lake Reservoir, completed in 1922, is used by Deschutes County Municipal Improvement District through its canal diverting from Deschutes River at Bend for irrigation of lands near Tumalo. Capacity of reservoir is 86,050 acre-feet at spillway crest at gage height 23.0 feet.

Stage and contents, water year October 1935 to September 1936

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	5.50	19,450	-
Oct. 31	5.65	19,990	+540
Nov. 30	6.00	21,260	+1,270
Dec. 31	6.30	25,340	+1,080
Jan. 31		26,000	+5,660
Feb. 29	7.7	27,430	+1,430
Mar. 31	7.6	27,060	-370
Apr. 30	8.6	30,740	+3,680
May 31	10.8	38,920	+8,180
June 30	11.8	42,680	+3,760
July 31		29,600	-13,080
Aug. 31		20,500	-9,100
Sept. 30	6.0	21,260	+760
The year			+1,810

Crescent Creek at Crescent Lake, near Crescent, Oreg.

Location.- Water-stage recorder, lat. 43°30', long. 121°58', in sec. 11, T. 24 S., R. 6 E., at Parshall measuring flume 100 yards below dam at outlet of Crescent Lake and 14 miles west of Crescent.

Records available.- January 1911 to July 1915, July 1927 to September 1928 (incomplete), October 1928 to September 1936.

Average discharge.- 11 years (1911-14, 1928-36), 38.5 second-feet.

Extremes.- Maximum discharge during year, 313 second-feet (regulated) Aug. 9 (gage height, 3.28 feet); no flow most of year.
1911-15, 1927-36: Maximum discharge, 313 second-feet July 9, 1929, Aug. 9, 1936; no flow at times.

Remarks.- Records excellent except those interpolated for Aug. 11, 12, which are fair. FLOW regulated since 1922 by storage in Crescent Lake Reservoir, this storage being released June 27 to Sept. 3 for Deschutes County Municipal Improvement District Canal near Bend.

Rating table, June to September 1936 (gage height, in feet, and discharge, in second-feet)

0	0	1.5	89.3
.2	4.0	2.0	142
.4	10.0	2.6	216
.7	26.4	3.2	301
1.0	46.0		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									0	182	216	7
2									0	182	220	5
3									0	182	220	3
4									0	181	222	0
5									0	180	220	0
6									0	180	217	0
7									0	189	217	0
8									0	225	219	0
9									0	222	215	0
10									0	221	215	0
11									0	220	203	0
12									0	219	192	0
13									0	217	180	0
14									0	216	173	0
15									0	219	165	0
16									0	222	155	0
17									0	220	149	0
18									0	217	141	0
19									0	215	134	0
20									0	220	127	0
21									0	221	120	0
22									0	224	114	0
23									0	225	109	0
24									0	221	106	0
25									0	219	101	0
26									0	217	98	0
27									40	222	55	0
28									112	220	19	0
29									112	219	19	0
30									146	217	19	0
31									-	213	16	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	0					0	0	0	0			
November.....	0					0	0	0	0			
December.....	0					0	0	0	0			
Calendar year 1935.....	11,060					246	0	30.3	21,930			
January.....	0					0	0	0	0			
February.....	0					0	0	0	0			
March.....	0					0	0	0	0			
April.....	0					0	0	0	0			
May.....	0					0	0	0	0			
June.....	410					146	0	13.7	813			
July.....	6,547					225	180	211	12,990			
August.....	4,576					222	16	148	9,000			
September.....	15					7	0	.5	30			
Water year 1935-36.....	11,548					225	0	31.6	22,910			

DESCHUTES RIVER BASIN

Diversions from Deschutes River near Bend, Oreg. .

The following canals divert from Deschutes River between the gaging station at Benham Falls and the station below Bend: Arnold Canal diverts from right bank of Deschutes River at head of Lava Island, in SW $\frac{1}{4}$ sec. 27, T. 18 S., R. 11 E.; water used for irrigation of lands southeast of Bend. Central Oregon Canal diverts from right bank in NE $\frac{1}{4}$ sec. 13, T. 18 S., R. 11 E.; water used for irrigation of lands east of Bend. Beginning Oct. 1, 1932, record of flow of Central Oregon Canal obtained above intake of Pilot Butte Canal. Deschutes County Municipal Improvement District Canal diverts from left bank in NE $\frac{1}{4}$ sec. 32, T. 17 S., R. 12 E., at Bend; water used to supplement flow of Tumalo project feed canal for irrigation of lands near Tumalo; water stored at Crescent Lake Reservoir is diverted by this canal. North and Swalley Canals divert from right bank in NE $\frac{1}{4}$ sec. 29, T. 17 S., R. 12 E.; water used to irrigate lands north of Bend, mostly near Redmond. No other diversions between gaging stations at Benham Falls and below Bend.

Records are available from October 1926 to September 1936; records for each of these canals published separately prior to 1926.

Diversions, in acre-feet, water year October 1935 to September 1936

Month	Arnold Canal	Central Oregon Canal	Deschutes County Municipal Improvement District Canal	North Canal	Swalley Canal	Total
October	2,800	22,830	4,240	19,790	4,280	53,940
November	246	1,690	1,780	1,930	623	6,249
December	464	1,460	377	1,500	474	4,275
January	0	1,690	0	1,410	248	3,348
February	276	2,460	0	825	179	3,740
March	343	1,490	0	2,740	690	5,263
April	1,300	14,390	1,950	11,920	2,400	31,960
May	5,360	22,820	3,810	26,040	6,270	64,300
June	5,600	25,290	2,150	26,230	6,190	65,470
July	6,100	29,180	10,060	30,390	6,810	82,540
August	6,100	25,260	8,750	29,830	6,860	77,160
September	5,230	23,880	1,270	23,000	5,150	58,630
The year	33,819	172,800	34,477	175,605	40,174	456,875

Tumalo Creek near Bend, Oreg.

Location.- Water-stage recorder, lat. 44°5', long. 121°22', in SE¼ sec. 23, T. 17 S., R. 11 E., a quarter of a mile above diversion dam of feed canal of Tumalo project, 4 miles above mouth, and 4 miles northwest of Bend.

Drainage area.- 57 square miles.

Records available.- November 1913 to September 1936; also during winters from October 1906 to April 1913, except 1909 and 1910.

Average discharge.- 21 years (1913-21, 1923-36), 80.2 second-feet.

Extremes.- Maximum discharge during year, 396 second-feet May 13 (gage height, 2.59 feet); minimum, 4.6 second-feet Aug. 27-31 (gage height, 0.70 foot).
1906-8, 1911-36: Maximum discharge, 1,420 second-feet about Jan. 6, 1923 (gage height, 4.55 feet); minimum, 4.0 second-feet Oct. 28, 1922 (gage height, 0.55 foot).

Remarks.- Records good except those for periods of ice effect Oct. 30, Nov. 1-6, Nov. 30 to Dec. 4, Dec. 15-17, Jan. 17, 18, 21, 29-31, Mar. 30 to Apr. 2, which are fair and were computed on basis of weather records, gage heights, 2 discharge measurements, field inspection, and comparison with flow of Squaw Creek near Sisters; those for periods of ice effect Dec. 18-26, Feb. 1-12, 14-22, which are poor and are based chiefly on weather records at Bend; those for periods of missing gage-height record, Nov. 11-24, Jan. 2, 3, Mar. 11-17, which are fair and were computed on basis of weather records, recorded range in stage, and comparison with flow in Squaw Creek near Sisters and in Tumalo feed canal; and those above 200 second-feet, which are fair. Columbia Southern Canal diverts above station. Canal discharge estimated for October, November, Apr. 9-12, May 14, 19-21, 23, June 6, Aug. 16-20, 29-31. Estimates of canal discharge poor.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	15	14	27		52	58	157	136	75	8	17
2	58	15	14	35		54	60	156	128	73	9	65
3	63	13	13	55		54	62	174	141	80	9	64
4	60	13	15	51		53	60	189	149	75	8	60
5	58	14	17	39		53	60	177	149	54	8	60
6	58	14	17	36	40	46	60	154	168	24	8	60
7	58	14	16	34		45	64	149	154	21	8	60
8	58	14	16	32		47	49	157	135	21	8	58
9	58	15	15	33		51	24	174	133	25	8	54
10	56	15	16	35		47	26	214	144	22	9	53
11	59	15	16	40		48	31	250	166	20	8	54
12	62	16	16	37		49	41	301	168	19	8	56
13	67	16	15	36	53	49	51	328	171	18	7	59
14	67	15	13	34		50	60	360	186	16	8	59
15	62	15	12	33		51	66	247	221	14	8	59
16	59	15	12	33		51	82	189	202	14	8	58
17	58	15	12	33	52	52	93	174	186	16	8	59
18	49	15		34		53	138	174	149	14	8	58
19	15	15		34		53	192	177	131	12	7	59
20	14	15		32		56	186	136	133	14	7	59
21	15	14		31		60	189	116	144	14	7	59
22	15	14		31		60	205	110	171	13	7	59
23	14	14	13	31	53	60	211	116	189	12	7	60
24	14	14		31	54	60	230	136	154	11	8	60
25	14	14		30	53	60	205	168	119	10	7	60
26	14	15		30	53	58	186	211	107	10	7	59
27	14	15	23	30	52	58	180	230	95	9	7	59
28	14	15	21	30	53	56	171	214	71	9	7	59
29	15	15	27	29	53	54	160	157	71	8	7	59
30	13	15	26	27	-	56	154	133	71	8	7	59
31	15	-	27	27	-	57	-	128	-	8	7	-

Month	Tumalo Creek					Columbia Southern Canal (run- off in acre- feet)	Combined run-off in acre-feet
	Second- foot in days	Discharge in second-feet			Run-off in acre-feet		
		Maximum	Minimum	Mean			
October.....	1,252	67	13	40.4	2,480	1,330	3,810
November.....	439	16	13	14.6	871	2,960	3,851
December.....	459	27	-	15.8	970	(*)	-
Calendar year 1935.....	17,478	222	-	47.9	34,651	-	-
January.....	1,050	55	27	33.9	2,080	(*)	-
February.....	1,372	54	-	47.3	2,720	(*)	-
March.....	1,653	60	45	53.3	3,280	0	3,280
April.....	3,356	230	24	112	6,650	1,000	7,660
May.....	5,766	360	110	186	11,440	2,860	14,300
June.....	4,341	221	71	145	8,610	5,420	14,030
July.....	744	80	0	24.0	1,480	5,550	7,030
August.....	237	9	7	7.6	470	3,710	4,180
September.....	1,724	65	17	57.5	3,420	48	3,468
Water year 1935-36.....	22,423	360	7	61.3	44,481	-	-

*Some flow; no record obtained.

155045 O-37-4

Squaw Creek near Sisters, Oreg.

Location.- Water-stage recorder, lat. 44°14', long. 121°34', in NW¼ sec. 32, T. 15 S., R. 10 E., immediately above intake of McCallister Ditch and 4 miles south of Sisters.

Drainage area.- 63 square miles.

Records available.- Irrigation seasons 1913-25, October 1925 to September 1936. July 1906 to May 1913 at station below intake of McCallister Ditch and 700 feet downstream.

Average discharge.- 24 years (1906-18, 1919-20, 1925-36), 105 second-feet.

Extremes.- Maximum discharge during year, 418 second-feet June 23 (gage height, 2.10 feet); maximum gage height, 3.0 feet during period when clock was stopped Dec. 20-25 (ice jam); minimum discharge, 30 second-feet Nov. 3 (gage height, 0.84 foot), 1906-36: Maximum discharge (estimated), 1,940 second-feet Nov. 22, 1909 (gage height, 7.5 feet, former site and datum); minimum, 19 second-feet Dec. 6, 1922.

Remarks.- Records fair except those for periods of ice effect, Nov. 3-7, Dec. 1-7, Dec. 14 to Jan. 14, Jan. 29 to Feb. 6, Feb. 9-29, and those for periods of missing gage height record, Oct. 24-26, Jan. 19-26, Mar. 1-3, which are poor and were estimated on basis of one discharge measurement, weather records, and records for Tumalo Creek near Bend. Pole Creek, a tributary above station, has been entirely diverted from its natural channel near mouth through a canal for irrigation of lands near Sisters.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	41	40		40	42	42	133	185	226	159	97
2	73	41	35		45	42	45	145	185	235	145	80
3	80	38	33	80	50	42	42	158	206	232	152	74
4	71	38	32		57	42	41	165	199	255	148	70
5	66	40	33		65	42	44	162	210	224	152	76
6	71	45	33		66	44	42	142	228	213	145	76
7	67	47	34		67	44	45	133	213	202	156	82
8	67	48	34	70	67	53	46	142	199	192	125	86
9	67	48	34			63	49	158	196	188	133	78
10	66	48	38			54	56	182	213	188	130	74
11	67	46	41			51	70	210	232	188	116	74
12	67	49	41			51	66	228	235	188	116	67
13	69	45	38	70		50	92	250	250	185	122	61
14	64	45	37			50	99	301	273	178	119	61
15	56	43	36	67		49	109	258	277	178	122	61
16	54	43		64		48	119	224	285	182	125	59
17	54	42		60		48	133	210	293	188	114	59
18	54	43	33	60	60	46	139	213	255	185	102	65
19	52	43		60		46	145	210	220	185	102	72
20	49	43		60		48	145	175	228	188	102	78
21	49	43		60		46	145	158	246	196	106	84
22	49	43		60		48	158	155	281	199	99	82
23	49	45	45	57		48	165	165	356	185	92	52
24	49	43	45	53		45	171	192	301	166	94	86
25	48	43		50		45	155	210	273	152	90	78
26	48	41	71	48		44	148	243	270	152	88	68
27	48	41		46		44	145	293	245	155	88	68
28	49	41		41		44	142	262	213	148	90	70
29	48	41	73	40		44	142	206	210	152	92	72
30	46	41		39	-	44	130	188	217	148	86	74
31	43	-		38	-	44	-	192	-	145	84	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,813	80	45	58.5	3,600		
November.....						1,500	49	38	43.3	2,580		
December.....						1,365	-	-	44.0	2,710		
Calendar year 1935.....						35,250	312	-	96.6	69,920		
January.....						1,933	-	38	62.4	3,850		
February.....						1,719	-	40	59.3	3,410		
March.....						1,455	63	42	46.9	2,890		
April.....						3,090	171	41	103	6,130		
May.....						6,053	301	133	195	12,010		
June.....						7,145	326	185	236	14,170		
July.....						5,782	235	145	187	11,470		
August.....						3,554	152	84	115	7,050		
September.....						2,214	97	59	73.8	4,590		
Water year 1935-36.....						37,423	326	-	102	74,240		

Crooked River near Culver, Oreg.

Location.- Staff gage, lat. 44°33', long. 121°16', in SW $\frac{1}{4}$ sec. 11, T. 12 S., R. 12 E., just below Cove power plant and 3 miles northwest of Culver.

Records available.- October 1917 to September 1936.

Average discharge.- 19 years, 1,375 second-feet.

Extremes.- Maximum discharge observed during year, 6,000 second-feet Apr. 15 (gage height, 5.0 feet); minimum, 1.60 second-feet July 24, 25, 27, 28, 30, 31, Aug. 1-4, 11, 19, 25, 30 (gage height, 0.48 foot).
1917-36: Maximum discharge, 7,200 second-feet (revised) Feb. 6, 1925 (gage height, 5.6 feet); minimum, 970 second-feet July 12 to Sept. 5, 1921.

Remarks.- Records fair. Flow regulated slightly by storage in Ochoco Reservoir.

Summer flow above Prineville diverted for irrigation. Springs increase flow about 1,000 second-feet in a few miles above station. Gage readings furnished by Pacific Power & Light Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.3	1,070	2.5	2,610
.6	1,220	3.0	3,100
1.0	1,460	3.5	3,670
1.5	1,800	4.5	5,090
2.0	2,160	5.5	6,990

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,190	1,190	1,250	1,250	1,250	1,460	1,590	1,870	1,280	1,210	*1,160	1,190
2	1,200	1,190	1,250	1,250	1,250	1,560	1,590	*1,870	1,280	1,200	1,160	1,180
3	1,190	1,200	1,250	1,280	1,220	2,020	1,590	1,800	1,280	1,200	1,160	1,210
4	1,190	1,200	1,250	1,280	1,210	2,610	1,560	1,730	1,310	*1,190	1,160	1,220
5	1,190	1,210	1,250	1,280	1,220	2,160	1,560	1,700	1,280	1,180	1,170	1,210
6	1,190	1,200	1,250	1,340	1,290	2,100	1,560	1,590	*1,310	1,200	1,170	1,220
7	1,200	1,200	1,250	1,370	1,220	2,020	1,560	1,700	1,310	1,200	1,170	1,220
8	1,190	1,210	1,250	1,340	1,250	2,020	1,560	1,660	1,340	1,200	*1,180	1,210
9	1,190	1,220	1,250	1,280	1,250	1,940	1,940	*1,590	1,310	1,190	1,190	1,200
10	1,180	1,220	1,250	1,310	1,220	2,020	2,610	1,520	1,310	1,190	1,180	1,210
11	1,190	1,220	1,250	1,310	1,250	2,160	3,550	1,520	1,310	*1,190	1,160	1,210
12	1,190	1,220	1,250	1,450	1,250	1,940	3,790	1,430	1,220	1,180	1,170	*1,220
13	1,210	1,250	1,250	1,560	1,250	1,870	4,620	1,400	*1,280	1,180	1,170	1,220
14	1,220	1,250	1,250	1,490	1,280	1,940	5,440	1,400	1,280	1,180	1,170	1,220
15	1,250	1,250	1,250	1,460	1,280	1,940	6,000	1,370	1,250	1,190	*1,170	1,220
16	1,250	1,250	1,250	1,370	1,280	1,870	5,260	*1,340	1,250	1,180	1,170	1,210
17	1,250	1,250	1,250	1,400	1,280	1,870	4,930	1,340	1,220	1,180	1,170	1,210
18	1,250	1,250	1,250	1,370	1,280	1,870	*4,470	1,250	1,250	*1,180	1,170	1,220
19	1,250	1,250	1,250	1,370	1,310	1,940	3,920	1,280	1,220	1,180	1,160	*1,220
20	1,250	1,250	1,250	1,340	1,310	2,020	3,550	1,280	*1,220	1,170	1,170	1,220
21	1,250	1,280	1,250	1,310	1,310	2,100	2,900	1,250	1,220	1,170	1,170	1,220
22	1,220	1,280	1,250	1,280	1,460	2,520	2,900	1,250	1,220	1,170	*1,170	1,220
23	1,220	1,250	1,250	1,280	4,330	2,340	2,610	*1,220	1,210	1,170	1,170	1,210
24	1,210	1,280	1,250	1,280	3,320	2,160	2,430	1,220	1,190	1,160	1,170	1,200
25	1,200	1,280	1,250	1,280	2,150	1,940	*2,430	1,210	1,200	*1,160	1,160	1,210
26	1,200	1,280	1,250	1,280	1,730	1,800	2,430	1,210	1,190	1,170	1,170	1,200
27	1,200	1,280	1,310	1,280	1,520	1,800	2,340	1,220	*1,190	1,160	1,170	1,210
28	1,200	1,250	1,310	1,280	1,460	1,730	2,180	1,210	1,190	1,160	1,180	1,210
29	1,190	1,250	1,310	1,250	1,460	1,700	2,020	1,220	1,540	*1,170	*1,170	1,200
30	1,190	1,250	1,310	1,220	-	1,660	1,940	*1,220	1,210	1,160	1,160	1,200
31	1,200	-	1,340	1,250	-	1,660	-	1,220	-	1,160	1,170	-
Month	Second-foot-days			Maximum		Minimum		Mean		Run-off in acre-feet		
October	37,500			1,250		1,180		1,210		74,380		
November	37,160			1,280		1,190		1,239		73,710		
December	38,990			1,540		1,220		1,288		77,840		
Calendar year 1935	496,210			3,090		1,170		1,359		964,200		
January	41,070			1,560		1,220		1,325		81,460		
February	43,820			4,330		1,210		1,511		86,920		
March	60,800			2,520		1,460		1,961		120,230		
April	66,630			6,000		1,560		2,894		172,200		
May	44,120			1,870		1,210		1,423		87,510		
June	37,730			1,340		1,190		1,258		74,840		
July	36,590			1,210		1,160		1,180		72,680		
August	36,240			1,190		1,160		1,169		71,880		
September	36,320			1,220		1,180		1,211		72,040		
Water year 1935-36	537,170			6,000		1,160		1,468		1,065,000		

*Estimated.

Metolius River near Grandview, Oreg.

Location.- Staff gage, lat. $44^{\circ}37'$, long. $121^{\circ}27'$, in NE $\frac{1}{4}$ sec. 19, T. 11 S., R. 11 E., at Montgomery ranch, 8 miles northwest of Grandview.

Records available.- October 1921 to September 1936.

Average discharge.- 15 years, 1,455 second-feet.

Extremes.- Maximum discharge observed during year, 1,860 second-feet May 16 (gage height, 0.84 foot); minimum, 1,200 second-feet Feb. 17 (gage height, 0.26 foot).
1921-36: Maximum discharge, about 5,760 second-feet Jan. 7, 1923 (gage height, 3.32 feet); minimum, 1,080 second-feet Feb. 17, 1932 (gage height, 0.14 foot).

Remarks.- Records good. Discharge interpolated Oct. 4. No diversions or regulation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.2	1,140
.4	1,340
.6	1,560
.8	1,800
1.0	2,060

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,280	1,260	1,280	1,260	1,280	1,320	1,340	1,620	1,620	1,500	1,340	1,320
2	1,280	1,260	1,260	1,680	1,280	1,340	1,340	1,620	1,620	1,500	1,340	1,320
3	1,280	1,240	1,240	1,400	1,280	1,340	1,340	1,620	1,560	1,500	1,340	1,320
4	1,280	1,240	1,240	1,740	1,280	1,400	1,340	1,560	1,560	1,500	1,340	1,300
5	1,280	1,280	1,240	1,500	1,280	1,400	1,340	1,740	1,560	1,500	1,340	1,300
6	1,280	1,280	1,240	1,400	1,280	1,400	1,340	1,620	1,560	1,450	1,340	1,300
7	1,280	1,280	1,240	1,340	1,280	1,400	1,340	1,620	1,680	1,450	1,340	1,300
8	1,280	1,280	1,240	1,340	1,220	1,400	1,340	1,620	1,680	1,450	1,340	1,280
9	1,280	1,300	1,240	1,340	1,280	1,400	1,340	1,620	1,620	1,450	1,340	1,280
10	1,280	1,300	1,240	1,400	1,260	1,400	1,400	1,580	1,560	1,450	1,340	1,280
11	1,280	1,280	1,240	1,500	1,260	1,400	1,450	1,680	1,560	1,450	1,340	1,280
12	1,300	1,280	1,240	1,450	1,260	1,450	1,450	1,740	1,620	1,450	1,340	1,280
13	1,400	1,280	1,240	1,620	1,260	1,450	1,500	1,740	1,620	1,450	1,340	1,280
14	1,320	1,280	1,240	1,560	1,240	1,450	1,560	1,740	1,620	1,450	1,340	1,280
15	1,300	1,280	1,240	1,560	1,220	1,400	1,560	1,900	1,620	1,450	1,340	1,280
16	1,280	1,280	1,240	1,500	1,220	1,400	1,620	1,860	1,620	1,450	1,340	1,280
17	1,280	1,280	1,240	1,450	1,200	1,400	1,620	1,740	1,620	1,450	1,340	1,280
18	1,280	1,280	1,240	1,450	1,220	1,400	1,680	1,740	1,620	1,450	1,340	1,280
19	1,280	1,260	1,240	1,450	1,240	1,400	1,680	1,740	1,560	1,450	1,320	1,280
20	1,280	1,260	1,240	1,400	1,260	1,340	1,680	1,680	1,560	1,450	1,320	1,280
21	1,280	1,260	1,220	1,400	1,320	1,340	1,620	1,680	1,560	1,450	1,320	1,280
22	1,280	1,260	1,220	1,340	1,340	1,340	1,680	1,620	1,560	1,450	1,320	1,280
23	1,280	1,260	1,220	1,340	1,320	1,340	1,680	1,620	1,560	1,400	1,320	1,280
24	1,280	1,260	1,240	1,340	1,300	1,340	1,740	1,620	1,560	1,400	1,300	1,280
25	1,280	1,260	1,260	1,340	1,300	1,340	1,740	1,620	1,560	1,400	1,300	1,280
26	1,280	1,260	1,260	1,340	1,300	1,340	1,680	1,680	1,560	1,400	1,300	1,260
27	1,280	1,260	1,260	1,340	1,300	1,340	1,680	1,740	1,560	1,400	1,300	1,260
28	1,280	1,260	1,260	1,300	1,300	1,340	1,680	1,680	1,500	1,400	1,300	1,260
29	1,280	1,260	1,260	1,240	1,300	1,340	1,620	1,620	1,500	1,340	1,300	1,260
30	1,280	1,260	1,260	1,280	-	1,340	1,620	1,620	1,500	1,340	1,300	1,260
31	1,260	-	1,260	1,280	-	1,400	-	1,620	-	1,340	1,300	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						39,860	1,400	1,260	1,286	79,060		
November.....						38,080	1,300	1,240	1,269	75,530		
December.....						35,660	1,260	1,220	1,244	76,480		
Calendar year 1935.....						522,950	1,820	1,220	1,433	1,037,000		
January.....						43,860	1,740	1,240	1,415	87,000		
February.....						36,860	1,340	1,200	1,271	73,110		
March.....						42,690	1,450	1,320	1,377	84,670		
April.....						46,000	1,740	1,340	1,533	91,240		
May.....						52,020	1,860	1,620	1,678	103,200		
June.....						47,520	1,680	1,500	1,584	94,250		
July.....						44,570	1,500	1,340	1,438	88,400		
August.....						41,120	1,340	1,300	1,326	81,560		
September.....						38,500	1,320	1,260	1,283	76,360		
Water year 1935-36.....						509,640	1,860	1,200	1,392	1,011,000		

Lake Creek near Sisters, Oreg.

Location.- Water-stage recorder, lat. 44°26', long. 121°44', in SW¼ sec. 24, T. 13 S., R. 8 E., a quarter of a mile below Suttle Lake, 6 miles above mouth, and 13 miles northwest of Sisters. Zero of gage is about 3,430 feet above mean sea level (U. S. Geological Survey topographic map).

Drainage area.- 20.5 square miles.

Records available.- April 1915 to September 1936; occasional readings during summers of 1911 to 1913.

Average discharge.- 20 years (1915-18, 1919-36), 51.7 second-feet.

Extremes.- Maximum discharge during year, 113 second-feet Apr. 28 (gage height, 2.03 feet); minimum (regulated), 16 second-feet Nov. 10, Sept. 21, 22 (gage height, 0.80 foot); minimum daily discharge, 22 second-feet Aug. 24, 25.

1911-13, 1915-36: Maximum discharge, 302 second-feet Jan. 10, 1923 (gage height, 2.58 feet); minimum, 14 second-feet Oct. 17, 1933; minimum daily discharge, 15 second-feet July 29, 30, 1932.

Remarks.- Records good except those estimated for May 12-29, which are fair. No diversions above station; occasional regulation by storage in Suttle Lake.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.9	19
1.1	28
1.4	48
1.7	76
2.1	126

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	26	26	33	39	37	42	104	71	37	26	29
2	27	25	26	46	39	36	42	102	64	36	26	30
3	26	24	26	48	38	36	44	99	69	36	27	29
4	26	24	26	55	37	36	43	99	60	36	28	28
5	26	24	25	47	34	36	42	93	61	35	28	24
6	26	24	26	44	36	36	39	87	62	34	28	25
7	29	24	29	42	47	37	36	83	63	34	27	26
8	26	24	30	42	42	38	39	73	65	33	27	26
9	29	26	28	41	41	39	39	76	62	33	28	25
10	27	26	28	51	34	46	38	76	60	33	27	24
11	26	29	32	60	31	51	37	79	58	33	26	23
12	26	32	38	60	36	50	33	79	57	33	26	23
13	30	30	33	63	38	49	37		57	32	26	24
14	31	29	22	64	34	48	42		54	32	26	25
15	32	28	23	67	31	47	46		52	32	26	25
16	32	28	23	67	32	46	50	52	52	32	26	25
17	29	28	24	63	32	46	67	52	52	32	26	24
18	28	26	24	62	35	39	78	52	52	32	26	24
19	28	26	24	59	36	32	72	52	52	31	26	24
20	26	26	24	58	36	36	86	52	52	31	26	25
21	26	26	24	54	38	36	88	86	52	31	26	24
22	26	26	24	45	39	39	91		51	30	26	24
23	26	26	25	35	38	42	93		48	30	26	26
24	26	26	26	38	38	47	99		46	29	22	26
25	26	26	26	46	39	52	103	43	45	29	22	24
26	26	26	26	52	39	46	107	38	38	29	27	24
27	26	26	27	43	38	42	112	38	38	36	26	24
28	26	26	27	33	38	46	112	38	38	38	27	24
29	26	26	29	36	37	46	112	38	38	24	27	24
30	26	26	32	42	-	46	111	SS	38	24	26	24
31	26	-	33	40	-	44	-	S2	-	25	26	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						843	32	26	27.2		1,670	
November.....						789	32	24	26.3		1,560	
December.....						836	38	22	27.0		1,660	
Calendar year 1935.....						15,268	108	22	41.8		30,280	
January.....						1,533	67	33	49.5		3,040	
February.....						1,074	47	31	37.0		2,130	
March.....						1,309	52	32	42.2		2,600	
April.....						1,983	112	33	66.1		3,930	
May.....						2,671	104	73	86.2		5,300	
June.....						1,593	71	38	53.1		3,160	
July.....						992	38	24	32.0		1,970	
August.....						813	28	22	26.2		1,610	
September.....						752	30	23	25.1		1,490	
Water year 1935-36.....						15,188	112	22	41.5		30,120	

White River below Tygh Valley, Oreg.

Location.- Water-stage recorder, lat. 45°14', long. 121°6', in NW¼ sec. 8, T. 4 S., R. 14 E., just below Pacific Power & Light Co.'s plant at White River Falls and 4½ miles below Tygh Valley.

Drainage area.- 393 square miles.

Records available.- October 1917 to September 1936.

Average discharge.- 19 years, 428 second-feet.

Extremes.- Maximum discharge during year, 2,040 second-feet Apr. 19 (gage height, 4.84 feet); minimum, 40 second-feet July 12, Sept. 13 (gage height, 0.00 foot); minimum daily discharge, 108 second-feet Oct. 9, 11.

1917-36: Maximum discharge, 13,300 second-feet Jan. 6, 1923 (gage height, about 13.3 feet); minimum, 10 second-feet Dec. 11-14, 1919, Aug. 9, 1931. Minimum daily discharge, 75 second-feet Sept. 1, 1924.

Remarks.- Records good except those for Jan. 30, 31, Feb. 1-4, 8, 10-21, Aug. 4-7, which are fair, and were computed on basis of weather records and flow of other streams. Diversions for irrigation above station. Low-water flow regulated to some extent by operation of power plant. Water-stage recorder inspected by employees of Pacific Power & Light Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.8	90	1.8	247	3.6	990
1.0	110	2.1	335	4.0	1,290
1.2	134	2.4	440	4.5	1,710
1.4	162	2.6	598	5.0	2,190
1.6	199	3.2	765		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	118	139	222	220	615	374	1,060	575	217	140	126
2	110	118	138	726	240	615	352	1,060	575	208	140	138
3	109	129	135	575	250	675	356	1,130	535	210	139	133
4	112	165	130	1,710	250	675	549	1,320	495	215	138	129
5	110	172	130	1,340	255	615	335	1,290	475	215	136	129
6	111	147	135	720	264	575	320	1,130	535	206	135	128
7	110	138	142	535	253	555	363	1,060	720	195	133	126
8	110	137	167	416	245	575	405	990	575	195	132	124
9	108	154	156	458	240	765	422	960	515	195	129	123
10	109	138	164	739	240	698	495	1,020	475	193	128	122
11	108	135	164	960	240	635	696	1,130	458	197	128	122
12	112	154	172	815	250	615	1,020	1,160	440	181	132	122
13	142	147	159	900	250	595	1,280	1,160	422	183	130	122
14	142	139	152	765	240	555	1,320	1,200	458	176	129	134
15	135	144	147	675	230	555	1,360	1,240	495	174	128	132
16	128	152	139	595	220	495	1,580	1,240	475	170	127	126
17	123	180	138	475	220	495	1,760	1,020	458	169	127	122
18	122	146	135	408	210	458	1,640	990	422	162	122	120
19	120	142	130	402	210	458	1,760	1,020	377	159	124	118
20	118	139	129	495	210	458	1,660	900	356	160	124	120
21	124	137	126	436	210	515	1,530	842	326	160	123	118
22	127	138	123	405	234	495	1,580	790	314	159	122	117
23	123	144	138	394	264	458	1,580	720	293	158	122	117
24	122	148	147	380	240	440	1,530	698	264	153	122	117
25	122	144	154	363	227	408	1,480	698	261	152	121	118
26	122	146	185	338	487	391	1,360	698	237	148	118	116
27	124	147	181	326	675	440	1,240	720	242	147	115	115
28	124	146	199	314	664	475	1,130	698	237	144	115	115
29	124	140	187	255	615	440	1,100	675	232	143	115	114
30	120	138	183	240	-	426	1,060	635	220	140	120	117
31	121	-	230	230	-	394	-	595	-	142	118	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,702	142	108	119	7,340
November.....	4,292	172	118	143	8,510
December.....	4,754	230	123	153	9,430
Calendar year 1935	132,892	1,240	108	364	263,600
January.....	17,612	1,710	222	568	34,930
February.....	9,363	675	210	288	16,570
March.....	16,564	765	391	534	32,850
April.....	31,639	1,840	320	1,055	62,760
May.....	29,839	1,320	595	963	59,180
June.....	12,482	720	220	416	24,760
July.....	5,426	217	140	175	10,760
August.....	3,932	140	115	127	7,800
September.....	3,650	138	114	123	7,300
Water year 1935-36	142,275	1,840	108	369	282,200

Clickitat River near Glenwood, Wash.

Location.- Water-stage recorder, lat. 46°5'30", long. 121°15'30", in SE¼ sec. 14, T. 7 N., R. 12 E., half a mile below Dairy Creek and 5 miles north of Glenwood.

Drainage area.- 356 square miles.

Records available.- December 1910 to September 1936 (incomplete). October 1909 to December 1910 at a point 1 mile upstream.

Average discharge.- 19 years (1909-20, 1928-36), 850 second-feet.

Extremes.- Maximum discharge during year, 3,070 second-feet May 14 (gauge height, 4.08 feet) from rating curve extended above 2,100 second-feet; minimum, 269 second-feet Jan. 29 (gauge height, 0.75 foot); discharge probably lower sometime Feb. 8-27, when stage-discharge relation was affected by ice.
1909-36: Maximum discharge, 9,870 second-feet Dec. 22, 1933 (gauge height, 7.9 feet, present datum) from rating curve extended above 2,000 second-feet; minimum, 204 second-feet Nov. 28, 1931.

Remarks.- Records good except those for period of ice effect, Feb. 8-27, which were computed on basis of gauge heights and weather records and are poor. No diversions or regulation.

Rating tables, water year 1935-36 except period of ice effect (gauge height, in feet, and discharge, in second-feet)
Oct. 1 to May 14 May 15 to Sept. 30

0.8	285	2.0	980	1.0	289	3.0	1,580
1.0	360	2.5	1,400	1.5	510	3.5	2,050
1.2	455	3.0	1,850	2.0	800	4.0	2,580
1.4	565	3.5	2,360	2.5	1,160		
1.6	685	4.0	2,940				
1.8	820						

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	369	325	352	382	337	430	378	1,900	1,720	933	555	480
2	364	317	345	420	325	435	382	2,100	1,620	926	545	450
3	364	348	344	392	358	455	378	2,250	1,670	926	560	420
4	360	355	333	450	369	430	374	2,470	1,540	940	584	425
5	369	364	340	465	382	425	369	2,470	1,440	870	590	430
6	374	364	348	415	364	425	364	2,150	1,440	821	550	430
7	378	364	378	387	344	410	392	1,950	1,560	807	535	425
8	374	364	374	374	325	455	410	1,900	2,100	752	535	410
9	364	369	369	387	317	517	450	2,950	1,800	752	535	410
10	364	360	369	400	314	475	465	2,200	1,620	758	530	401
11	356	356	374	420	310	460	637	2,520	1,580	764	550	396
12	360	360	369	450	303	460	785	2,640	1,580	746	525	388
13	364	352	356	455	299	460	964	2,760	1,490	740	530	378
14	369	348	348	415	292	450	1,180	3,000	1,450	740	530	378
15	356	360	329	392	285	435	1,510	2,520	1,490	722	500	385
16	348	360	348	378	285	425	1,540	2,360	1,490	722	485	378
17	344	352	329	364	285	420	1,800	2,550	1,440	722	480	383
18	344	348	310	356	289	415	2,100	1,950	1,280	710	475	383
19	344	337	299	352	292	420	2,100	2,050	1,200	716	445	388
20	344	337	310	360	292	440	2,050	1,850	1,160	722	460	392
21	344	348	317	352	296	470	2,000	1,720	1,160	704	485	388
22	340	352	317	348	303	455	2,200	1,670	1,200	680	475	392
23	340	360	329	348	310	445	2,250	1,670	1,240	656	460	374
24	340	360	344	337	321	435	2,150	1,760	1,200	620	420	383
25	344	356	356	353	325	420	2,050	1,850	1,080	602	410	370
26	340	360	360	314	340	420	1,950	2,050	1,040	596	406	357
27	340	360	360	340	360	450	1,900	2,150	1,010	602	415	361
28	348	360	356	337	364	425	1,850	2,200	940	590	420	365
29	348	360	356	299	392	415	1,760	2,100	912	584	425	370
30	337	356	369	317	-	392	1,800	1,850	912	566	425	378
31	333	-	369	340	-	396	-	1,800	-	555	425	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	10,963	378	333	354	0.994	1.15	21,740
November.....	10,613	369	317	354	.994	1.11	21,050
December.....	10,760	378	299	347	.975	1.12	21,340
Calendar year 1935	276,632	2,250	299	758	2.13	28.87	548,700
January.....	11,679	465	299	377	1.06	1.22	23,160
February.....	9,376	392	285	323	.907	.98	18,600
March.....	13,565	517	392	438	1.23	1.42	26,910
April.....	38,338	2,250	364	1,278	3.59	4.00	76,040
May.....	65,860	3,000	1,670	2,125	5.97	6.88	130,600
June.....	41,994	2,150	912	1,400	3.93	4.38	83,290
July.....	22,574	940	555	728	2.04	2.35	44,770
August.....	15,235	590	406	491	1.38	1.59	30,220
September.....	11,846	480	357	395	1.11	1.24	23,500
Water year 1935-36	262,803	3,000	285	718	2.02	27.44	521,200

Clickitat River near Pitt, Wash.

Location.- Water-stage recorder, lat. 45°45', long. 120°12', in SW $\frac{1}{4}$ sec. 8, T. 3 N., R. 13 E., $\frac{3}{4}$ miles south of Pitt, 5 miles above Silvias Creek, and 7 miles above mouth.

Drainage area.- 1,170 square miles.

Records available.- October 1935 to September 1936. Comparable records at former station at Klickitat July 1909 to January 1912, and at station at Pitt October 1928 to September 1935.

Extremes.- Maximum discharge during year, 4,650 second-feet Jan. 12 (gage height, 7.05 feet); minimum, 618 second-feet Nov. 2 (gage height, 3.55 feet).
1909-12, 1928-36: Maximum discharge observed, about 21,000 second-feet Dec. 22, 1933 (gage height, 12.5 feet, former site and datum) from rating curve extended above 3,000 second-feet; minimum, 435 second-feet Dec. 28-31, 1930 (gage height, 0.88 foot, former site and datum).

Remarks.- Records good. Discharge interpolated Oct. 10. Minor diversions for irrigation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

3.5	590
3.7	700
4.0	910
4.5	1,400
5.0	1,950
5.5	2,550
6.0	3,200
6.5	3,900

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	736	662	684	843	886	2,880	1,300	2,490	2,250	1,220	816	767
2	736	640	672	1,410	802	2,430	1,290	2,680	2,130	1,220	802	749
3	742	662	672	1,130	788	2,370	1,290	2,680	2,190	1,190	809	724
4	736	678	667	2,230	850	2,250	1,250	3,000	2,130	1,210	823	718
5	724	700	662	1,950	823	2,130	1,210	3,200	1,950	1,170	830	724
6	730	712	672	1,510	878	2,010	1,190	2,810	1,900	1,090	830	718
7	730	706	706	1,350	823	1,900	1,210	2,550	2,550	1,070	802	724
8	718	700	730	1,290	730	1,900	1,290	2,430	2,380	1,050	781	712
9	712	712	712	1,510	754	2,070	1,350	2,450	2,430	1,010	781	700
10	706	700	712	2,800	781	1,950	1,460	2,620	2,190	1,000	781	700
11	700	706	718	3,200	754	1,840	1,780	2,940	2,070	1,010	724	694
12	712	718	730	3,820	767	1,900	1,950	3,200	2,070	991	781	694
13	724	712	706	3,760	760	1,900	2,250	3,200	2,010	991	781	684
14	748	700	694	3,070	730	1,840	2,490	3,410	2,010	982	781	684
15	736	730	678	2,940	730	1,780	2,620	3,340	2,010	973	760	678
16	718	730	672	2,550	724	1,680	2,810	3,140	2,010	955	754	672
17	712	712	678	2,130	712	1,620	3,070	2,810	1,950	982	736	672
18	700	694	656	1,840	724	1,560	3,270	2,620	1,780	964	730	678
19	706	689	645	1,840	730	1,560	3,340	2,680	1,620	955	724	684
20	700	684	640	1,840	718	1,560	3,140	2,490	1,620	973	712	684
21	700	684	645	1,620	736	1,620	3,000	2,310	1,560	964	736	689
22	700	694	650	1,510	724	1,560	3,140	2,190	1,560	937	760	689
23	694	700	656	1,460	760	1,510	3,200	2,190	1,620	919	748	678
24	700	700	678	1,350	736	1,460	3,140	2,250	1,620	902	730	678
25	694	700	706	1,250	730	1,400	2,940	2,370	1,510	886	718	684
26	694	700	712	1,180	772	1,350	2,810	2,550	1,400	862	706	672
27	694	700	724	1,140	1,650	1,510	2,740	2,680	1,350	882	706	662
28	689	694	724	1,120	2,690	1,560	2,550	2,810	1,290	862	712	672
29	689	689	748	937	3,220	1,460	2,430	2,680	1,220	846	718	672
30	684	689	760	894	-	1,400	2,430	2,430	1,220	846	724	678
31	667	-	846	894	-	1,350	-	2,370	-	816	724	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	22,031	748	667	711	0.608	0.70	43,700
November.....	20,897	730	640	697	.596	.66	41,450
December.....	21,555	846	640	695	.594	.68	42,750
Calendar year 1935.....	523,678	4,090	640	1,435	1.23	16.78	1,039,000
January.....	56,368	3,820	843	1,818	1.55	1.79	111,800
February.....	27,462	3,220	712	947	.809	.87	54,470
March.....	55,310	2,880	1,350	1,784	1.52	1.75	109,700
April.....	67,940	3,340	1,190	2,265	1.94	2.16	134,800
May.....	83,750	3,410	2,190	2,702	2.51	2.66	166,100
June.....	56,100	2,680	1,220	1,870	1.80	1.78	111,300
July.....	30,708	816	691	.647	.67	.98	60,910
August.....	23,520	830	706	759	.649	.75	46,650
September.....	20,833	767	662	694	.593	.66	41,320
Water year 1935-36.....	486,474	3,820	640	1,329	1.14	15.44	965,000

Hood River near Hood River, Oreg.

Location.- Water-stage recorder, lat. 45°20', long. 121°31', in SE $\frac{1}{4}$ sec. 36, T. 3 N., R. 10 E., at Powderdale, a quarter of a mile above Pacific Power & Light Co.'s plant and three-quarters of a mile south of Hood River. Zero of gage is 106.23 feet above mean sea level (general adjustment of 1929).

Drainage area.- 329 square miles.

Records available.- March 1913 to September 1936.

Average discharge.- 23 years, 1,086 second-feet (including flow of Pacific Power & Light Co.'s conduit).

Extremes.- Maximum discharge during year, 6,440 second-feet Jan. 4 (gage height, 6.04 feet); minimum observed, 16 second-feet Dec. 22 (gage height, 0.96 foot). Minimum mean daily discharge, 21 second-feet Dec. 23. 1913-36: Maximum discharge, 34,000 second-feet Jan. 6, 1923 (gage height, 11.1 feet); minimum, 3 second-feet Aug. 9, 1926 (gage height, 1.45 feet).

Remarks.- Records good except those for Nov. 3, 24, Feb. 9, 10, 13, 15-23, which are poor and are based on comparison with discharge of White River below Tygh Valley and West Fork of Hood River near Dee. Diversions for irrigation above station. Pacific Power & Light Co.'s conduit diverts water around gage. Low-water flow regulated by pondage at sawmill at Dee. Water-stage recorder inspected by employees of Pacific Power & Light Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.9	13	2.2	205	4.0	2,030
1.2	28	2.6	375	5.0	4,010
1.5	48	3.0	670	6.0	6,440
1.8	94	3.5	1,260		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	39	44	1,210	350	1,490	750	1,040	754	214	38	62
2	38	38	28	4,270	300	1,490	689	1,160	700	254	43	46
3	40	35	24	2,200	314	1,900	664	1,300	696	250	46	41
4	42	29	26	5,680	324	1,690	616	1,640	688	280	74	43
5	42	36	34	3,980	312	1,310	706	1,880	648	332	58	46
6	43	34	35	2,060	514	1,130	604	1,620	711	194	55	43
7	38	39	115	1,430	344	1,030	700	1,320	1,240	138	44	42
8	39	32	290	1,160	260	1,640	823	1,200	1,020	172	40	42
9	39	158	166	1,240	216	2,230	934	1,200	1,140	112	42	41
10	39	58	352	2,650	216	1,570	1,110	1,370	1,200	118	43	42
11	41	164	300	3,960	233	1,270	1,670	1,600	1,170	206	41	45
12	54	172	468	4,460	469	1,450	2,030	1,540	1,150	227	42	42
13	98	79	290	4,140	418	1,310	2,120	1,560	968	138	43	42
14	66	47	252	2,850	256	1,200	2,120	1,730	780	90	39	48
15	46	106	206	2,290	209	1,300	2,030	1,910	821	74	40	37
16	41	168	122	1,760	187	1,010	2,200	2,010	826	69	42	39
17	44	77	88	1,360	178	962	2,290	1,540	880	82	49	43
18	45	50	81	1,090	156	872	2,290	1,330	722	62	38	44
19	43	48	46	1,130	135	810	2,030	1,270	608	66	40	41
20	44	45	30	1,430	88	796	1,890	1,230	552	79	43	42
21	44	42	36	1,170	128	943	1,860	1,140	562	72	41	42
22	42	39	24	968	221	856	1,910	1,030	586	64	42	42
23	62	40	21	892	237	718	1,830	940	578	57	42	40
24	47	125	22	814	179	672	1,830	916	522	50	101	38
25	46	75	66	740	226	603	1,820	940	424	46	52	40
26	46	56	103	642	613	660	1,620	976	364	46	198	36
27	46	46	158	604	1,130	1,640	1,450	1,090	347	58	74	42
28	42	33	236	551	1,260	1,460	1,260	1,060	348	42	64	37
29	43	33	156	462	1,100	1,150	1,180	948	272	36	56	35
30	39	30	345	402	-	907	1,060	832	206	36	53	34
31	40	-	998	397	-	828	-	806	-	35	61	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				1,414	98	36	45.6	2,800				
November.....				1,973	172	29	65.8	3,910				
December.....				5,172	998	21	167	10,260				
Calendar year 1935.....				194,921	3,360	21	534	386,600				
January.....				57,932	5,580	397	1,869	114,900				
February.....				10,563	1,250	86	364	20,950				
March.....				36,767	2,230	603	1,186	72,930				
April.....				44,106	2,280	604	1,470	87,480				
May.....				40,118	2,010	806	1,294	79,570				
June.....				21,483	1,240	206	716	42,610				
July.....				3,699	352	35	119	7,340				
August.....				1,684	198	38	54.3	3,340				
September.....				1,266	62	34	41.9	2,490				
Water year 1935-36.....				226,167	5,580	21	618	448,600				

Combined discharge, in second-feet, of Hood River and Pacific Power & Light Co.'s conduit near Hood River, Oreg., for water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	394	405	459	1,660	815	1,760	1,110	1,450	1,160	653	371	389
2	393	406	453	4,680	770	1,850	1,060	1,570	1,100	697	378	404
3	401	414	444	2,630	761	2,240	1,020	1,700	1,100	692	397	326
4	417	439	432	6,000	760	1,980	982	2,040	1,090	706	415	350
5	410	460	432	4,340	754	1,660	953	2,290	1,060	720	429	351
6	412	450	440	2,490	915	1,500	961	2,010	1,130	601	425	345
7	406	457	561	1,850	796	1,400	1,060	1,740	1,600	569	366	329
8	401	459	757	1,580	699	1,810	1,190	1,620	1,400	588	359	314
9	399	569	636	1,670	690	2,580	1,190	1,620	1,290	542	344	309
10	396	487	822	3,080	684	1,920	1,480	1,780	1,200	546	351	302
11	398	581	770	4,380	688	1,650	2,050	2,020	1,170	629	343	310
12	470	632	938	4,890	711	1,820	2,380	1,970	1,150	576	339	320
13	554	548	760	4,540	710	1,680	2,500	1,980	1,140	548	333	387
14	536	504	690	3,270	700	1,580	2,520	2,160	1,180	506	346	484
15	482	566	651	2,710	660	1,560	2,440	2,350	1,220	501	332	423
16	454	605	592	2,180	640	1,390	2,610	2,450	1,230	487	320	399
17	434	537	558	1,750	620	1,320	2,700	1,980	1,260	509	340	394
18	420	610	551	1,520	600	1,200	2,720	1,760	1,130	481	308	400
19	421	491	500	1,550	580	1,170	2,450	1,710	1,030	486	304	402
20	417	465	481	1,840	560	1,150	2,300	1,650	972	502	294	411
21	436	471	478	1,580	600	1,200	2,290	1,570	975	507	292	410
22	424	477	454	1,400	700	1,110	2,300	1,480	1,000	496	306	418
23	421	500	469	1,320	642	1,070	2,220	1,380	1,000	490	294	432
24	419	585	466	1,240	607	1,030	2,210	1,360	948	440	329	423
25	416	529	536	1,180	675	959	2,190	1,370	855	406	308	435
26	416	516	573	1,090	1,000	1,010	1,950	1,420	817	395	290	408
27	425	506	628	1,040	1,520	2,000	1,820	1,510	789	409	291	405
28	443	490	693	975	1,630	1,820	1,640	1,470	745	402	289	412
29	450	481	636	906	1,460	1,450	1,590	1,360	666	394	300	413
30	420	470	615	872	-	1,270	1,480	1,250	645	391	297	407
31	425	-	1,470	867	-	1,190	-	1,160	-	382	290	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						13,309	554	393	429	26,400		
November.....						15,010	632	405	500	29,770		
December.....						19,145	1,470	432	618	37,970		
Calendar year 1935.....						326,802	3,700	307	895	648,200		
January.....						71,100	6,000	867	2,294	141,000		
February.....						22,947	1,630	560	791	45,510		
March.....						47,319	2,580	959	1,526	93,860		
April.....						55,356	2,720	953	1,845	109,800		
May.....						53,150	2,450	1,160	1,715	105,400		
June.....						32,072	1,600	645	1,069	63,610		
July.....						16,251	720	382	524	32,250		
August.....						10,400	429	289	335	20,630		
September.....						11,472	484	302	382	22,750		
Water year 1935-36.....						367,531	6,000	289	1,004	728,900		

West Fork of Hood River near Dee, Oreg.

Location.- Water-stage recorder, lat. 45°36', long. 121°38', in SE $\frac{1}{4}$ sec. 1, T. 1 N., R. 9 E., $\frac{1}{2}$ quarter of a mile above Dead Point Creek, half a mile above junction with Hood River, and 1 mile northwest of Dee. Zero of gage is 864.11 feet above mean sea level.

Drainage area.- 96 square miles.

Records available.- August 1913 to September 1915 (incomplete), June 1932 to September 1936.

Extremes.- Maximum discharge during year, 6,250 second-feet Jan. 4 (gage height, 8.68 feet); minimum, 114 second-feet Nov. 2 (gage height, 1.59 feet).
1913-15, 1932-36: Maximum discharge, 12,900 second-feet Dec. 22, 1933 (gage height, 12.4 feet); minimum, 100 second-feet Sept. 29, 30, 1915.

Remarks.- Records excellent except those for period Dec. 7 to Mar. 27, which are fair. Discharge for Feb. 9, 10, 12-20 based on weather records and discharge records of Hood River near Hood River and White River below Tygh Valley. Diversions for irrigation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.6	116	4.5	1,460
2.0	198	5.0	1,840
2.5	350	6.0	2,730
3.0	570	7.0	3,820
3.5	850	8.0	5,190
4.0	1,120		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	129	125	153	1,360	236	748	475	720	470	264	166	155
2	129	120	147	3,600	318	850	430	775	444	267	168	157
3	130	127	142	1,800	315	1,000	406	830	444	276	172	136
4	136	129	138	5,190	312	850	378	748	434	285	172	136
5	132	125	134	2,640	318	720	362	1,180	418	276	174	134
6	130	125	138	1,420	366	645	370	1,030	444	246	170	130
7	129	129	257	1,000	312	585	444	858	695	238	161	129
8	127	136	374	885	276	965	535	775	645	235	157	127
9	125	221	315	970	268	1,250	560	775	575	227	155	125
10	123	153	452	2,050	260	912	802	858	516	241	155	123
11	123	185	434	2,800	252	748	1,150	912	484	285	155	123
12	170	285	550	3,290	220	858	1,360	858	457	246	155	125
13	166	198	418	2,750	230	775	1,420	885	448	232	153	169
14	174	172	350	1,800	220	748	1,380	940	450	224	155	196
15	151	216	308	1,390	210	748	1,320	1,090	434	221	151	155
16	149	244	276	1,090	210	645	1,390	1,120	448	221	149	142
17	140	206	252	858	200	615	1,420	885	480	219	149	134
18	136	181	230	748	190	560	1,360	775	430	211	149	134
19	134	168	214	658	185	525	1,180	748	374	208	147	132
20	132	159	196	1,090	180	535	1,090	802	350	211	147	134
21	145	153	188	885	196	570	1,120	802	346	206	147	134
22	144	157	181	775	235	525	1,090	748	374	203	145	136
23	136	181	179	720	219	498	1,030	670	358	196	142	134
24	132	235	179	670	198	462	1,080	645	336	188	161	132
25	130	201	193	595	203	430	1,060	645	315	181	145	136
26	130	196	198	530	312	498	940	670	298	176	140	134
27	129	186	294	488	595	1,190	858	670	295	179	136	138
28	136	176	312	444	620	970	775	605	289	176	136	138
29	136	168	267	402	585	720	748	585	267	174	136	138
30	129	159	509	374	-	605	720	506	264	172	136	136
31	127	-	970	362	-	530	-	475	-	170	134	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,241	174	123	137	8,410		
November.....						5,216	285	120	174	10,350		
December.....						8,948	970	134	289	17,750		
Calendar year 1935.....						149,827	2,370	120	410	297,200		
January.....						43,834	5,190	362	1,414	86,940		
February.....						8,241	620	180	284	16,350		
March.....						22,240	1,250	430	717	44,110		
April.....						27,243	1,420	362	908	54,040		
May.....						24,585	1,180	475	793	48,760		
June.....						12,562	695	264	419	24,920		
July.....						6,854	285	170	221	13,590		
August.....						4,718	174	134	152	9,360		
September.....						4,142	196	123	138	8,220		
Water year 1935-36.....						172,824	5,190	120	472	342,800		

Pacific Power & Light Co.'s conduit near Hood River, Oreg.

Location.- Venturi meter, lat. 45°42', long. 121°30', in NE $\frac{1}{4}$ sec. 36, T. 3 N., R. 10 E., at Pacific Power & Light Co.'s plant on Hood River, half a mile southeast of Hood River.

Records available.- October 1922 to September 1936. At station on tailrace of former plant October 1913 to September 1914, January 1916 to July 1922.

Average discharge.- 14 years (1922-36), 341 second-feet.

Extremes.- Maximum discharge during year, 479 second-feet Feb. 22; no flow when power plant was occasionally shut down.
1913-14, 1916-36: Maximum discharge, 510 second-feet Dec. 30, 1932.

Remarks.- Records good. Discharge determined from hourly readings of Venturi meter checked by occasional discharge measurements except for Feb. 8, 9, 13-22, for which period daily discharge is computed from records of daily electrical output of power plant. Pacific Power & Light Co.'s conduit diverts from Hood River in SE $\frac{1}{4}$ sec. 11, T. 2 N., R. 10 E., immediately below mouth of Neal Creek. Water is returned to river in NE $\frac{1}{4}$ sec. 36, T. 3 N., R. 10 E., being diverted around the gage on Hood River near Hood River. Meter readings furnished by Pacific Power & Light Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	358	366	415	445	465	266	360	412	401	439	333	327
2	355	368	425	413	470	361	358	413	400	445	355	358
3	361	379	420	430	447	353	359	403	401	442	351	326
4	375	410	405	420	436	287	356	405	406	426	341	287
5	368	424	398	357	442	354	247	409	410	388	371	286
6	369	416	405	432	401	365	357	387	415	407	370	302
7	368	418	446	423	452	370	362	418	360	451	342	287
8	362	427	457	424	439	170	353	419	377	416	319	272
9	360	411	470	430	474	351	255	421	146	430	302	265
10	356	429	470	432	463	352	374	407	0	428	305	260
11	357	417	470	418	455	376	383	415	0	423	302	265
12	416	460	470	405	242	372	355	432	0	349	297	273
13	456	469	470	402	232	373	350	430	183	410	290	345
14	470	457	438	421	444	379	402	435	405	416	307	436
15	436	460	445	422	451	259	412	439	397	427	292	386
16	413	437	470	424	453	368	408	439	398	418	278	360
17	390	460	470	418	442	362	414	435	384	427	291	351
18	375	460	470	430	444	361	428	422	409	419	270	356
19	378	443	454	424	445	360	412	436	418	420	264	351
20	373	420	451	408	472	356	406	422	420	423	251	369
21	392	429	442	409	472	358	409	434	413	435	251	368
22	382	438	430	410	479	253	389	446	418	432	264	376
23	359	460	448	423	405	356	390	442	427	433	262	392
24	372	460	444	428	428	358	377	439	426	390	228	355
25	370	454	470	443	449	356	370	432	431	360	256	395
26	370	460	470	444	357	360	328	448	453	349	92	372
27	380	460	470	432	394	361	370	418	442	351	217	363
28	401	457	457	424	376	364	380	412	397	360	225	375
29	407	448	470	444	365	318	413	412	414	358	244	378
30	381	440	470	470	-	360	415	395	439	355	244	373
31	385	-	470	470	-	362	-	355	+	347	229	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					11,895	470	355	384	23,590			
November.....					13,037	469	366	435	25,860			
December.....					15,971	470	398	451	27,710			
Calendar year 1935.....					131,809	470	82	361	261,400			
January.....					13,175	470	357	425	26,130			
February.....					12,389	479	242	427	24,570			
March.....					10,556	379	170	341	20,940			
April.....					11,248	428	247	375	22,310			
May.....					13,032	449	355	420	25,850			
June.....					10,575	453	0	352	20,980			
July.....					12,552	443	347	405	24,900			
August.....					8,716	371	92	281	17,290			
September.....					10,216	436	260	341	20,260			
Water year 1935-36.....					141,362	479	0	386	280,400			

White Salmon River at Husum, Wash.

Location.- Water-stage recorder, lat. 45°47'50", long. 121°29'15", in SW $\frac{1}{4}$ sec. 30, T. 4 N., R. 11 E., at Husum, 500 feet above Rattlesnake Creek.

Drainage area.- 300 square miles.

Records available.- September 1909 to October 1919, October 1929 to September 1936 in reports of U. S. Geological Survey; November 1919 to September 1920 in State Water-Supply Bulletin 5.

Average discharge.- 18 years (1909-20, 1929-36), 977 second-feet.

Extremes.- Maximum discharge during year, 2,180 second-feet May 5 (gage height, 4.61 feet); minimum, 455 second-feet Dec. 22 (gage height, 1.26 feet).

1909-20, 1929-36: Maximum discharge, 10,800 second-feet Dec. 22, 1933 (gage height, 11.0 feet); minimum, 340 second-feet Dec. 30, 1930 (gage height, 0.64 foot).

Remarks.- Records good. Numerous diversions for irrigation near Trout Lake. Springs greatly increase flow within a few miles above station.

Rating tables, water year, 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 5			May 6 to Sept. 30		
1.2	440	2.5	552	3.5	1,330
1.4	500	3.0	1,100	4.0	1,680
1.6	561	3.5	1,370	4.5	2,090
1.8	626	4.0	1,690	2.2	743
2.0	695	4.5	2,090	2.5	855
2.2	765	4.8	2,360	3.0	1,070

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	577	530	500	704	695	895	875	1,490	1,500	975	743	634
2	593	530	500	895	678	955	855	1,550	1,560	975	743	652
3	577	530	485	835	678	1,020	855	1,660	1,600	975	743	652
4	577	546	485	1,100	678	1,050	835	1,590	1,500	975	724	634
5	593	561	485	1,180	695	978	818	2,140	1,420	975	743	634
6	577	561	485	1,120	695	955	818	1,960	1,460	955	743	634
7	577	546	515	1,000	678	935	818	1,920	1,920	935	724	634
8	577	546	530	935	626	955	818	2,090	2,090	935	724	616
9	577	546	546	955	660	1,080	818	1,600	1,890	915	706	616
10	561	530	546	1,100	678	1,020	835	1,640	1,720	915	706	599
11	546	530	561	1,340	678	978	895	1,760	1,600	915	688	599
12	561	546	577	1,520	643	1,020	1,000	1,880	1,560	915	688	599
13	593	546	530	1,550	643	1,020	1,100	1,960	1,530	895	688	599
14	593	530	515	1,400	626	1,000	1,180	2,040	1,500	855	688	616
15	610	546	500	1,280	626	978	1,280	2,040	1,500	855	688	599
16	593	546	500	1,150	610	955	1,430	2,140	1,530	855	688	599
17	593	530	500	1,050	593	935	1,580	1,960	1,530	855	670	599
18	577	515	485	978	610	915	1,720	1,760	1,420	856	670	599
19	577	515	485	935	626	915	1,800	1,800	1,360	817	670	582
20	577	515	470	915	626	895	1,800	1,720	1,300	817	652	582
21	577	515	470	915	626	915	1,800	1,690	1,240	817	670	582
22	577	515	470	875	626	895	1,760	1,530	1,240	798	670	582
23	561	546	470	855	643	895	1,760	1,530	1,220	780	670	565
24	561	561	470	818	626	875	1,690	1,500	1,200	762	652	565
25	561	546	500	800	626	855	1,690	1,530	1,120	762	652	548
26	561	530	530	782	660	855	1,660	1,530	1,040	762	652	548
27	561	546	546	765	743	978	1,620	1,690	1,040	762	634	548
28	561	530	561	748	782	978	1,550	1,720	998	762	652	548
29	561	515	577	712	818	935	1,490	1,640	998	762	634	548
30	546	500	577	695	-	915	1,460	1,560	975	743	634	532
31	546	-	660	712	-	895	-	1,530	-	743	634	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						17,779	610	546	574	35,260		
November.....						16,049	561	500	535	31,530		
December.....						16,051	660	470	517	31,800		
Calendar year 1935.....						340,796	1,700	470	934	676,000		
January.....						30,619	1,550	695	988	60,730		
February.....						19,197	818	593	662	38,080		
March.....						29,445	1,080	855	950	58,400		
April.....						38,610	1,800	818	1,287	76,580		
May.....						53,770	2,140	1,490	1,735	108,700		
June.....						42,451	2,090	976	1,415	84,200		
July.....						26,598	975	743	858	52,760		
August.....						21,243	743	634	685	42,130		
September.....						17,844	652	532	595	35,390		
Water year 1935-36.....						329,636	2,140	470	901	653,900		

White Salmon River near Underwood, Wash.

Location.- Water-stage recorder, lat. 45°45'0", long. 121°31'30", in NW¼ sec. 14, T. 3 N., R. 10 E., 1,000 feet below Northwestern Electric Co.'s Condit power plant and 2 miles north of Underwood. Present gage at new datum.

Drainage area.- 384 square miles.

Records available.- March 1915 to September 1930, September 1935 to September 1936. October 1912 to February 1913 at dam 1 mile above.

Average discharge.- 16 years (1915-30, 1935-36), 1,052 second-feet.

Extremes.- Maximum discharge during the period September 1935 to September 1936, 3,490 second-feet May 18 (gage height, 6.90 feet), from rating curve extended above 2,000 second-feet; minimum mean daily discharge, 443 second-feet Dec. 25 and minimum discharge, 73 second-feet Dec. 21 (gage height, 1.48 feet) both the result of regulation.

1915-30, 1935-36: Maximum discharge, about 9,700 second-feet Dec. 29, 1917 (gage height, 9.5 feet), relation to present datum unknown; practically no flow at times when power plant is shut down.

Remarks.- Records excellent except those for Sept. 1-8, 1935, computed on basis of records of White Salmon River at Husum, and those for Dec. 16-18, Aug. 21, 22, computed on basis of partial gage-height record and recorded range of stage, which are fair. Numerous diversions for irrigation near Trout Lake. Flow regulated by operation of power plant.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

3.0	350	4.0	820	5.0	1,590	6.0	2,530
3.5	545	4.5	1,190	5.5	2,040	6.5	3,050

Discharge, in second-feet, September 1935 to September 1936.

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		597	566	517	764	814	1,300	1,020	1,820	1,550	1,030	736	646
2		630	519	550	1,170	668	1,290	1,130	1,670	1,560	1,020	760	633
3		802	584	516	956	910	1,510	1,090	1,760	1,580	1,010	770	619
4		620	568	525	1,430	830	1,490	958	1,960	1,570	1,060	752	555
5	700	708	589	464	1,480	834	1,420	1,030	2,180	1,510	1,010	754	616
6		547	564	509	1,340	850	1,340	1,080	2,020	1,520	950	748	563
7		606	530	662	1,240	828	1,510	1,840	1,900	982	734	743	
8		304	588	474	1,120	644	1,310	1,070	2,060	972	727	650	
9	720	626	578	556	1,180	628	1,400	1,150	1,720	1,890	957	728	658
10	756	591	552	584	1,640	926	1,390	748	1,740	1,760	1,130	722	664
11	721	576	578	604	2,040	748	1,350	1,130	1,860	1,670	763	705	628
12	800	572	618	630	2,540	822	1,350	1,320	1,940	1,620	958	700	574
13	644	620	598	566	2,450	698	1,350	1,510	1,970	1,600	935	702	476
14	652	669	632	599	2,040	660	1,360	1,500	2,040	1,540	888	740	522
15	556	606	628	470	1,870	694	1,340	1,410	2,050	1,550	874	651	608
16	652	640	604	550	1,660	570	1,330	1,610	2,100	1,600	885	692	614
17	726	640	521	550	1,440	790	1,260	1,760	1,950	1,600	862	756	570
18	640	611	603	550	1,330	725	1,070	1,690	1,800	1,520	844	653	606
19	754	640	560	523	1,310	705	1,280	1,870	1,810	1,440	852	703	602
20	642	470	546	505	1,230	792	1,170	1,940	1,760	1,390	855	653	596
21	644	722	562	531	1,180	894	1,150	1,680	1,660	1,350	846	700	602
22	626	570	560	467	1,070	624	1,150	1,880	1,610	1,320	866	700	580
23	761	603	586	514	1,100	538	1,150	1,900	1,600	1,320	790	758	576
24	599	596	568	542	1,030	654	1,070	1,630	1,570	1,290	780	580	599
25	610	598	616	443	951	756	1,070	1,610	1,590	1,210	758	693	561
26	642	562	652	666	930	774	1,060	1,770	1,620	1,130	784	939	541
27	664	606	588	592	965	1,050	1,230	1,740	1,720	1,050	790	748	560
28	656	568	534	660	905	939	1,370	1,670	1,740	1,060	822	648	571
29	640	596	556	584	880	1,050	1,320	1,610	1,670	1,130	800	650	590
30	610	586	545	878	784	-	1,210	1,570	1,610	918	728	649	532
31	-	613	-	841	913	-	1,260	-	1,610	-	755	594	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....							18,797	722	470	606	37,280		
November.....							17,193	652	519	573	34,060		
December.....							17,412	641	443	562	34,540		
Calendar year													
January.....							40,968	2,540	764	1,322	81,260		
February.....							22,415	1,050	538	773	44,460		
March.....							39,680	1,510	1,070	1,280	73,700		
April.....							45,676	1,970	748	1,456	86,630		
May.....							55,550	2,180	1,570	1,792	110,200		
June.....							44,208	2,060	918	1,474	87,690		
July.....							27,586	1,130	728	890	54,720		
August.....							22,035	939	580	711	43,710		
September.....							17,910	748	476	597	35,520		
Water year 1935-36							367,420	2,540	443	1,004	728,800		

Note.- Mean discharge for September 1935, 676 second-feet; run-off, 40,256 acre-feet.

Wind River near Carson, Wash.

Location.- Water-stage recorder, lat. 45°44'10", long. 121°48'10", in SW¼ sec. 21, T. 3 N., R. 8 E., three-quarters of a mile above Little Wind River and 1 mile north-east of Carson. Discharge measurements made just below mouth of Little Wind River and records include its flow.

Drainage area.- 224 square miles.

Records available.- December 1934 to September 1936.

Extremes.- Maximum discharge during year, 7,590 second-feet-Jan. 12 (gage height, 13.96 feet) from rating curve extended above 2,000 second-feet; minimum, 183 second-feet Nov. 2, 3, 4 (gage height, 2.32 feet).

1934-36: Maximum discharge, 8,190 second-feet Dec. 21, 1934 (gage height, 14.6 feet) from rating curve extended above 2,000 second-feet; minimum, that of Nov. 2, 3, 4, 1935.

Remarks.- Records excellent except those from 2,500 to 3,500 second-feet, which are fair, and those above 3,500 second-feet, which are poor. No diversions or regulation.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

2.2	151	3.6	378	6.5	1,450
2.4	175	3.8	429	7.0	1,750
2.6	201	4.0	485	7.5	2,070
2.8	230	4.5	645	8.0	2,420
3.0	260	5.0	820	9.0	3,150
3.2	294	5.5	1,010	11.0	4,790
3.4	333	6.0	1,210	13.0	6,590

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	175	175	304	3,070	838	2,490	1,170	1,170	820	470	275	215
2	175	169	268	4,970	795	2,560	1,090	1,210	820	456	268	230
3	175	169	260	3,630	785	2,700	1,010	1,300	538	456	268	230
4	175	169	260	5,550	768	2,420	930	1,570	802	485	260	215
5	175	169	252	4,880	750	2,070	890	2,140	750	470	260	215
6	175	175	260	3,470	855	1,870	855	2,210	750	429	252	208
7	175	175	416	2,340	750	1,750	855	1,810	1,530	403	252	208
8	175	175	732	2,840	645	1,930	890	1,570	1,690	403	245	208
9	175	222	662	3,310	645	2,560	890	1,400	1,510	390	245	208
10	175	215	820	4,640	610	2,140	990	1,350	1,300	390	238	201
11	175	208	1,000	6,320	610	1,810	1,250	1,400	1,170	470	238	201
12	194	335	1,450	6,500	658	2,000	1,350	1,350	1,090	416	238	208
13	230	290	1,150	5,950	545	2,000	1,810	1,300	990	390	230	230
14	222	268	930	4,450	545	2,000	1,930	1,300	930	366	230	245
15	238	334	768	3,710	515	2,000	1,930	1,350	930	366	238	230
16	208	592	662	3,070	500	1,810	2,210	1,400	990	355	222	222
17	194	486	545	2,550	456	1,630	2,210	1,210	950	344	230	208
18	188	364	515	2,140	456	1,450	2,140	1,150	838	344	230	208
19	138	470	470	1,350	470	1,350	1,350	1,210	785	333	222	194
20	182	285	429	2,070	456	1,350	1,810	1,400	732	323	222	194
21	194	260	403	1,930	470	1,400	1,750	1,400	715	313	222	201
22	201	260	378	1,750	674	1,300	1,750	1,300	660	313	222	194
23	188	415	366	1,630	890	1,250	1,630	1,210	662	304	222	194
24	188	575	366	1,510	715	1,150	1,570	1,150	610	304	230	188
25	182	442	390	1,350	645	1,050	1,690	1,090	575	294	222	188
26	182	378	416	1,250	1,130	1,130	1,510	1,050	545	294	222	188
27	182	355	674	1,170	2,630	2,390	1,400	1,050	545	285	215	182
28	182	323	1,130	1,090	2,700	2,350	1,300	990	545	285	215	182
29	188	304	1,010	1,010	2,280	1,750	1,250	950	515	276	208	182
30	188	294	1,740	950	-	1,450	1,210	872	485	276	208	182
31	182	-	8,590	910	-	1,300	-	838	276	215	-	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	5,826	238	175	188	0.539	0.97	11,560
November.....	8,894	592	169	296	1.32	1.47	17,640
December.....	22,416	3,390	252	723	3.23	3.72	44,460
Calendar year 1935.....	308,932	3,830	169	846	3.78	51.27	612,800
January.....	92,540	6,500	910	2,985	13.3	15.33	183,600
February.....	24,793	2,700	456	855	3.82	4.12	49,180
March.....	56,390	2,700	1,050	1,819	8.12	9.36	111,800
April.....	45,480	2,210	855	1,449	6.47	7.22	86,240
May.....	40,660	2,210	838	1,312	5.66	6.76	80,550
June.....	26,092	1,690	485	870	3.88	4.33	51,750
July.....	11,279	485	276	364	1.62	1.87	22,370
August.....	7,265	276	208	234	1.04	1.20	14,410
September.....	6,159	245	182	205	.915	1.02	12,220
Water year 1935-36.....	345,794	6,500	169	945	4.22	57.37	685,900

Sandy River near Marmot, Oreg.

Location.- Water-stage recorder, lat. 45°23', long. 122°8', in NE¼ sec. 24, T. 2 S., R. 5 E., 1 mile southwest of Marmot, 1½ miles above Sandy River Dam of Portland General Electric Co., and 5 miles below mouth of Salmon River.

Drainage area.- 262 square miles.

Records available.- August 1911 to December 1915, July 1919 to September 1936. Combined discharge of Sandy River below dam and canal gives same results January 1916 to June 1919.

Average discharge.- 25 years, 1,341 second-feet.

Extremes.- Maximum discharge during year, 12,400 second-feet Jan. 4 (gage height, 11.1 feet); minimum, 222 second-feet Nov. 2 (gage height, 1.92 feet).
1911-36: Maximum discharge, about 29,200 second-feet Jan. 6, 1923 (gage height, 17.5 feet); minimum, 210 second-feet Oct. 14, 15, 1931.

Remarks.- Records good. Discharge estimated for Feb. 17, 18. No diversions or regulation above station. Water-stage recorder inspected by employee of Portland General Electric Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	267	255	416	2,100	860	2,380	1,070	1,830	1,210	748	520	442
2	265	244	402	7,330	902	2,560	1,010	1,980	1,240	775	530	505
3	271	255	384	4,730	802	2,680	980	2,140	1,210	775	530	424
4	311	263	367	11,100	830	2,320	920	3,000	1,180	802	530	384
5	299	263	359	7,260	775	1,980	890	3,270	1,140	775	530	379
6	291	263	402	4,200	950	1,780	890	3,070	1,210	704	515	379
7	275	263	540	3,140	830	1,600	1,040	2,620	1,930	670	505	362
8	271	307	880	2,500	748	1,980	1,240	2,320	1,830	654	490	346
9	267	719	730	2,380	720	3,070	1,240	2,140	1,640	648	485	353
10	255	470	1,010	4,520	709	2,320	1,780	2,260	1,470	709	475	330
11	255	505	975	6,410	720	1,880	2,810	2,320	1,350	830	475	322
12	351	942	1,330	4,950	1,640	2,090	3,480	2,140	1,240	709	475	338
13	470	724	1,110	4,800	2,140	2,040	3,480	2,090	1,210	676	475	368
14	424	582	810	3,750	1,470	1,980	3,270	2,200	1,210	658	475	500
15	398	626	790	3,140	1,210	2,090	3,440	2,320	1,210	621	460	415
16	584	730	708	2,500	1,070	1,740	3,760	2,380	1,180	610	456	354
17	335	642	642	2,040	1,010	1,600	3,760	1,930	1,210	616	451	330
18	307	555	587	1,780	950	1,430	3,620	1,740	1,210	590	420	322
19	295	490	530	2,620	890	1,320	3,140	1,690	1,040	585	374	318
20	311	452	500	3,000	890	1,520	2,980	1,890	1,010	595	362	318
21	375	434	470	2,390	1,470	1,390	2,880	2,090	980	585	374	318
22	406	442	465	1,930	2,090	1,280	2,810	1,930	1,010	570	374	322
23	339	505	456	1,780	1,830	1,210	2,560	1,740	1,010	540	366	318
24	319	550	465	1,600	1,470	1,140	2,680	1,600	950	530	406	314
25	311	515	598	1,430	1,320	1,040	2,810	1,560	890	525	366	310
26	307	515	790	1,280	1,390	1,140	2,440	1,510	860	530	354	294
27	295	525	1,010	1,210	1,640	2,040	2,200	1,470	830	530	342	302
28	327	495	1,250	1,100	2,200	1,980	1,980	1,350	830	525	346	302
29	339	460	1,140	1,010	2,040	1,470	2,040	1,280	748	525	362	298
30	299	434	1,220	950	-	1,280	1,880	1,240	748	525	362	298
31	287	-	2,100	920	-	1,180	-	1,180	-	520	346	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	9,904	470	255	319	1.22	1.41	19,640
November.....	14,425	942	244	481	1.84	2.06	22,610
December.....	23,536	2,100	359	759	2.90	3.34	46,680
Calendar year 1935.....	365,768	3,850	244	1,002	3.82	51.92	725,400
January.....	99,900	11,100	920	3,223	12.3	14.18	198,100
February.....	35,466	2,200	709	1,223	4.67	5.04	70,350
March.....	55,210	3,070	1,040	1,784	6.81	7.85	109,700
April.....	66,880	3,750	890	2,296	8.76	9.77	136,600
May.....	62,270	3,270	1,180	2,009	7.67	8.84	123,500
June.....	34,798	1,830	748	1,160	4.43	4.94	69,000
July.....	19,635	830	520	633	2.42	2.79	38,950
August.....	13,531	530	342	436	1.66	1.91	26,840
September.....	10,670	605	294	356	1.36	1.52	21,160
Water year 1935-36.....	448,313	11,100	244	1,225	4.68	63.64	889,100

Sandy River below Bull Run River, near Bull Run, Oreg.

Location.- Water-stage recorder, lat. 45°27', long. 122°15', in NW¼ sec. 30, T. 1 S., R. 5 E., 1 mile below Bull Run River and 2 miles northwest of Bull Run. Zero of gage is about 202 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 440 square miles.

Records available.- October 1929 to September 1936. At site three-quarters of a mile upstream April 1910 to September 1914.

Average discharge.- 10 years (1910-11, 1912-14, 1929-36), 2,246 second-feet.

Extremes.- Maximum discharge during year, 26,600 second-feet Jan. 4 (gage height, 13.43 feet); minimum, 115 second-feet Aug. 7 (gage height, 0.90 foot); minimum daily discharge, 264 second-feet Oct. 6.

1910-14, 1929-36: Maximum discharge, 58,000 second-feet Mar. 31, 1931 (gage height, 20.6 feet); minimum, 53 second-feet Oct. 4, 1931 (gage height, 0.53 foot); minimum daily discharge, 129 second-feet Oct. 4, 1931.

Remarks.- Records good. No diversions for irrigation above station; about 50,000 acre-feet annually diverted from Bull Run River by Portland Water Bureau. Flow regulated by Bull Run power plant of Portland General Electric Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.4	250	7.0	6,400
2.0	480	8.0	8,650
3.0	1,020	10.0	14,100
4.0	1,860	12.0	21,000
5.0	2,940	14.0	29,100
6.0	4,450		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	374	329	532	4,360	1,250	4,450	1,950	2,830	1,720	947	512	533
2	331	347	715	16,300	1,190	4,450	1,880	2,690	1,760	974	468	712
3	357	360	612	9,370	1,360	4,810	1,720	3,010	1,740	1,200	524	556
4	537	373	544	22,600	1,220	4,110	1,460	5,040	1,610	764	539	516
5	318	462	596	14,400	1,190	3,420	1,360	6,010	1,770	968	538	385
6	264	406	619	7,840	1,460	3,000	1,610	5,980	1,660	951	538	457
7	368	296	1,020	5,780	1,470	2,630	1,580	4,640	2,760	802	468	434
8	384	378	2,010	4,630	1,140	3,320	1,860	3,960	3,350	826	469	486
9	363	1,000	1,530	4,450	1,010	6,000	1,970	3,320	3,090	809	416	490
10	370	634	2,140	8,340	1,200	4,110	2,810	3,260	2,570	940	546	400
11	390	816	2,230	13,800	1,140	3,210	4,320	3,350	2,260	1,310	416	396
12	310	1,360	3,510	10,100	2,940	3,560	5,780	3,130	2,100	812	452	368
13	588	868	2,690	10,100	4,480	3,560	5,580	2,920	1,830	932	458	478
14	571	696	2,160	7,710	2,940	3,420	5,380	3,140	1,530	850	466	703
15	572	800	1,510	6,400	2,240	3,720	5,380	3,700	1,880	818	442	588
16	601	1,290	1,300	5,000	1,900	3,070	5,980	3,680	1,880	755	441	532
17	444	1,100	1,170	4,020	1,670	2,810	5,980	3,110	1,830	746	446	416
18	436	1,090	1,120	3,410	1,540	2,460	5,190	2,800	1,990	822	418	436
19	346	842	904	5,360	1,490	2,190	4,550	2,600	1,770	541	472	393
20	388	766	878	7,040	1,400	2,140	4,420	3,170	1,620	718	382	440
21	470	704	811	5,200	2,740	2,250	4,260	4,290	1,060	666	407	402
22	624	741	751	3,980	4,110	1,830	4,190	3,850	1,500	658	434	414
23	512	869	624	3,500	3,720	2,090	3,760	2,970	1,340	644	440	420
24	438	1,070	716	3,000	2,880	1,860	4,340	2,580	1,290	642	462	418
25	409	987	830	2,660	2,520	1,650	4,140	2,460	1,210	682	452	417
26	436	926	1,310	2,260	2,690	1,920	3,480	2,270	1,170	354	420	382
27	353	1,010	1,470	2,060	3,160	4,160	3,500	2,190	1,140	640	414	348
28	478	819	2,180	2,020	4,630	4,360	2,960	1,940	808	560	399	400
29	564	954	1,840	1,690	4,030	2,950	3,060	1,990	980	531	400	346
30	443	769	2,390	1,520	-	2,540	2,860	1,710	890	522	394	352
31	340	-	4,820	1,440	-	2,230	-	1,730	-	498	430	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	13,359	624	264	431	0.980	1.13	26,500
November.....	23,062	1,360	296	769	1.75	1.95	45,740
December.....	45,532	4,820	532	1,469	3.34	3.85	90,310
Calendar year 1935.....	594,307	8,410	170	1,628	3.70	50.24	1,179,000
January.....	200,840	22,600	1,440	6,479	14.7	16.95	398,400
February.....	64,710	4,630	1,010	2,231	5.07	5.47	128,400
March.....	98,280	6,000	1,650	3,170	7.20	8.30	194,900
April.....	107,230	5,980	1,300	3,574	8.12	9.06	212,700
May.....	100,300	6,010	1,710	3,235	7.35	8.47	188,900
June.....	52,038	3,350	808	1,736	3.95	4.41	105,300
July.....	23,662	1,510	334	770	1.75	2.02	47,330
August.....	14,083	546	382	454	1.03	1.19	27,930
September.....	13,606	712	346	454	1.03	1.15	26,990
Water year 1935-36.....	756,952	22,600	264	2,068	4.70	63.95	1,501,000

Little Zigzag River at Twin Bridges, near Rhododendron, Oreg.

Location.- Water-stage recorder, lat. 45°19', long. 121°49', probably in sec. 15 of unsurveyed T. 3 S., R. 8 E., 500 feet above upper of Twin Bridges on Mount Hood Loop highway, 5½ miles east of Rhododendron. Zero of gage is 2,903.7 feet above mean sea level.

Drainage area.- 3.7 square miles.

Records available.- March 1926 to September 1936 (discontinued).

Average discharge.- 10 years, 25.3 second-feet.

Extremes.- Maximum discharge during year, 89 second-feet Jan. 2, 4 (gage height, 2.36 feet); minimum, 18 second-feet Dec. 20, 23, 24, 1926-36; Maximum discharge (estimated), 256 second-feet Mar. 31, 1931 (gage height, about 3.5 feet); minimum, 15 second-feet Feb. 1-13, 18-18, 1932.

Remarks.- Records good except those for October and November, which are fair. Discharge for Aug. 7-14 interpolated. No diversions or regulation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1 to Dec. 31)

1.7	16
1.8	20
1.9	26
2.0	32
2.2	51
2.4	74

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	21	20	24	22	25	25	33	28	24	23	25
2	20	21	20	44	22	24	23	36	28	24	23	26
3	20	22	20	30	22	25	25	36	28	25	23	24
4	20	22	20	62	22	24	22	43	27	25	22	23
5	20	22	19	34	22	24	22	40	27	24	22	22
6	20	22	20	26	22	24	22	36	30	24	22	22
7	19	22	21	24	22	24	23	35	34	24	22	22
8	19	22	21	24	22	28	24	35	30	24	22	22
9	19	22	20	24	22	28	24	36	29	24	22	22
10	19	22	21	40	22	25	26	37	28	26	22	22
11	19	22	21	37	22	24	29	38	28	25	22	22
12	22	23	21	33	29	25	31	38	28	24	22	22
13	23	22	20	31	26	24	31	37	28	24	22	22
14	23	22	20	27	24	24	31	39	27	24	22	22
15	23	22	19	25	24	24	36	40	27	24	22	22
16	22	21	19	24	24	24	36	35	27	24	22	22
17	22	20	19	24	23	24	36	33	26	24	22	22
18	22	20	19	24	23	24	36	33	26	24	22	21
19	22	20	19	29	22	24	35	32	26	24	22	21
20	22	20	18	28	23	24	36	34	26	24	22	21
21	22	20	19	25	28	24	36	36	26	24	22	21
22	22	20	19	24	25	24	34	33	26	24	22	21
23	22	20	18	24	24	24	31	26	24	23	21	21
24	22	20	19	24	23	24	38	31	25	23	24	21
25	22	20	20	24	22	24	36	31	25	23	23	21
26	22	20	20	24	22	24	36	31	25	23	23	21
27	22	20	22	24	24	24	34	31	26	23	23	21
28	22	20	20	23	24	24	35	29	25	23	23	21
29	21	20	20	23	24	23	34	29	24	23	23	21
30	21	20	20	23	-	23	32	28	24	23	22	21
31	21	-	20	22	-	23	-	28	-	23	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	655	23	19	21.1	5.70	6.57	1,300
November.....	630	23	20	21.0	5.68	6.34	1,250
December.....	614	22	18	19.8	5.35	6.17	1,220
Calendar year 1935.....	8,589	38	18	23.5	6.35	86.33	17,050
January.....	874	62	22	28.2	7.62	8.78	1,730
February.....	877	29	22	23.3	6.30	6.80	1,340
March.....	753	28	23	24.3	6.57	7.57	1,490
April.....	916	38	22	30.5	8.24	9.19	1,820
May.....	1,085	43	28	34.4	9.30	10.72	2,110
June.....	810	34	24	27.0	7.30	8.14	1,610
July.....	741	26	23	23.9	6.46	7.45	1,470
August.....	693	24	22	22.4	5.05	6.98	1,370
September.....	657	26	21	21.9	5.92	6.60	1,300
Water year 1935-36.....	9,085	62	18	24.8	6.70	91.31	18,010

Salmon River near Government Camp, Oreg.

Location.- Water-stage recorder, lat. 45°16', long. 121°43', in sec. 31, T. 3 S., R. 9 E., near lower end of Red Top Meadows, 4 miles southeast of Government Camp. Zero of gage is 3,446.45 feet above mean sea level (general adjustment of 1929).

Drainage area.- 8.7 square miles.

Records available.- May 1910 to May 1912, April 1926 to September 1936.

Average discharge.- 11 years, 41.2 second-feet.

Extremes.- Maximum discharge during year, 208 second-feet Jan. 4 (gage height, 2.15 feet); minimum, 14 second-feet Dec. 20 (gage height, 0.38 foot).
1910-12, 1926-36: Maximum discharge, 650 second-feet Dec. 22, 1933 (gage height, 3.61 feet); minimum, 12 second-feet Nov. 21, 1929, Oct. 19, 1930.

Remarks.- Records good. Stage affected by ice and discharge based on weather records and discharge below Linney Creek Nov. 2, 3, Jan. 30, Feb. 1, 2. Method of shifting control used Dec. 1 to Sept. 30. No diversions or regulation above station.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	18	20	33	23	36	24	82	78	48	32	33
2	18	16	19	110	23	38	23	88	75	49	32	30
3	19	17	18	65	24	45	23	90	71	49	32	24
4	21	18	18	157	24	39	23	109	68	50	32	24
5	20	18	18	79	24	36	22	96	67	47	32	24
6	20	19	19	56	23	35	24	60	82	45	31	23
7	19	20	27	46	23	33	28	75	92	43	29	23
8	19	25	28	39	23	46	30	76	75	43	28	22
9	18	28	26	38	22	55	30	81	70	43	28	21
10	18	21	30	57	22	41	42	94	67	45	28	21
11	18	21	28	67	23	38	54	97	67	46	28	20
12	30	25	27	50	42	41	62	97	65	42	28	22
13	29	22	22	45	37	36	67	100	69	42	28	26
14	29	21	21	40	28	34	72	108	72	40	28	28
15	23	26	20	37	25	32	82	110	75	39	26	23
16	23	23	18	35	24	31	102	109	68	38	26	21
17	21	21	18	32	23	32	104	92	67	39	26	21
18	21	21	17	30	23	30	109	91	64	38	26	20
19	21	20	16	43	23	30	101	88	59	37	25	20
20	20	20	16	46	22	34	94	89	59	37	24	20
21	22	20	16	38	35	35	95	98	60	38	26	20
22	21	21	16	35	37	31	99	91	63	38	25	22
23	20	23	16	32	29	30	95	86	59	37	24	21
24	20	23	16	31	26	28	105	87	58	36	26	21
25	20	23	28	30	24	28	102	91	55	35	24	20
26	20	25	29	28	23	28	94	95	54	35	23	19
27	20	25	33	28	28	27	95	94	54	35	22	20
28	20	22	26	27	30	26	83	85	53	35	23	20
29	20	21	23	26	30	26	83	85	50	34	25	19
30	18	21	29	24	-	25	83	78	49	33	23	19
31	18	-	28	24	-	25	-	74	-	32	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	644	30	18	20.8	2.39	2.76	1,280
November.....	643	28	16	21.4	2.46	2.74	1,280
December.....	686	33	16	22.1	2.54	2.93	1,360
Calendar year 1935	14,054	94	16	38.5	4.43	60.09	27,370
January.....	1,428	157	24	46.1	5.30	6.11	2,830
February.....	763	42	22	26.3	3.02	3.26	1,510
March.....	1,049	53	25	33.8	3.89	4.48	2,080
April.....	2,040	109	22	68.0	7.82	8.72	4,050
May.....	2,816	110	74	90.8	10.4	11.99	5,560
June.....	1,963	92	49	65.4	7.52	8.59	3,890
July.....	1,248	50	32	40.3	4.63	5.34	2,480
August.....	832	32	22	26.8	3.08	3.55	1,650
September.....	667	33	19	22.2	2.55	2.84	1,320
Water year 1935-36	14,779	157	16	40.4	4.64	63.11	29,390

Salmon River below Linney Creek, Oreg.

Location.- Water-stage recorder, lat. 45°13', long. 121°52', 200 feet below Linney Creek, 9 miles southeast of Welches, and 11 miles downstream from gaging station on Salmon River near Government Camp.

Drainage area.- 54 square miles.

Records available.- October 1927 to September 1936.

Extremes.- Maximum discharge during year, 1,590 second-feet Jan. 4 (gage height, 3.99 feet); minimum recorded, 50 second-feet Nov. 1, 2 (gage height, 0.37 foot). Minimum discharge during period of ice effect, Nov. 2, 3, may have been less than 50 second-feet.

1927-36: Maximum discharge, 4,070 second-feet Mar. 31, 1931 (gage height, 5.81 feet); minimum, 44 second-feet Nov. 21, 1929 (gage height, 0.27 foot).

Remarks.- Records good except those for period of ice effect, Nov. 2-4, which are fair and are based on record at Welches. No diversions or regulation above station.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.3	43	2.0	460
.5	64	2.5	685
.8	108	3.0	960
1.2	190	3.5	1,270
1.6	310	4.0	1,590

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	54	64	202	123	225	157	512	270	138	86	80
2	52	52	63	768	122	251	151	532	270	138	86	95
3	53	52	62	508	131	293	148	540	251	140	84	74
4	57	60	57	1,300	129	290	140	685	239	140	84	72
5	55	64	58	924	125	270	136	660	230	136	83	72
6	54	63	68	558	122	267	140	585	284	131	82	70
7	53	61	84	417	111	248	162	540	350	127	78	68
8	52	68	105	335	110	310	183	516	273	122	77	67
9	52	106	90	317	116	402	188	500	248	123	77	67
10	51	73	111	434	111	352	246	516	233	125	77	67
11	52	76	108	576	111	303	339	528	228	129	77	65
12	77	95	120	508	168	321	428	512	219	120	77	68
13	92	84	97	480	193	300	500	504	222	116	76	78
14	83	73	88	398	144	276	549	528	295	113	76	95
15	72	90	82	355	123	257	620	528	222	110	76	77
16	68	90	77	290	122	242	768	520	219	108	74	69
17	63	77	74	251	122	242	822	448	211	106	74	67
18	58	69	69	225	138	225	878	417	211	103	73	64
19	57	65	61	276	131	222	822	406	188	102	72	63
20	58	64	60	296	123	233	768	406	180	102	69	63
21	70	64	62	254	164	245	740	421	176	100	70	63
22	72	68	65	230	225	225	740	387	173	97	72	63
23	64	77	70	216	185	213	685	350	171	95	70	64
24	62	77	72	203	164	200	740	355	164	94	76	62
25	62	72	89	190	155	188	740	324	159	92	72	62
26	62	78	116	178	146	188	660	324	155	90	69	61
27	61	82	144	188	166	211	605	324	157	90	68	60
28	63	74	131	162	193	195	567	300	157	89	67	61
29	63	69	118	146	190	183	567	293	146	88	69	60
30	58	67	151	140	-	171	528	290	140	86	70	60
31	58	-	190	140	-	164	-	267	-	86	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	1,906	92	51	61.5	1.14	1.31	3,780
November.....	2,164	106	52	72.1	1.34	1.50	4,290
December.....	2,806	190	57	90.5	1.68	1.94	5,570
Calendar year 1935.....	64,009	660	51	175	3.24	44.13	127,000
January.....	11,425	1,300	140	369	6.83	7.87	22,680
February.....	4,165	225	110	144	2.67	2.88	8,260
March.....	7,692	402	164	248	4.59	5.29	15,280
April.....	14,720	878	136	491	9.09	10.14	29,400
May.....	13,998	685	267	452	8.37	9.65	27,760
June.....	6,351	350	140	212	3.93	4.38	12,600
July.....	3,458	140	86	111	2.06	2.38	6,620
August.....	2,329	86	67	75.1	1.39	1.60	4,620
September.....	2,057	95	60	66.6	1.27	1.42	4,080
Water year 1935-36.....	73,051	1,300	51	200	3.70	50.36	144,900

Salmon River at Welches, Oreg.

Location.- Staff gage, lat. 45°19', long. 121°57', in S½ sec. 9, T. 3 S., R. 7 E., just below Sheeny Creek and three-quarters of a mile southeast of Welches.

Drainage area.- 100 square miles.

Records available.- August 1913 to September 1914, July 1920 to September 1921, April 1925 to September 1936 (discontinued).

Average discharge.- 13 years, 438 second-feet.

Extremes.- Maximum discharge observed during year, 4,950 second-feet Jan. 4 (gage height, 8.20 feet); minimum, 71 second-feet Sept. 28-30.
1913-14, 1920-21, 1925-36: Maximum discharge (estimated), 13,900 second-feet Mar. 31, 1931 (gage height, 9.80 feet at former gage 500 feet downstream); minimum, 65 second-feet Dec. 3-6, 1929, Aug. 31 to Sept. 3, 1931.

Remarks.- Records fair. Discharge for Dec. 15, 16, Jan. 18, 26-28, July 11 estimated by comparison with discharge of Salmon River below Linney Creek. No diversion or regulation above station.

Rating tables. water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 4			Jan. 5 to Sept. 30		
0.6	74	3.0	1,210	0.7	71
.9	150	3.5	1,590	.9	133
1.2	250	4.0	2,070	1.2	244
1.6	415	5.0	3,280	1.6	415
2.0	600	6.2	4,950	2.0	600
2.5	880			4.0	2,070
				6.2	4,950

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	78	100	600	264	780	349	760	460	284	107	101
2	74	74	95	3,000	224	320	349	380	482	205	107	186
3	74	74	95	1,280	205	945	306	880	505	224	107	117
4	84	78	87	4,800	306	320	306	1,140	482	224	107	101
5	84	78	84	2,070	244	678	285	1,210	438	224	107	101
6	84	78	108	1,210	306	650	285	1,140	415	205	107	86
7	84	78	108	945	244	800	370	945	705	133	107	86
8	84	84	290	320	224	600	482	945	900	186	107	86
9	78	215	270	760	244	1,070	482	880	550	186	107	86
10	78	165	290	1,350	224	620	650	820	505	205	107	56
11	78	165	250	2,070	224	678	945	880	460	260	107	86
12	100	310	415	1,350	505	760	1,140	820	415	205	107	86
13	150	232	310	1,350	528	705	1,140	820	438	186	101	117
14	150	165	290	1,070	505	678	1,070	820	392	175	101	186
15	135	150	230	945	482	705	1,070	820	392	168	101	120
16	115	232	180	705	415	600	1,210	880	392	168	101	101
17	100	198	150	625	285	575	1,970	820	370	161	101	95
18	91	160	135	550	285	528	1,280	678	415	150	101	86
19	78	135	120	820	285	462	1,140	850	370	140	101	86
20	78	120	115	945	264	506	1,070	650	327	140	95	86
21	120	108	108	760	528	528	1,070	705	306	140	95	86
22	180	108	108	650	760	482	1,070	705	285	133	95	86
23	95	135	108	800	650	460	1,070	650	285	133	86	86
24	87	160	108	580	505	415	1,070	575	264	133	101	77
25	84	120	120	482	458	370	1,070	550	244	133	101	77
26	84	135	232	400	460	370	945	528	264	127	95	77
27	84	135	330	350	528	678	945	550	285	127	95	77
28	84	120	438	320	705	625	820	505	264	127	86	71
29	84	115	350	306	650	560	820	482	244	117	86	71
30	78	108	350	285	-	415	820	528	224	117	86	71
31	78	-	820	285	-	392	-	482	-	117	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,931	180	74	94.5	0.945	1.09	5,810
November.....	4,093	310	74	136	1.36	1.52	8,120
December.....	6,794	620	84	219	2.19	2.52	13,480
Calendar year 1935.....	123,392	1,680	72	338	3.38	45.89	244,700
January.....	32,253	4,800	285	1,040	10.4	11.99	63,970
February.....	11,487	780	205	396	3.96	4.27	22,780
March.....	19,264	1,070	370	621	6.21	7.16	38,210
April.....	25,597	1,970	285	883	8.83	9.52	50,770
May.....	23,638	1,210	482	763	7.63	8.80	46,890
June.....	11,778	705	224	393	3.93	4.38	23,360
July.....	5,238	260	117	189	1.89	1.95	10,390
August.....	3,089	107	77	99.6	.996	1.15	6,130
September.....	2,864	186	71	95.5	.955	1.07	5,680
Water year 1935-36.....	149,026	4,800	71	407	4.07	55.42	295,600

SANDY RIVER BASIN

Bull Run Reservoir near Bull Run, Oreg.

Location.- Water-stage recorder, lat. $45^{\circ}29'$, long. $122^{\circ}5'$, in SW $\frac{1}{4}$ sec. 16, T. 1 S., R. 6 E., at Bear Creek Dam, of City of Portland, $8\frac{1}{2}$ miles northeast of Bull Run. Gage readings are elevations above mean sea level.

Records available.- October 1928 to September 1936.

Extremes.- Maximum contents during water year 1934-35, 30,610 acre-feet (revised) Dec. 20 (gage height, 1,045.09 feet). Maximum contents during water year 1935-36, 29,710 acre-feet Jan. 4 (gage height, 1,042.98 feet); minimum, 22,300 acre-feet Oct. 12 (gage height, 1,023.29 feet).
1928-36: Maximum contents, 31,600 acre-feet Mar. 31, 1931 (gage height, 1,047.40 feet); minimum, 20,530 acre-feet Oct. 4, 1931.

Remarks.- Records good. Bear Creek Dam, on Bull Run River, completed in March 1929, stores water in Bull Run Reservoir for water supply of City of Portland. Capacity of reservoir at crest of spillway, gage height 1,036 feet, is 26,930 acre-feet and at center-line of outlet valves, gage-height 890 feet, is 213 acre-feet, which is dead storage. Water-stage recorder graph furnished by Portland Water Bureau.

Stage and contents, water year October 1935 to September 1936

Date	Gage height (feet)	Contents (acre-feet)	Change in content, during month (acre-feet)
Sept. 30	1,026.12	23,290	-
Oct. 31	1,026.38	23,030	-260
Nov. 30	1,036.70	27,800	+4,170
Dec. 31	1,036.74	28,000	+800
Jan. 31	1,036.85	27,280	-740
Feb. 29	1,038.04	27,730	+470
Mar. 31	1,037.12	27,370	-360
Apr. 30	1,037.27	27,430	+60
May 31	1,036.95	27,300	-130
June 30	1,036.61	27,170	-130
July 31	1,036.05	26,950	-220
Aug. 31	1,031.20	25,120	-1,830
Sept. 30	1,028.14	24,010	-1,110
The year			+720

Bull Run River below Bull Run Reservoir, Oreg.

Location.- Water-stage recorder, lat. 45°29', long. 122°5', in SW¼ sec. 16, T. 1 S., R. 8 E., at Bull Run Reservoir, 8½ miles northeast of Bull Run.

Drainage area.- 77 square miles.

Records available.- October 1929 to September 1936.

Extremes.- Maximum discharge during year, 7,390 second-feet Jan. 4 (gage height, 8.98 feet); minimum, 8 second-feet part of Nov. 12-15.
1929-36: Maximum discharge, 15,700 second-feet Mar. 31, 1931 (gage height, 10.85 feet); minimum (estimated), 5 second-feet Oct. 10, 11, 1930.

Remarks.- Records good. Daily discharge determined by combining discharge through valves near base of dam and flow over crest of dam. No diversions above station. Flow regulated by storage in Bull Run Lake and Bull Run Reservoir. Records of reservoir stage and valve openings furnished by Portland Water Bureau.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	99	100	187	1,900	245	1,190	371	516	310	187	93	102
2	102	100	160	5,120	235	1,190	335	536	304	140	91	102
3	99	100	140	2,590	225	1,190	310	648	304	144	89	105
4	99	100	128	6,290	225	993	299	1,080	307	152	98	102
5	99	100	127	3,160	220	755	255	1,600	310	215	104	102
6	99	100	148	1,700	291	690	260	1,550	310	178	107	102
7	99	90	356	1,420	266	600	282	1,100	768	156	104	102
8	99	73	746	1,140	235	961	377	848	874	144	104	102
9	102	73	588	1,240	220	1,750	404	711	824	140	104	102
10	100	73	746	2,790	205	1,080	614	655	662	147	104	105
11	100	74	763	3,790	205	800	1,030	627	542	235	104	102
12	100	39	1,240	2,920	784	874	1,320	562	458	199	104	102
13	100	8	682	2,810	1,190	851	1,420	522	383	178	107	102
14	100	8	641	1,850	732	776	1,280	516	548	164	103	102
15	100	87	484	1,500	542	848	1,240	689	321	156	103	102
16	103	348	377	1,140	430	697	1,320	925	383	147	103	102
17	100	371	304	908	365	614	1,280	753	444	140	103	105
18	100	326	255	732	310	536	1,140	614	428	138	103	102
19	100	260	218	1,360	282	487	934	542	377	113	103	102
20	100	225	182	2,050	275	458	848	792	338	116	106	102
21	100	187	187	1,420	694	464	832	1,240	304	116	103	102
22	100	172	187	1,020	1,060	444	832	1,070	277	113	103	102
23	100	182	827	908	413	742	808	255	113	103	103	108
24	100	451	178	711	676	377	816	648	235	110	103	102
25	100	371	225	594	555	343	916	548	213	106	103	102
26	100	321	307	503	648	404	800	484	196	135	103	102
27	100	304	432	458	902	1,190	697	438	187	124	106	102
28	100	263	562	395	1,420	1,100	620	392	178	103	103	102
29	100	230	516	343	1,140	676	574	360	178	103	103	101
30	100	205	799	324	-	510	539	360	164	100	102	101
31	100	-	1,800	282	-	438	-	338	-	95	102	-

Month	Observed			Change in contents of Bull Run Reservoir in acre-feet	Corrected for storage				
	Discharge in second-feet				Run-off in acre-feet	Discharge in second-feet		Run-off in inches	
	Maximum	Minimum	Mean			Mean	Per square mile		
October.....	103	99	100	6,150	-260	5,890	95.8	1.24	1.43
November.....	451	8	180	10,690	+4,170	14,860	250	3.25	3.88
December.....	1,800	127	453	27,860	+800	28,660	466	6.05	6.98
Calendar year 1935	2,540	8	382	276,290	+590	276,880	352	4.96	67.42
January.....	6,290	282	1,719	105,700	-740	104,960	1,707	22.2	25.59
February.....	1,420	205	534	30,710	+470	31,180	542	7.04	7.59
March.....	1,750	343	766	47,090	-360	46,730	760	9.87	11.38
April.....	1,420	255	756	45,000	+60	45,060	757	9.83	10.77
May.....	1,600	338	725	44,570	-130	44,440	723	9.39	10.83
June.....	874	164	373	22,180	-130	22,050	371	4.82	5.38
July.....	235	95	142	8,750	-220	8,530	139	1.81	2.06
August.....	107	89	102	6,290	-1,530	4,760	72.5	0.92	1.09
September.....	108	101	102	6,100	-1,110	4,990	83.9	1.04	1.22
Water year 1935-36	6,290	8	497	361,090	+720	361,810	498	6.47	88.18

Bull Run River near Bull Run, Oreg.

Location.- Water-stage recorder, lat. 45°27', long. 122°7', in SE½ sec. 25, T. 1 S., R. 5 E., 1½ miles above intake of Portland water-supply pipe line and 5 miles east of Bull Run.

Drainage area.- 102 square miles.

Records available.- January 1895 to September 1936.

Average discharge.- 29 years (1907-36), 747 second-feet.

Extremes.- Maximum discharge during year, 8,790 second-feet Jan. 4 (gage height, 8.41 feet); minimum, 108 second-feet Oct. 9, 10 (gage height, 0.74 foot).
1895-1936: Maximum discharge, 20,600 second-feet Mar. 31, 1931 (gage height, 13.8 feet); minimum, 63 second-feet Aug. 13-16, 1926.

Remarks.- Records good. No diversions above station. Flow regulated by storage in Bull Run Lake and Bull Run Reservoir. Water-stage recorder graph furnished by Portland Water Bureau.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.7	99	3.0	1,140
1.0	173	3.5	1,520
1.3	267	4.0	1,970
1.7	420	5.0	3,070
2.0	550	6.0	4,410
2.5	815	7.0	6,110
		8.0	7,990

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	126	271	2,260	345	1,480	532	575	408	208	117	126
2	114	126	250	5,960	307	1,400	474	625	190	114	154	
3	110	124	230	3,190	303	1,440	432	750	408	208	114	131
4	112	136	208	7,420	318	1,180	392	1,240	412	271	121	124
5	112	146	196	4,200	310	958	364	1,920	384	278	128	121
6	110	146	243	2,270	420	845	348	1,970	396	224	134	121
7	110	136	496	1,920	392	732	380	1,560	968	205	128	119
8	110	124	1,000	1,560	315	1,170	478	1,070	1,100	196	128	119
9	114	190	798	1,610	307	2,100	500	905	1,040	193	128	117
10	112	167	1,040	3,400	285	1,320	760	815	846	221	126	124
11	110	185	1,060	4,950	289	1,000	1,240	760	705	348	124	117
12	134	243	1,740	3,700	1,070	1,180	1,600	705	585	281	124	119
13	141	146	1,240	3,670	1,550	1,140	1,640	650	518	243	128	149
14	151	121	935	2,440	968	1,070	1,520	705	460	227	121	170
15	138	192	705	1,970	705	1,180	1,480	905	448	214	121	149
16	144	532	580	1,480	585	935	1,600	1,210	523	205	121	141
17	131	523	492	1,210	496	845	1,520	968	595	190	119	141
18	126	428	416	1,000	435	705	1,400	788	565	196	119	131
19	126	352	368	1,650	408	625	1,180	732	478	165	119	128
20	134	303	334	2,710	396	600	1,070	1,100	432	165	126	128
21	154	274	285	1,820	945	625	1,070	1,560	396	162	119	126
22	146	250	267	1,320	1,400	570	1,040	1,360	360	151	119	126
23	138	344	247	1,070	1,210	532	935	1,040	325	146	119	126
24	154	600	250	905	905	482	1,040	845	307	144	126	121
25	128	496	333	788	760	440	1,100	732	585	138	119	119
26	124	440	456	678	905	565	935	625	260	162	119	121
27	124	420	585	580	1,170	1,600	815	565	250	154	124	119
28	138	372	705	532	1,780	1,480	705	510	267	136	117	119
29	156	353	705	456	1,400	968	650	487	263	128	114	119
30	128	296	1,040	416	-	732	625	469	221	128	114	117
31	124	-	2,220	398	-	600	-	416	-	117	114	-

Month	Observed				Change in contents of Bull Run Reservoir in acre-feet	Corrected for storage			
	Discharge in second-feet			Run-off in acre-feet		Run-off in acre-feet	Discharge in second-feet		Run-off in inches
	Maximum	Minimum	Mean				Mean	Per square mile	
October.....	154	110	127	7,790	-260	7,530	122	1.20	1.38
November.....	600	121	275	16,390	+4,170	20,560	346	3.39	3.78
December.....	2,220	196	634	38,970	+600	39,770	647	6.34	7.31
Calendar year 1935	3,190	110	512	370,590	+690	371,180	513	5.03	68.24
January.....	7,420	388	2,181	134,100	-740	133,360	2,169	21.3	24.56
February.....	1,780	285	713	41,030	+470	41,500	721	7.07	7.62
March.....	2,100	440	984	60,510	-360	60,150	978	9.59	11.06
April.....	1,640	348	928	55,190	+60	55,250	929	9.11	10.16
May.....	1,920	416	912	56,080	-130	56,050	910	8.92	10.28
June.....	1,100	221	486	28,900	-130	28,770	483	4.74	5.29
July.....	548	117	193	11,890	-220	11,670	190	1.86	2.14
August.....	134	114	121	7,470	-1,830	5,640	91.7	0.899	1.04
September.....	170	117	126	7,620	-1,110	6,510	109	1.07	1.19
Water year 1935-36	7,420	110	642	465,940	+720	466,660	643	6.30	85.81

Little Sandy River near Bull Run, Oreg.

Location.— Water-stage recorder, lat. 45°25', long. 122°10', in NE¼ sec. 10, T. 2 S., R. 5 E., three-eighths of a mile above Portland General Electric Co.'s dam and tunnel from Sandy River and 3 miles east of Bull Run. Zero of gage is 710.51 feet above mean sea level (surveys of Portland General Electric Co. referred to adjustment of 1924).

Drainage area.— 23 square miles.

Records available.— May 1911 to April 1913, fragmentary; July 1919 to September 1936.

Average discharge.— 17 years (1919-36), 140 second-feet.

Extremes.— Maximum discharge during year, 1,920 second-feet Jan. 2 (gage height, 6.39 feet); minimum, 12 second-feet Oct. 1-3, 1911-13, 1919-36: Maximum discharge, 3,950 second-feet Nov. 20, 1921 (gage height, 9.18 feet); minimum, 10 second-feet Sept. 17, 1924, Sept. 2-5, 1931, Sept. 30, Oct. 1-11, 1932.

Remarks.— Records fair. No diversions or regulation above station. Water-stage recorder graph furnished by Portland General Electric Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.8	8	3.5	222
2.0	17	4.0	380
2.2	30	4.5	580
2.4	45	5.0	840
2.7	73	5.5	1,160
3.0	115	6.0	1,570

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	25	48	386	70	295	110	137	84	42	21	25
2	12	36	46	1,160	65	271	101	162	88	41	21	59
3	12	51	43	602	66	277	95	214	86	45	21	30
4	17	52	40	1,350	68	222	85	373	88	55	20	22
5	18	32	38	715	66	180	79	451	79	53	20	20
6	15	22	49	427	79	156	77	390	85	43	19	18
7	14	22	103	358	69	135	83	286	210	40	19	17
8	14	30	150	277	62	255	104	230	228	39	19	16
9	14	145	117	295	58	355	99	197	222	39	18	16
10	13	68	171	661	56	225	167	185	171	50	18	15
11	13	91	166	798	59	180	282	167	135	92	18	14
12	28	180	280	553	242	217	338	141	110	55	17	18
13	46	119	192	558	295	204	345	184	95	49	17	35
14	51	89	144	447	190	197	310	152	91	45	17	72
15	43	93	110	352	141	217	317	204	92	43	17	47
16	39	104	86	280	119	185	338	207	115	40	16	34
17	31	86	73	230	99	167	324	160	128	38	16	27
18	28	69	63	203	92	141	289	135	133	37	16	23
19	24	58	57	516	94	126	244	128	101	36	16	21
20	29	52	51	540	83	124	217	244	66	35	16	21
21	47	46	47	345	271	129	228	338	77	34	16	19
22	53	51	44	247	280	112	214	282	70	33	14	19
23	39	71	43	207	235	105	192	197	62	31	16	18
24	35	110	43	178	167	93	256	156	58	31	22	18
25	33	77	79	156	165	85	250	126	54	30	19	17
26	30	74	112	137	192	99	202	107	51	29	16	17
27	27	77	137	115	233	207	175	99	49	24	16	17
28	36	64	128	104	286	226	156	88	53	24	15	15
29	33	56	142	91	247	175	148	88	47	23	14	15
30	31	53	169	83	-	142	152	91	44	22	14	14
31	27	-	359	78	-	126	-	80	-	22	14	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				867	53	12	28.0	1.22	1.41	1,720		
November.....				2,107	180	22	70.2	3.05	3.40	4,180		
December.....				3,332	359	38	107	4.65	5.36	6,610		
Calendar year 1935.....				35,424	471	12	97.1	4.22	57.27	70,260		
January.....				12,416	1,330	78	401	17.4	20.06	24,630		
February.....				4,157	295	58	143	6.22	6.71	8,250		
March.....				5,628	356	85	182	7.91	9.12	11,160		
April.....				5,957	345	77	199	8.65	9.65	11,820		
May.....				5,917	451	80	191	8.30	9.57	11,740		
June.....				2,992	228	44	99.7	4.33	4.83	5,930		
July.....				1,280	92	22	39.4	1.71	1.97	2,420		
August.....				558	22	14	17.4	.757	.87	1,070		
September.....				719	72	14	24.0	1.04	1.16	1,430		
Water year 1935-36.....				45,850	1,330	12	125	5.43	74.11	90,960		

Middle Fork of Willamette River above Salt Creek,
near Oakridge, Oreg.

Location.- Water-stage recorder, lat. 43°44', long. 122°26', in SE¼ sec. 22, T. 21 S., R. 3 E., 400 feet above mouth of Salt Creek and 2 miles southwest of Oakridge. Zero of gage is 1,202.8 feet above mean sea level (plane-table survey by the U. S. Geological Survey).

Drainage area.- 392 square miles.

Records available.- October 1913 to September 1914, September 1935 to September 1936.

Extremes.- Maximum discharge during year, 9,560 second-feet Jan. 11 (gage height, 6.34 feet); minimum, 229 second-feet Oct. 1 (gage height, 1.62 feet).
Maximum stage known, determined in 1935 from floodmarks, 10.6 feet (date unknown).

Remarks.- Records good. No diversions above gage. Water-stage recorder inspected by employee of U. S. Forest Service.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

1.6	222	3.6	1,730
1.8	294	4.0	2,310
2.0	380	4.4	3,050
2.2	480	4.8	3,990
2.4	655	5.2	5,210
2.6	880	5.6	6,620
3.2	1,270	6.0	8,140

Discharge, in second-feet, September 1935 to September 1936

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	229	267	302	1,100	848	2,080	800	1,360	956	508	310	279
2	-	236	256	294	6,080	800	2,150	748	1,320	922	498	310	325
3	-	255	246	290	2,050	748	2,150	755	1,350	906	486	310	290
4	-	271	249	283	7,430	718	1,930	965	1,610	872	480	306	279
5	-	256	253	283	5,380	669	1,730	914	2,000	848	470	306	271
6	-	249	260	323	2,570	669	1,550	864	2,150	984	455	302	267
7	-	246	294	405	1,800	704	1,440	1,080	1,930	1,350	450	298	260
8	-	242	323	610	1,610	862	1,340	1,340	1,800	1,440	445	294	256
9	-	232	425	480	2,680	656	1,490	1,290	1,750	1,300	445	290	253
10	236	232	362	711	8,050	610	1,370	1,490	1,930	1,180	440	290	253
11	236	246	319	940	7,370	642	1,250	1,930	2,080	1,100	445	290	253
12	236	294	582	1,600	4,570	824	1,200	2,480	2,080	1,080	430	286	256
13	236	371	590	1,120	6,620	1,230	1,140	2,760	2,000	1,180	415	286	283
14	-	313	435	785	6,080	1,190	1,070	2,570	2,150	1,100	400	285	314
15	-	400	480	822	4,570	1,040	1,000	2,570	1,930	1,320	395	285	290
16	256	348	648	540	3,730	948	940	2,660	1,670	1,200	385	275	271
17	256	294	502	491	2,660	897	888	2,460	1,490	1,100	380	271	260
18	249	275	410	455	1,860	914	808	2,310	1,380	984	376	271	256
19	249	264	366	415	1,800	931	824	2,000	1,370	888	366	267	249
20	249	260	340	385	1,670	1,170	864	1,860	1,320	824	358	267	249
21	-	283	335	371	1,490	3,480	984	1,930	1,310	785	353	267	249
22	-	302	376	353	1,380	4,130	965	2,000	1,240	762	353	267	246
23	246	271	491	340	1,440	2,950	922	2,000	1,190	748	344	267	246
24	242	264	450	335	1,440	2,150	897	2,400	1,230	711	340	267	246
25	239	260	400	362	1,380	1,730	832	2,230	1,300	662	335	264	246
26	236	253	366	376	1,280	1,610	792	1,800	1,440	622	331	264	239
27	236	249	340	465	1,240	1,610	922	1,810	1,490	596	327	264	239
28	-	256	327	496	1,190	2,080	1,380	1,610	1,380	562	327	264	236
29	-	271	319	629	1,090	2,080	1,130	1,490	1,180	540	323	264	236
30	229	264	310	965	994	-	956	1,440	1,130	524	319	264	236
31	-	267	-	1,220	906	-	880	-	1,030	-	314	264	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-foot
October.....	8,651	513	229	279	0.712	0.52	17,160
November.....	11,321	648	246	377	0.962	1.07	22,450
December.....	17,446	1,800	283	563	1.44	1.66	34,600
Calendar year							
January.....	89,490	7,430	906	2,887	7.36	8.48	177,500
February.....	36,870	4,130	610	1,333	3.40	3.67	76,700
March.....	37,874	2,150	792	1,222	3.12	3.60	75,120
April.....	52,406	2,760	748	1,747	4.46	4.98	103,900
May.....	48,600	2,150	1,030	1,568	4.00	4.61	96,400
June.....	28,046	1,440	524	935	2.39	2.67	55,630
July.....	12,291	508	314	396	1.01	1.16	24,380
August.....	8,711	310	264	281	.717	.83	17,280
September.....	7,831	323	236	261	.666	.74	15,530
Water year 1935-36	361,337	7,430	229	987	2.52	34.29	716,600

Middle Fork of Willamette River at Eula, Oreg.

Location.- Water-stage recorder, lat. 43°50', long. 122°37', in sec. 18, T. 20 S., R. 2 E., a quarter of a mile southwest of Eula and 8 miles below mouth of North Fork. Zero of gage is 860.89 feet above mean sea level (general adjustment of 1929).

Drainage area.- 941 square miles (revised from topographic maps).

Records available.- July 1923 to September 1936.

Average discharge.- 12 years (1923-26, 1927-36), 2,337 second-feet.

Extremes.- Maximum discharge during year, 18,700 second-feet Jan. 11 (gage height, 10.3 feet); minimum, 545 second-feet Oct. 1, 2 (gage height, 1.12 feet).
1923-36: Maximum discharge, 55,100 second-feet Feb. 21, 1927 (gage height, 17.0 feet); minimum, 450 second-feet Nov. 24, 25, Dec. 5, 6, 1929, Sept. 4-6, 16, 17, 1931.

Remarks.- Records good. No diversions above station. Considerable diurnal fluctuation during low water, owing to logging operations upstream. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 4				Jan. 5 to Sept. 30			
1.0	490	6.0	6,320	1.0	540	4.0	3,240
1.5	755	7.0	8,160	1.5	820	6.0	6,440
2.0	1,100	8.0	10,400	2.0	1,170	7.0	8,310
3.0	1,980	9.0	13,400	3.0	2,060	8.0	10,400
4.0	3,120	10.0	17,300				
5.0	4,610						

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	545	678	766	2,130	2,280	5,250	2,270	3,660	2,610	1,370	826	706
2	550	646	725	10,900	2,060	5,570	2,110	3,590	2,490	1,290	820	844
3	575	612	725	7,400	1,910	5,740	2,160	3,740	2,440	1,290	814	766
4	629	612	707	14,300	1,910	5,230	2,550	4,260	2,320	1,250	814	736
5	607	624	695	12,100	1,820	4,740	2,440	5,400	2,270	1,250	808	712
6	590	640	768	7,360	1,860	4,260	2,270	6,080	2,440	1,210	796	700
7	575	707	825	5,400	2,110	3,980	5,230	5,230	3,110	1,170	790	589
8	565	762	1,380	4,580	1,910	3,590	3,310	4,740	3,450	1,130	778	678
9	560	1,100	1,180	6,080	1,820	4,420	3,310	4,580	3,180	1,170	772	678
10	560	995	1,510	7,160	1,720	4,110	3,660	5,060	2,850	1,170	766	672
11	585	827	1,860	14,500	1,770	3,660	4,900	5,400	2,670	1,210	760	667
12	701	1,320	3,980	9,960	2,060	3,450	6,440	5,400	2,550	1,130	760	672
13	948	1,510	2,620	12,800	3,110	3,310	6,980	5,400	2,670	1,090	754	724
14	1,100	1,100	1,930	11,200	3,040	3,110	6,620	5,570	2,490	1,060	748	908
15	925	1,100	1,600	9,960	2,730	2,980	6,620	5,230	2,980	1,020	742	844
16	814	1,600	1,380	8,710	2,490	2,790	6,980	4,740	2,790	1,020	736	748
17	719	1,260	1,260	6,980	2,380	2,610	6,620	4,110	2,670	985	730	706
18	668	1,060	1,180	5,570	2,380	2,440	6,260	3,810	2,490	985	718	689
19	640	995	1,060	5,060	2,380	2,320	5,570	3,810	2,270	950	718	678
20	634	869	995	4,740	2,920	2,380	5,230	3,740	2,160	950	712	672
21	695	841	960	4,260	6,410	2,610	5,230	3,810	2,010	936	706	650
22	794	890	925	3,740	8,510	2,610	5,400	3,590	1,910	922	706	640
23	695	1,140	890	3,740	7,160	2,490	5,400	3,450	1,860	908	706	640
24	656	1,100	876	3,740	5,740	2,440	6,440	3,380	1,820	894	700	640
25	640	995	925	3,590	4,740	2,270	6,440	3,590	1,720	887	700	640
26	634	925	960	3,310	4,260	2,160	5,400	3,810	1,640	880	694	634
27	624	869	1,100	3,110	4,260	2,610	4,580	4,110	1,540	874	694	618
28	634	827	1,300	2,980	5,400	4,110	4,420	3,810	1,500	868	684	606
29	701	807	1,380	2,730	5,400	3,310	4,110	3,310	1,460	856	678	601
30	684	781	1,690	2,490	-	2,790	3,880	3,040	1,410	844	689	601
31	678	-	2,180	2,380	-	2,490	-	2,950	-	838	684	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	20,825	1,100	545	672	0.714	0.82	41,310
November.....	28,192	1,600	612	940	.999	1.11	55,920
December.....	40,434	3,890	695	1,304	1.39	1.60	80,200
Calendar year 1935	772,304	7,400	545	2,116	2.25	30.26	1,532,000
January.....	202,960	14,500	2,130	6,547	6.96	8.02	402,600
February.....	96,480	9,510	1,720	3,327	3.54	3.82	191,400
March.....	105,710	5,740	2,160	3,410	3.62	4.17	209,700
April.....	140,270	6,980	2,110	4,676	4.97	5.54	278,200
May.....	132,500	6,080	2,850	4,268	4.54	5.23	262,400
June.....	69,770	3,450	1,410	2,326	2.47	2.76	138,400
July.....	32,407	1,370	838	1,045	1.11	1.28	64,280
August.....	23,003	826	678	742	.789	.91	45,630
September.....	20,759	908	601	692	.735	.82	41,170
Water year 1935-36	913,110	14,500	545	2,495	2.65	36.08	1,811,000

WILLAMETTE RIVER BASIN

Willamette River at Springfield, Oreg.

Location.- Water-stage recorder, lat. 44°2'45", long. 123°1'40", in SE $\frac{1}{4}$ sec. 34, T. 17 S., R. 3 W., at highway bridge at Springfield. Zero of gage is 424.16 feet above mean sea level (general adjustment of 1929).

Drainage area.- 2,030 square miles.

Records available.- November 1911 to September 1913, October 1923 to September 1936; June 1919 to September 1928 at Eugene, 4 miles downstream. Gage-height record at Eugene by U. S. Weather Bureau, 1894 to 1936.

Average discharge.- 18 years (1912-13, 1919-36), 4,952 second-feet.

Extremes.- Maximum discharge during year, 48,900 second-feet Jan. 5, 13 (gage height, 14.9 feet); minimum, 630 second-feet Oct. 11 (gage height, 1.45 feet).
1911-13, 1919-36: Maximum discharge, 73,300 second-feet Feb. 21, 1927 (gage height at Eugene, 17.0 feet); minimum, 500 second-feet Aug. 11, 1923.
Maximum stage recorded by U. S. Weather Bureau, 22.0 feet at Eugene Jan. 25, 1903. The stages of floods in December 1861 and February 1890 were about the same.

Remarks.- Records good. Daily discharge for period July 22 to Aug. 2 based on records of Middle Fork of Willamette River at Eyla and Middle Fork of Willamette River near Oakridge. Slight diurnal fluctuation during low water, owing to logging operations in Basin of Middle Fork of Willamette River. No diversions above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.4	590	2.6	1,820	4.2	4,650	7.0	13,100	14.0	44,400
1.7	840	3.0	2,390	4.6	5,600	8.0	17,000		
2.0	1,130	3.4	3,030	5.0	6,610	10.0	25,500		
2.3	1,460	3.8	3,770	6.0	9,480	12.0	34,700		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	1,030	1,340	5,240	3,980	12,700	5,480	5,480	3,570	1,690	980	795
2	670	980	1,260	17,000	3,970	11,900	4,760	5,120	3,480	1,630	970	990
3	654	921	1,220	20,400	3,480	10,800	4,760	5,120	3,290	1,630	970	1,040
4	670	849	1,180	22,300	3,580	9,480	6,610	6,610	3,120	1,670	960	940
5	718	840	1,140	42,000	3,580	8,260	6,610	9,170	3,030	1,670	960	885
6	718	840	1,180	21,600	3,490	7,410	5,850	12,700	3,120	1,610	960	849
7	694	912	1,570	14,600	5,720	6,610	6,350	10,800	3,880	1,450	950	822
8	670	1,120	2,540	11,900	5,000	5,980	7,690	8,860	5,120	1,430	940	795
9	654	1,510	2,700	13,100	4,200	6,610	7,410	7,690	5,000	1,440	921	786
10	638	2,170	2,540	17,400	3,680	6,480	7,410	7,410	4,310	1,450	912	777
11	638	1,630	3,480	38,500	3,680	5,850	8,660	7,410	3,880	1,510	903	768
12	742	2,020	12,100	32,800	4,880	5,480	10,100	7,140	3,570	1,510	894	768
13	1,190	5,000	9,800	42,400	6,870	5,360	10,500	6,870	3,480	1,400	894	822
14	1,960	3,120	6,100	34,700	6,870	5,240	9,800	7,690	3,290	1,320	885	1,080
15	1,960	2,390	4,540	30,000	5,850	5,240	9,170	7,690	4,200	1,270	876	1,250
16	1,380	3,570	3,570	26,000	5,240	4,980	9,170	6,610	4,420	1,230	858	1,070
17	1,170	3,670	3,030	22,800	4,760	4,540	8,860	6,100	4,310	1,200	831	912
18	1,000	2,700	2,700	15,800	4,760	4,200	7,970	5,480	4,200	1,170	822	849
19	894	2,170	2,320	13,100	4,760	3,980	7,410	5,240	3,770	1,140	813	813
20	840	1,890	2,100	12,300	6,350	3,770	6,610	5,600	3,290	1,090	813	795
21	858	1,760	1,960	10,500	13,400	3,980	6,480	6,870	3,030	1,070	813	768
22	1,120	1,960	1,820	8,860	25,000	3,880	6,610	6,480	2,780	1,070	804	734
23	1,170	2,540	1,690	8,260	20,300	3,980	6,610	5,850	2,700	1,060	804	726
24	970	2,540	1,630	7,970	15,400	3,980	7,410	5,360	2,540	1,060	804	710
25	885	2,240	1,690	7,140	12,300	3,980	8,260	5,240	2,390	1,050	786	710
26	849	1,960	1,760	6,610	12,300	3,770	6,870	5,120	2,240	1,050	777	702
27	813	1,760	2,100	5,980	11,800	5,240	6,100	5,360	2,170	1,040	768	694
28	804	1,570	2,940	5,600	14,600	12,300	5,980	5,240	2,030	1,030	768	694
29	912	1,450	3,200	5,120	13,800	9,800	5,850	4,760	1,890	1,020	768	694
30	1,050	1,380	3,670	4,650	-	7,690	5,850	4,200	1,820	1,010	777	694
31	1,030	-	6,360	4,310	-	6,480	-	3,980	-	1,000	768	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	28,991	1,960	638	935	0.461	0.53	57,500
November.....	58,492	5,000	840	1,950	.961	1.07	116,000
December.....	94,230	12,100	1,140	3,040	1.50	1.73	186,900
Calendar year 1935.....	1,506,662	20,400	638	4,128	2.03	27.60	2,988,000
January.....	528,940	42,400	4,310	17,060	8.40	9.68	1,049,000
February.....	233,390	25,000	3,380	8,048	3.96	4.27	462,900
March.....	199,850	12,700	3,770	6,447	3.18	3.67	396,400
April.....	217,400	10,500	4,760	7,247	3.67	3.98	431,200
May.....	203,250	12,700	3,980	6,556	3.23	3.72	405,100
June.....	99,320	5,120	1,820	3,331	1.64	1.83	198,200
July.....	39,670	1,690	1,000	1,280	0.63	.73	78,680
August.....	26,749	980	768	863	.425	.49	53,060
September.....	24,932	1,250	694	831	.409	.46	49,450
Water year 1935-36.....	1,755,814	42,400	638	4,797	2.36	32.16	3,482,000

Willamette River at Albany, Oreg.

Location.- Water-stage recorder, lat. 44°38'20", long. 123°6'20", in SW¼ sec. 6, T. 11 S., R. 3 W., at Albany, just below mouth of Calapoya River. Zero of gage is 171.70 feet above mean sea level (general adjustment of 1929).

Drainage area.- 4,840 square miles.

Records available.- November 1878 to April 1882, January 1892 to September 1936; fragmentary records 1883 to 1888.

Average discharge.- 41 years (1896-1936), 13,740 second-feet.

Extremes.- Maximum discharge during year, 125,000 second-feet Jan. 13 (gage height, 24.3 feet); minimum, 2,340 second-feet Oct. 1, 2 (gage height, 0.36 foot).
1878-82, 1892-1936: Maximum discharge, 229,000 second-feet Jan. 14, 1881 (gage height, 32.8 feet); minimum, about 1,870 second-feet Sept. 21-27, 1879 (gage height, 0.2 foot). Minimum discharge in recent years, 1,890 second-feet Sept. 5, 1931 (gage height, 0.26 foot).
Maximum stage known, 36.0 feet Dec. 4, 1861 (estimated discharge, 274,000 second-feet). (Date of flood corrected on basis of research by U. S. Corps of Engineers.)

Remarks.- Records excellent. No regulation. Albany power canal diverts water from South Santiam River into Willamette River above station. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.2	2,000	1.1	4,040	2.4	7,530	4.0	12,400	7.0	23,100	14.0	52,600
.4	2,420	1.4	4,800	2.8	8,700	4.5	14,100	8.0	26,900	17.0	69,000
.6	2,860	1.7	5,590	3.2	9,900	5.0	15,800	10.0	34,800	20.0	88,500
.8	3,320	2.0	6,410	3.6	11,100	6.0	19,400	12.0	43,300	24.0	122,000

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,340	3,200	4,160	17,200	12,400	34,000	17,900	14,100	10,500	5,660	3,440	2,680
2	2,340	3,160	4,040	20,100	11,800	31,200	15,500	13,400	9,900	5,590	3,440	2,770
3	2,380	3,070	3,800	36,400	11,100	29,200	14,800	13,100	9,600	5,460	3,440	3,160
4	2,420	3,000	3,680	47,600	10,500	27,600	15,800	13,400	9,900	5,520	3,320	3,140
5	2,440	2,880	3,680	52,100	10,800	25,000	17,200	15,800	9,000	5,320	3,320	3,020
6	2,510	2,910	3,600	70,200	11,100	22,300	16,500	20,100	8,700	5,190	3,270	2,930
7	2,510	2,860	4,040	70,800	13,700	20,500	15,100	23,800	8,700	5,060	3,230	2,790
8	2,440	2,950	4,670	47,300	15,800	18,700	15,100	21,600	10,200	4,930	3,180	2,730
9	2,420	3,200	6,410	38,100	14,400	17,200	16,900	19,000	11,800	4,800	3,160	2,680
10	2,400	3,920	6,830	38,500	13,100	16,300	16,500	17,200	11,800	4,930	3,090	2,640
11	2,400	4,930	7,250	50,700	12,100	17,600	18,900	16,500	10,500	5,060	3,090	2,620
12	2,440	4,540	10,700	81,500	12,400	16,200	19,000	16,500	9,900	5,060	3,090	2,660
13	2,790	6,360	22,100	120,000	14,100	15,500	21,600	16,200	9,300	4,930	3,040	2,560
14	3,920	9,300	20,100	114,000	16,900	15,500	22,500	16,500	9,300	4,670	2,980	2,750
15	4,930	7,110	14,800	104,000	16,500	15,100	21,200	17,900	9,300	4,540	3,020	3,250
16	5,060	6,270	11,800	61,500	14,800	15,100	20,500	17,600	10,500	4,420	2,980	3,440
17	4,290	8,400	9,900	67,800	13,400	14,400	20,500	16,200	10,800	4,290	2,950	3,140
18	3,800	6,400	8,400	59,400	12,400	13,400	19,700	14,800	11,100	4,160	2,950	2,880
19	3,440	6,830	7,530	48,400	12,100	12,700	18,700	13,700	10,800	4,160	2,930	2,750
20	3,180	5,860	6,830	38,500	11,800	11,800	17,600	13,400	9,900	4,040	2,910	2,660
21	3,110	5,320	6,130	34,400	17,400	11,400	16,200	15,500	9,000	4,040	2,860	2,730
22	3,160	4,930	5,720	30,000	33,200	11,800	15,800	17,200	8,400	3,920	2,860	2,680
23	3,440	5,060	5,460	26,100	49,700	11,800	15,800	16,500	7,520	3,800	2,860	2,620
24	3,440	5,720	5,060	25,800	49,700	11,400	16,200	15,100	7,530	3,800	2,820	2,570
25	3,260	5,720	4,930	22,500	42,400	11,400	17,600	13,700	7,250	3,680	2,770	2,530
26	3,110	5,460	5,060	20,100	36,000	11,100	18,700	13,100	6,970	3,500	2,770	2,510
27	2,980	5,060	5,590	18,700	34,000	11,800	16,500	13,100	6,630	3,560	2,750	2,460
28	2,930	4,670	7,110	16,900	34,000	18,700	15,100	13,100	6,550	3,560	2,710	2,460
29	2,820	4,540	9,900	15,500	35,600	28,400	14,800	12,400	6,270	3,560	2,710	2,420
30	3,040	4,290	11,100	14,400	-	25,300	14,400	11,800	6,000	3,560	2,680	2,420
31	3,230	-	13,700	13,400	-	20,800	-	11,100	-	3,440	2,680	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	94,960	5,060	2,340	3,063	0.633	0.73	188,400
November.....	149,960	9,300	2,680	4,999	1.03	1.15	297,400
December.....	244,280	22,100	3,680	7,860	1.63	1.88	484,500
Calendar year 1935.....	4,039,260	43,700	2,340	11,070	2.29	31.05	8,012,000
January.....	1,437,900	120,000	13,400	46,380	9.58	11.04	2,852,000
February.....	1,584,900	49,700	10,500	20,480	4.23	4.56	1,178,000
March.....	565,820	34,000	11,100	18,230	3.77	4.35	1,121,000
April.....	520,400	22,300	14,400	17,350	3.58	3.99	1,032,000
May.....	483,400	23,800	11,100	15,590	3.22	3.71	958,800
June.....	273,520	11,800	6,000	9,117	1.88	2.10	542,500
July.....	138,270	5,660	3,440	4,460	.921	1.06	274,500
August.....	93,500	3,440	2,680	3,010	.652	.72	185,100
September.....	82,730	3,440	2,420	2,758	.570	.64	164,100
Water year 1935-36.....	4,677,720	120,000	2,340	12,780	2.64	35.93	9,278,000

Willamette River at Salem, Oreg.

Location.— Water-stage recorder, lat. 44°56'40", long. 123°2'30", in SW¼ sec. 22, T. 7 S., R. 3 W., 300 feet above highway bridge at Salem. Zero of gage is 113.9 feet above mean sea level (general adjustment of 1929).

Drainage area.— 7,280 square miles.

Records available.— October 1909 to December 1916, October 1927 to September 1936.

Average discharge.— 16 years (1909-16, 1927-36), 22,010 second-feet.

Extremes.— Maximum discharge during year, 225,000 second-feet Jan. 14 (gage height, 23.8 feet); minimum, 3,160 second-feet Oct. 2; minimum gage height, -3.96 feet Sept. 29, 30.

1909-16, 1927-36: Maximum observed discharge, 315,000 second-feet Nov. 25, 1909 (gage height, 30.5 feet); minimum, 2,500 second-feet Sept. 5-8, 1931 (gage height, -3.5 feet).

Maximum known discharge (estimated), 500,000 second-feet Dec. 4, 1861 (gage height, about 39 feet). Flood of Feb. 5, 1890, reached a stage of 37.1 feet.

Remarks.— Records good below and fair above 80,000 second-feet. A few small irrigation diversions above station; part of flow of Salem Canal diverted from North Santiam River returns to Willamette River below gage; no regulation. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 13			Jan. 14 to Sept. 30		
-4.0	3,080	-1.5	8,010	-4.0	3,220
-3.5	3,650	-1.0	9,510	-3.5	3,890
-3.0	4,450	0.0	12,800	-3.0	4,710
-2.5	5,450	2.0	19,900	-2.5	5,700
-2.0	6,530	2.9	28,300	-1.5	6,850
				0.0	8,000
				1.0	9,580
				2.0	12,900
				3.0	19,900
				4.0	28,300
				5.0	37,300
				6.0	47,000
				7.0	58,000
				8.0	69,000
				9.0	80,000
				10.0	92,000
				11.0	104,000
				12.0	116,000
				13.0	128,000
				14.0	140,000
				15.0	152,000
				16.0	164,000
				17.0	176,000
				18.0	188,000
				19.0	200,000
				20.0	212,000
				21.0	224,000
				22.0	236,000
				23.0	248,000
				24.0	260,000
				25.0	272,000
				26.0	284,000
				27.0	296,000
				28.0	308,000
				29.0	320,000
				30.0	332,000

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,180	4,450	6,880	31,400	19,500	52,400	28,300	21,500	18,500	8,490	4,510	3,510
2	3,180	4,270	6,580	45,400	18,200	49,100	24,800	20,700	15,800	8,060	4,440	3,520
3	3,180	4,100	6,140	71,600	17,000	46,500	22,700	20,300	15,100	7,920	4,410	3,820
4	3,290	3,940	5,800	83,700	16,700	43,400	24,300	21,500	14,600	7,780	4,360	4,150
5	3,290	3,790	5,670	113,000	16,700	39,400	24,800	25,200	13,900	7,640	4,300	4,070
6	3,400	3,790	5,670	122,000	17,000	35,000	24,300	32,300	13,400	7,640	4,260	3,880
7	3,400	3,790	6,580	114,000	20,700	31,900	22,300	35,500	13,200	7,370	4,180	3,760
8	3,290	3,790	9,500	90,400	23,100	29,200	22,300	33,200	14,800	7,110	4,120	3,650
9	3,290	3,790	11,400	68,900	21,900	29,200	24,300	29,600	17,600	6,850	4,070	3,590
10	3,290	4,640	12,100	67,400	19,700	31,000	24,400	26,900	18,200	6,850	4,020	3,520
11	3,180	7,160	12,400	92,900	18,200	29,200	26,100	26,100	16,800	7,240	3,980	3,480
12	3,290	7,160	20,500	143,000	18,600	26,500	30,500	25,600	15,400	7,370	3,960	3,480
13	3,400	13,400	32,800	191,000	23,500	26,100	35,500	25,200	14,400	7,240	3,950	3,520
14	5,240	15,900	33,200	211,000	27,400	26,100	36,800	25,200	13,800	6,960	3,900	3,570
15	8,590	13,800	29,600	178,000	26,500	26,100	36,900	27,900	13,900	6,500	3,850	3,960
16	8,890	11,400	20,700	144,000	23,500	26,100	35,000	29,200	15,400	6,290	3,850	4,770
17	7,160	15,500	17,300	112,000	21,500	24,800	34,600	28,300	17,400	6,110	3,810	4,530
18	5,900	15,900	14,800	90,400	19,700	23,100	33,200	25,200	18,100	5,960	3,780	4,120
19	5,240	13,100	13,100	75,100	18,800	21,500	31,400	22,700	17,600	5,860	3,760	3,690
20	4,640	10,800	11,800	65,500	18,600	19,900	28,700	22,300	16,000	5,690	3,750	3,750
21	4,270	9,200	10,800	64,500	24,800	19,200	25,500	28,700	14,600	5,510	3,720	3,680
22	4,270	8,300	9,830	49,800	55,700	19,200	26,100	31,400	13,400	5,390	3,670	3,650
23	4,830	8,300	9,200	42,200	77,400	19,900	25,500	29,200	12,500	5,250	3,650	3,580
24	5,030	10,500	8,590	37,800	78,200	18,400	25,600	26,100	11,800	5,130	3,650	3,520
25	4,240	11,400	8,500	35,000	68,800	18,100	27,800	23,500	11,200	5,030	3,640	3,430
26	4,450	10,100	3,590	31,900	58,300	17,400	29,200	21,900	10,600	4,960	3,600	3,450
27	4,100	9,700	6,610	28,700	54,300	19,000	26,500	21,100	10,100	4,860	3,580	3,390
28	4,100	8,590	13,100	26,500	54,300	23,800	23,900	20,700	9,680	4,800	3,560	3,360
29	3,940	7,720	17,700	24,500	55,000	42,200	23,100	19,700	9,380	4,730	3,530	3,310
30	4,100	7,160	21,100	22,700	-	39,400	22,300	18,600	8,930	4,670	3,510	3,280
31	4,450	-	27,400	20,700	-	32,800	-	17,600	-	4,550	3,490	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	136,500	8,890	3,180	4,403	0.605	0.70	270,700
November.....	284,940	15,900	3,180	9,498	1.17	1.30	505,700
December.....	420,950	33,200	5,670	13,580	1.87	2.16	834,900
Calendar year 1935.....	6,447,940	69,500	3,080	17,670	2.43	32.96	12,790,000
January.....	2,490,600	211,000	20,700	80,340	11.0	12.68	4,940,000
February.....	933,500	78,200	16,700	32,130	4.42	4.77	1,852,000
March.....	913,800	52,400	17,400	29,480	4.05	4.37	1,812,000
April.....	827,200	36,800	22,300	27,670	3.79	4.23	1,641,000
May.....	782,800	35,500	17,600	25,250	3.47	4.00	1,553,000
June.....	423,580	18,200	8,930	14,120	1.94	2.16	840,200
July.....	195,670	8,490	4,550	6,312	.867	1.00	388,100
August.....	120,880	4,510	3,490	3,899	.536	.62	239,800
September.....	111,230	4,770	3,230	3,708	.509	.57	220,600
Water year 1935-36.....	7,611,760	211,000	3,180	20,800	2.86	38.86	15,100,000

Hills Creek near Oakridge, Oreg.

Location.- Staff gage, lat. $43^{\circ}42'$, long. $122^{\circ}24'$, in E $\frac{1}{2}$ sec. 36, T. 21 S., R. 3 E., $\frac{1}{2}$ miles above mouth and $4\frac{1}{2}$ miles southeast of Oakridge.

Drainage area.- 59 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge during period, 1,320 second-feet Jan. 11, 13 (gage height, 3.3 feet, from floodmarks); minimum, 18 second-feet Sept. 27, Oct. 1, 2, 9-11, 1935 (gage height, 0.58 foot).

Remarks.- Records good. No diversions above station; records include flow diverted in small canal just below gage.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.5	13
.7	27
1.0	65
1.3	144
1.6	260
2.0	460
2.4	695
2.8	960

Discharge, in second-feet, September 1935 to September 1936

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	18	27	36	113	105	296	83	212	108	47	25	21
2	-	18	25	35	825	95	305	78	197	108	47	25	31
3	-	20	25	35	432	87	305	78	212	108	44	25	25
4	-	21	22	33	960	78	274	116	305	97	44	25	22
5	-	20	25	33	695	74	244	113	355	92	42	25	22
6	-	19	28	35	432	74	220	103	330	113	42	25	22
7	-	19	34	37	274	69	193	162	305	181	39	25	22
8	-	19	37	45	212	65	174	228	296	220	39	25	21
9	-	18	51	47	330	65	189	220	287	189	39	25	21
10	-	18	45	97	380	62	148	264	305	159	39	25	21
11	21	21	25	103	960	62	144	380	330	144	44	24	19
12	21	29	51	236	500	67	143	515	305	132	39	24	19
13	21	37	62	143	960	128	139	488	287	132	37	24	21
14	-	57	51	103	890	125	128	432	305	113	37	24	27
15	-	39	78	85	630	113	116	432	287	212	35	22	25
16	-	32	74	67	515	105	108	460	244	174	35	22	24
17	22	31	55	60	380	97	103	432	204	144	33	22	24
18	-	27	48	55	287	105	97	181	132	132	33	22	22
19	-	23	45	49	252	119	90	355	174	113	33	22	21
20	20	25	42	47	243	144	92	274	159	92	33	22	19
21	-	30	42	44	216	500	113	287	159	83	31	21	19
22	-	35	47	41	193	488	108	305	151	83	31	21	19
23	20	29	63	38	208	432	108	330	144	78	29	21	19
24	20	27	57	37	212	300	103	405	159	74	29	21	19
25	20	27	49	45	208	264	92	330	174	65	29	21	19
26	19	27	45	48	185	224	83	287	197	62	29	21	19
27	18	25	42	57	181	208	90	232	189	59	29	21	19
28	-	24	42	52	170	287	141	220	174	55	27	21	19
29	-	30	39	72	148	292	110	204	144	52	27	21	19
30	-	27	38	95	136	-	105	220	138	49	27	21	19
31	-	27	-	113	116	-	95	-	125	-	27	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	819	57	18	26.4	0.447	0.52	1,620
November.....	1,313	78	22	43.8	.742	.83	2,600
December.....	2,026	236	33	65.4	1.11	1.28	4,020
Calendar year							
January.....	12,247	960	113	385	6.69	7.71	24,290
February.....	4,332	500	62	167	2.93	3.05	9,580
March.....	4,660	305	83	150	2.54	2.93	9,240
April.....	8,413	515	78	280	4.75	5.30	16,690
May.....	7,034	355	125	227	3.85	4.44	13,950
June.....	3,423	220	49	114	1.93	2.15	6,790
July.....	1,066	47	27	35.4	.600	.69	2,170
August.....	709	25	21	22.9	.383	.45	1,410
September.....	639	31	19	21.3	.361	.40	1,270
Water year 1935-36.....	47,211	960	18	129	2.19	29.75	93,630

Salt Creek near Oakridge, Oreg.

Location.- Water-stage recorder, lat. 43°44', long. 122°25', in SW $\frac{1}{4}$ sec. 23, T. 21 S., R. 3 E., 0.7 mile above mouth and 2 miles southeast of Oakridge.

Drainage area.- 113 square miles.

Records available.- July 1913 to September 1914, October 1933 to September 1936.

Extremes.- Maximum discharge during year, 1,090 second-feet Jan. 4 (gage height, 4.22 feet); minimum, 90 second-feet Nov. 3 (gage height, 1.55 feet).
1913-14, 1933-36: Maximum discharge, 2,170 second-feet Dec. 20, 1934 (gage height, 5.92 feet); minimum, 77 second-feet July 17, 1934; minimum daily discharge, 82 second-feet Sept. 20, 21, 1934.

Remarks.- Records good. No diversions above station; slight regulation. Water-stage recorder inspected by employee of U. S. Forest Service.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.6	97	2.7	380
1.8	130	3.1	540
2.1	195	3.5	715
2.4	250	4.0	970

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	108	109	159	201	412	228	484	428	184	116	110
2	94	103	103	551	129	428	217	472	408	182	114	121
3	97	100	106	472	189	432	222	468	408	177	114	114
4	104	103	106	851	191	412	256	540	392	172	114	109
5	89	106	104	738	182	380	247	670	376	172	114	108
6	97	109	116	492	189	359	239	715	412	163	112	106
7	96	110	119	392	199	354	286	625	472	161	112	104
8	94	112	132	342	199	320	345	580	476	159	112	104
9	94	152	123	398	182	359	352	580	444	161	110	104
10	94	128	157	412	177	338	388	670	416	161	109	103
11	102	121	174	810	179	317	480	738	408	168	109	103
12	114	157	271	670	199	310	580	760	400	157	108	106
13	121	150	209	970	247	283	648	760	416	150	106	112
14	136	130	174	898	244	283	648	810	408	146	106	125
15	121	142	157	738	228	274	648	738	440	142	104	116
16	123	154	148	625	222	262	670	642	396	140	104	109
17	114	140	140	520	214	253	670	625	380	136	104	106
18	108	128	132	436	209	242	670	580	356	134	104	104
19	104	121	126	416	217	233	625	580	320	132	104	104
20	106	119	123	400	256	233	602	520	301	130	104	103
21	114	117	121	359	412	250	602	500	289	128	103	103
22	116	123	117	334	520	256	625	468	266	126	104	102
23	108	130	114	331	484	247	648	472	283	125	104	102
24	106	128	114	324	416	244	785	496	271	125	103	102
25	106	121	117	310	370	250	785	540	253	123	103	102
26	106	119	119	289	352	228	648	602	236	121	103	100
27	104	116	126	277	356	250	602	648	225	121	103	100
28	109	112	125	262	428	324	560	602	209	119	102	98
29	114	112	128	239	416	289	520	500	201	117	102	98
30	110	110	142	228	-	259	500	480	194	117	103	100
31	110	-	161	217	-	247	-	448	-	116	102	--

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	3,513	156	93	107	0.947	1.09	6,570
November.....	3,591	157	100	123	1.05	1.22	7,500
December.....	4,218	271	104	136	1.20	1.38	8,570
Calendar year 1935	87,212	625	88	239	2.12	28.70	175,000
January.....	14,440	970	159	466	4.12	4.75	28,640
February.....	7,857	520	177	271	2.40	2.59	15,580
March.....	9,288	452	228	300	2.65	3.06	19,420
April.....	15,296	708	217	510	4.51	5.03	30,540
May.....	18,333	810	448	591	5.23	6.03	36,860
June.....	10,504	476	194	350	3.10	3.46	20,830
July.....	4,465	184	116	144	1.27	1.46	8,860
August.....	3,312	116	102	107	.947	1.09	6,570
September.....	3,176	123	99	106	.938	1.05	6,500
Water year 1935-36	97,883	970	93	267	2.36	32.21	194,100

Salmon Creek near Oakridge, Oreg.

Location.— Water-stage recorder, lat. 43°45', long. 122°23', in SW $\frac{1}{4}$ sec. 7, T. 21 S., R. 4 E., a quarter of a mile above Slide Creek and 4 miles east of Oakridge.

Drainage area.— 117 square miles (revised) at cable a quarter of a mile above gage, where all discharge measurements are made.

Records available.— October 1933 to September 1936. At station 2 miles downstream, below Flat Creek, February 1913 to September 1914. At station 1 mile below present gage, October 1914 to October 1919.

Extremes.— Maximum discharge during year, 1,840 second-feet Jan. 4 (gage height, 4.33 feet); minimum, 107 second-feet Oct. 1, 2, 10, 11 (gage height, 1.15 feet).
1913-19, 1933-36: Maximum discharge, 6,400 second-feet (estimated) Jan. 12, 1918; minimum, 98 second-feet Oct. 30, 1915.

Remarks.— Records good except those for periods Nov. 13, 14, 16-18, Nov. 24 to Dec. 6, Feb. 14, Mar. 1-11, which were based on records of Salt Creek near Oakridge and are fair. No regulation or diversions above station. Water-stage recorder inspected by employee of U. S. Forest Service.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.1	98	2.4	500
1.3	135	2.8	695
1.5	190	3.2	930
1.6	270	3.6	1,220
2.1	375	4.0	1,540

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	107	124	129	267	347	630	347	590	423	239	168	154
2	107	120	128	1,240	326	658	330	570	423	239	166	163
3	114	114	127	870	312	665	336	605	403	236	163	152
4	118	114	126	1,500	308	640	364	645	395	230	163	148
5	114	118	125	1,340	294	580	350	780	387	227	163	143
6	112	122	145	870	308	550	340	810	419	221	161	141
7	111	131	154	670	322	530	391	722	473	218	158	139
8	109	139	188	570	298	510	460	722	491	215	158	137
9	109	230	168	670	284	620	478	722	464	221	156	135
10	107	173	227	750	270	590	545	810	435	227	156	135
11	116	156	270	1,540	277	560	750	870	423	230	156	133
12	131	221	439	1,180	322	545	1,000	870	411	215	154	137
13	139	210	326	1,300	514	527	1,100	840	399	208	152	154
14	156	175	267	1,260	490	504	1,040	840	403	203	150	190
15	135	201	230	1,140	415	491	1,070	750	447	201	148	163
16	133	220	209	965	375	464	1,000	695	407	198	148	152
17	120	185	193	780	361	443	1,070	630	395	196	146	141
18	116	180	190	645	364	419	965	600	391	193	146	139
19	112	146	173	610	379	392	870	595	361	190	143	135
20	114	139	163	595	427	407	810	585	347	188	141	139
21	139	139	156	532	780	443	810	585	336	185	141	133
22	135	152	152	496	930	439	840	560	326	183	141	129
23	120	178	146	496	840	419	840	545	319	180	141	129
24	116	170	143	496	695	407	1,000	560	308	178	139	129
25	114	150	152	478	600	383	965	590	294	178	139	127
26	112	140	156	455	545	368	810	630	288	175	141	126
27	111	136	173	447	536	427	722	630	277	175	139	124
28	118	133	183	435	645	514	695	585	267	173	137	124
29	129	132	193	411	630	447	640	504	256	170	139	124
30	124	130	209	397	-	403	605	492	246	170	139	124
31	127	-	246	564	-	378	-	443	-	168	139	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				3,725	156	107	120	1.03	1.19	7,390		
November.....				4,660	230	114	155	1.32	1.47	9,240		
December.....				5,876	439	125	190	1.62	1.87	11,650		
Calendar year 1935.....				119,023	1,000	107	326	2.79	38.11	236,100		
January.....				23,759	1,540	267	766	6.55	7.55	47,130		
February.....				13,194	950	270	455	3.99	4.20	26,170		
March.....				15,354	665	368	495	4.23	4.88	30,450		
April.....				21,643	1,100	330	721	6.16	6.97	42,930		
May.....				20,355	870	443	657	5.62	6.48	40,370		
June.....				11,219	491	246	374	3.20	3.57	22,250		
July.....				6,228	239	168	201	1.72	1.98	12,350		
August.....				4,651	168	137	149	1.27	1.46	9,190		
September.....				4,199	190	124	140	1.30	1.54	8,330		
Water year 1935-36.....				134,843	1,540	107	368	3.15	42.86	287,400		

North Fork of Middle Fork of Willamette River near Oakridge, Oreg.

Location.- Staff gage, lat. 43°45', long. 122°30', in SW¼ sec. 7, T. 21 S., R. 3 E., 1 mile above mouth and 2½ miles northeast of Oakridge. Zero of gage is 1,029.6 feet above mean sea level (plane-table survey by the U. S. Geological Survey).

Drainage area.- 246 square miles.

Records available.- October 1909 to September 1912 (fragmentary), September 1935 to September 1936. At station half a mile upstream, above small tributary, October 1913 to February 1916.

Extremes.- 1935-36: Maximum discharge during year, 5,850 second-feet Jan. 11 (gage height, 8.1 feet, from floodmark); minimum discharge observed, 121 second-feet Oct. 1 (gage height, 0.79 foot).

1909-16, 1935-36: Maximum stage observed, 12.4 feet, former site and datum, Nov. 22, 1909 (discharge not determined); minimum discharge observed, that of Oct. 1, 1935.

Remarks.- Records fair. Tunnel and control gates have been built to divert part of outflow from Waldo Lake into Salmon Creek Basin; they are not used, but leakage through gates is about 2 second-feet.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.7	108	3.0	1,060
1.0	158	3.5	1,380
1.3	230	4.0	1,740
1.6	323	5.0	2,590
2.0	495	6.0	3,580
2.5	765	7.0	4,640

Discharge, in second-feet, September 1935 to September 1936

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	122	167	227	682	682	1,380	710	1,060	765	342	204	156
2	-	122	160	220	4,090	655	1,520	682	1,060	710	323	199	180
3	-	127	154	190	3,280	800	1,650	710	1,180	682	323	199	173
4	-	138	144	190	4,860	600	1,690	765	1,240	655	323	199	165
5	-	132	146	192	3,680	572	1,450	710	1,520	655	306	194	160
6	-	128	150	209	2,320	628	1,310	682	1,120	682	306	194	156
7	-	128	146	277	1,660	710	1,240	710	1,310	765	306	192	154
8	-	128	178	445	1,450	572	1,240	880	1,310	820	289	190	154
9	-	127	212	360	1,740	572	1,520	880	1,310	765	306	185	164
10	-	127	241	445	2,410	545	1,380	1,000	1,310	765	306	180	150
11	-	133	202	628	4,750	545	1,240	1,310	1,450	682	306	180	150
12	-	167	342	1,000	3,780	655	1,180	1,740	1,450	655	286	180	169
13	-	230	380	710	3,180	880	1,120	2,140	1,450	655	290	178	204
14	-	236	306	545	3,080	820	1,060	2,060	1,450	682	267	176	247
15	-	199	270	470	2,780	765	1,000	1,980	1,380	710	264	173	220
16	146	190	283	400	2,410	710	940	2,140	1,240	682	258	171	199
17	-	162	323	342	1,900	682	880	2,060	1,120	655	255	171	176
18	-	146	289	323	1,590	710	820	1,900	1,060	655	252	167	158
19	-	142	252	306	1,450	710	820	1,590	1,060	600	250	167	154
20	136	162	230	293	1,380	820	880	1,380	1,120	572	244	162	154
21	-	171	250	270	1,240	1,590	880	1,520	1,120	545	238	162	150
22	-	169	244	252	1,120	2,230	880	1,520	1,060	495	233	160	148
23	-	169	264	250	1,120	1,900	820	1,590	1,060	470	230	158	146
24	-	176	306	241	1,060	1,450	820	1,900	1,000	445	227	158	142
25	-	148	280	277	1,060	1,310	765	1,820	1,000	422	225	158	140
26	-	138	252	277	1,000	1,180	765	1,450	1,060	400	220	158	138
27	128	146	253	342	940	1,180	1,060	1,310	1,120	380	214	156	135
28	-	154	176	400	880	1,450	1,120	1,240	1,000	380	214	154	128
29	-	169	204	422	820	1,450	940	1,180	940	360	209	154	128
30	-	167	209	445	765	-	820	1,120	820	342	209	154	128
31	-	167	-	545	710	-	765	-	765	-	204	150	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	4,820	236	122	155	0.630	0.73	9,560
November.....	6,973	380	144	232	.943	1.05	13,830
December.....	11,453	1,000	190	370	1.50	1.73	22,780
Calendar year							
January.....	63,187	4,860	682	2,036	8.28	9.55	125,300
February.....	27,173	2,230	545	937	3.81	4.11	53,900
March.....	33,865	1,660	765	1,092	4.44	5.12	67,170
April.....	40,879	2,140	682	1,366	5.51	6.15	80,690
May.....	36,145	1,520	765	1,166	4.74	5.46	71,690
June.....	18,051	820	342	502	2.45	2.73	35,800
July.....	8,215	342	204	265	1.08	1.24	16,290
August.....	5,383	204	150	174	.707	.82	10,680
September.....	4,816	247	128	161	.654	.73	9,550
Water year 1935-36.....	260,790	4,860	122	713	2.90	39.42	517,200

Fall Creek above Winberry Creek, near Lowell, Oreg.

Location.- Staff gage, lat. 43°57', long. 122°43', in SE $\frac{1}{4}$ sec. 32, T. 18 S., R. 1 E., 2 $\frac{1}{2}$ miles above Winberry Creek and 4 $\frac{1}{2}$ miles northeast of Lowell. Zero of gage is 728.0 feet above mean sea level by preliminary determination (general adjustment of 1929).

Drainage area.- 131 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge observed during period, 5,850 second-feet Jan. 4 (gage height, 7.30 feet); minimum, 16 second-feet Sept. 30, Oct. 1, 2, 1935 (gage height, 0.58 foot).

Maximum stage known, determined in 1935 from floodmarks, about 11 feet (date unknown).

Remarks.- Records good. No diversions above gage.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.5	14	1.5	144	3.0	805	6.0	3,900
.7	22	1.8	237	3.5	1,140	7.3	5,850
.9	36	2.2	395	4.0	1,550		
1.2	78	2.6	580	5.0	2,600		

Discharge, in second-feet, September 1935

Sept. 9	17
13	17
23	20
30	16

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	43	50	444	256	1,380	444	237	180	108	45	30
2	16	36	46	2,480	230	1,220	375	237	209	104	44	71
3	18	30	44	1,300	209	1,000	462	237	177	101	43	45
4	21	28	42	3,620	237	805	745	462	168	97	45	37
5	21	30	40	2,840	237	690	635	930	166	99	44	34
6	20	34	68	1,460	805	580	555	1,140	166	93	43	32
7	19	68	88	1,140	745	508	930	805	295	91	43	31
8	18	80	275	1,070	485	462	930	608	444	86	40	30
9	18	315	158	1,220	418	636	805	485	355	89	40	29
10	18	124	295	1,550	395	485	930	395	295	104	39	28
11	20	78	295	3,900	462	395	1,000	355	256	134	38	27
12	45	256	1,300	2,370	745	444	930	295	216	93	38	29
13	136	485	690	2,970	1,380	444	805	355	186	82	37	39
14	202	230	375	2,480	805	444	608	395	171	78	36	177
15	115	216	220	2,370	635	555	530	355	256	75	36	78
16	76	530	183	1,940	555	444	485	335	355	71	35	45
17	46	315	166	1,460	530	444	418	315	555	68	34	36
18	34	177	134	1,070	508	375	375	275	444	68	34	34
19	31	132	117	1,300	485	335	315	256	355	64	34	32
20	31	101	108	1,220	690	315	295	580	295	61	34	30
21	61	84	115	930	1,740	295	275	805	237	58	33	30
22	110	115	93	865	1,740	275	256	608	209	58	33	29
23	55	117	80	745	1,380	275	256	462	190	55	32	28
24	36	110	73	805	1,000	295	335	395	171	55	32	27
25	31	89	89	608	865	295	375	335	158	53	32	27
26	29	78	82	485	930	335	315	295	149	53	31	26
27	26	70	149	462	930	1,000	256	256	136	50	30	25
28	37	61	212	395	1,550	1,460	237	256	129	50	30	24
29	68	55	315	375	1,380	805	237	237	119	47	29	24
30	48	54	275	295	-	635	275	216	117	47	29	24
31	45	-	375	275	-	555	-	196	-	45	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,467	202	16	47.3	0.361	0.42	2,910
November.....	4,141	530	28	138	1.05	1.17	8,210
December.....	6,552	1,300	40	211	1.61	1.86	13,000
Calendar year							
January.....	44,444	3,900	275	1,434	10.9	12.57	88,150
February.....	22,327	1,740	209	770	5.88	6.34	44,280
March.....	18,185	1,460	275	587	4.48	5.16	36,070
April.....	15,399	1,000	237	513	3.92	4.37	30,520
May.....	13,113	1,140	196	423	3.23	3.72	26,010
June.....	7,159	555	117	239	1.82	2.03	14,200
July.....	2,337	134	45	75.4	.576	.66	4,640
August.....	1,122	45	29	36.2	.276	.32	2,230
September.....	1,158	177	24	38.6	.295	.33	2,300
Water year 1935-36.....	137,394	3,900	16	375	2.86	38.95	272,500

Fall Creek below Winberry Creek, near Fall Creek, Oreg.

Location.- Staff gage, lat. 43°57', long. 122°47', near center of sec. 2, T. 19 S., R. 1 W., 1½ miles below Winberry Creek and 2½ miles southeast of Fall Creek post office. Zero of gage is 637.75 feet above mean sea level, preliminary determination (general adjustment of 1929).

Drainage area.- 190 square miles.

Records available.- October to December 1911 (gage heights only), September 1935 to September 1936.

Extremes.- Maximum discharge observed during period, 7,550 second-feet Jan. 4 (gage height, 10.6 feet); minimum, 21 second-feet Oct. 1, 2 (gage height, 0.52 foot). Maximum stage known, determined in 1935 from floodmarks, about 14 feet (date unknown).

Remarks.- Records good. No diversions above station.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.5	20	1.8	178	3.5	775	7.0	3,220
.7	30	2.2	275	4.0	1,020	8.0	4,260
1.0	53	2.6	405	5.0	1,580	9.0	5,430
1.4	107	3.0	555	6.0	2,320	10.0	6,730

Discharge, in second-feet, September 1935

Sept. 9	22
13	22
23	23

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	60	75	730	335	1,790	595	335	223	149	53	37
2	21	48	72	3,120	305	1,580	515	305	275	140	53	70
3	22	42	65	1,580	275	1,220	515	320	223	140	51	53
4	26	36	63	4,150	290	1,020	1,070	305	223	140	51	43
5	28	36	58	4,040	305	870	870	1,220	223	140	49	40
6	25	41	65	1,860	405	775	775	1,580	212	123	49	43
7	24	65	123	1,520	1,070	640	1,070	335	123	49	43	
8	23	101	440	1,460	685	640	1,220	820	555	123	47	35
9	22	305	236	1,580	555	775	1,070	685	475	123	47	34
10	22	223	305	1,930	555	595	1,170	555	405	132	47	32
11	23	123	275	5,070	730	515	1,280	475	335	140	43	32
12	48	178	1,720	2,930	1,580	515	1,220	405	290	123	43	34
13	92	555	920	4,150	1,400	555	1,070	370	248	107	42	43
14	248	305	555	3,220	1,020	555	820	555	223	104	42	123
15	140	223	422	3,120	920	730	730	515	388	98	42	123
16	115	515	305	2,750	730	595	640	475	475	95	40	60
17	72	515	248	2,160	595	555	555	405	730	89	40	43
18	47	290	212	1,460	475	370	515	370	595	68	39	42
19	39	189	178	1,650	640	405	440	370	495	78	37	36
20	36	149	158	1,580	920	388	405	515	405	78	37	36
21	45	123	140	1,220	2,320	388	370	1,020	305	78	36	35
22	158	132	123	1,120	2,320	370	370	870	305	78	36	34
23	81	178	115	1,020	1,860	352	335	685	262	65	36	34
24	51	178	107	970	1,460	405	475	515	236	65	36	32
25	41	149	115	775	1,170	405	475	475	223	65	36	31
26	37	132	123	640	1,280	405	405	405	200	65	36	31
27	35	107	158	555	1,340	920	370	370	178	65	36	30
28	33	101	405	515	2,160	1,930	370	370	178	63	35	30
29	81	92	370	458	1,860	1,170	335	335	158	61	35	30
30	76	84	335	405	-	370	370	290	158	61	35	29
31	58	-	440	370	-	775	-	275	-	58	35	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-foot		
October.....				1,792	248	21	57.8	0.304	0.35	3,550		
November.....				5,275	555	36	176	.926	1.03	10,480		
December.....				8,926	1,720	53	288	1.52	1.75	17,700		
Calendar year												
January.....				58,108	5,070	370	1,874	9.86	11.37	115,300		
February.....				29,725	2,320	275	1,025	5.39	5.81	58,960		
March.....				23,183	1,930	352	748	3.94	4.54	45,980		
April.....				20,420	1,280	335	681	3.58	3.99	40,500		
May.....				17,260	1,580	275	557	2.93	3.38	34,230		
June.....				9,536	730	158	318	1.67	1.86	18,910		
July.....				3,055	149	58	98.5	.518	.60	6,060		
August.....				1,293	53	35	41.7	.219	.25	2,560		
September.....				1,318	123	29	43.9	.231	.26	2,610		
Water year 1935-36.....				179,891	5,070	21	492	2.59	35.19	356,800		

Little Fall Creek near Fall Creek, Oreg.

Location.- Staff gage, lat. 43°59', long. 122°45', in sec. 25, T. 18 S., R. 1 W., 4 miles northeast of Fall Creek post office.

Drainage area.- 48 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge observed during period, 3,000 second-feet Jan. 4 (gage height, 6.30 feet); minimum, 11 second-feet Sept. 30, Oct. 1, 2, 1935 (gage height, 1.13 feet).

Remarks.- Records good except those above 1,300 second-feet, which are poor. No diversions above station.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

1.1	10	3.0	280
1.3	18	3.5	445
1.5	27	4.0	650
1.8	45	4.5	945
2.2	87	5.0	1,380
2.6	167	5.5	1,930

Discharge, in second-feet, September 1935

Sept. 13	12
16	22
17	19
30	11

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	21	41	295	167	560	193	103	111	60	37	21
2	11	20	39	875	143	560	167	103	114	59	36	22
3	12	22	36	560	132	500	221	107	114	59	34	42
4	14	23	34	1,590	132	410	250	143	97	59	33	33
5	14	24	33	1,480	132	375	221	325	87	58	33	30
6	14	26	55	810	295	310	221	310	82	57	32	26
7	13	27	50	650	280	295	250	295	97	56	32	25
8	13	34	97	605	221	265	250	280	122	56	32	24
9	12	132	87	605	193	280	250	280	103	59	31	23
10	12	38	122	700	180	265	265	221	95	55	30	22
11	13	42	207	1,480	193	221	265	167	90	57	30	21
12	22	250	560	1,100	193	236	265	122	87	53	30	22
13	118	265	310	1,380	392	221	250	112	94	51	29	31
14	90	103	265	1,100	310	221	221	193	122	50	28	53
15	37	118	143	1,190	265	250	193	180	167	48	28	30
16	34	155	132	875	236	236	167	143	155	47	28	27
17	26	122	103	750	221	221	143	122	143	45	28	24
18	22	87	87	605	221	207	132	114	132	44	27	23
19	21	70	75	650	207	180	132	114	111	44	26	22
20	21	63	72	560	250	167	122	310	103	42	26	22
21	29	53	70	500	500	155	114	325	93	41	26	22
22	37	74	63	428	650	143	103	280	87	40	25	22
23	31	77	57	358	605	143	122	250	84	39	24	21
24	22	63	53	340	480	143	155	221	79	39	24	21
25	21	53	53	310	445	155	132	193	77	39	24	21
26	21	51	61	280	445	167	114	167	74	38	23	21
27	18	50	143	250	445	428	122	143	72	38	22	20
28	24	45	132	221	560	480	122	132	70	38	22	20
29	29	44	122	193	520	410	122	132	65	37	22	19
30	26	42	180	167	-	295	103	122	61	37	22	19
31	23	-	193	167	-	250	-	114	-	37	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	811	118	11	26.2	0.546	0.83	1,610
November.....	2,194	265	20	73.1	1.52	1.70	4,350
December.....	3,684	560	33	11.9	2.48	2.66	7,310
Calendar year							
January.....	21,074	1,590	167	680	14.2	16.37	41,800
February.....	9,013	650	132	311	6.48	6.99	17,880
March.....	8,749	560	143	282	5.87	6.77	17,350
April.....	5,387	265	103	180	3.75	4.18	10,680
May.....	5,823	325	103	188	3.92	4.52	11,550
June.....	2,968	167	61	98.9	2.06	2.50	5,890
July.....	1,481	60	37	47.8	.996	1.15	2,940
August.....	865	37	21	27.9	.581	.67	1,720
September.....	749	53	19	25.0	.521	.68	1,490
Water year 1935-36	62,798	1,590	11	172	3.58	48.72	124,600

Coast Fork of Willamette River at London, Oreg.

Location.- Water-stage recorder, lat. 43°39', long. 123°5', in SW¼ sec. 20, T. 22 S., R. 3 W., 0.6 mile north of London and 11 miles south of Cottage Grove. Staff gage used prior to Nov. 1, 1935.

Drainage area.- 69 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge during period, 3,350 second-feet Jan. 13 (gage height, 7.45 feet); minimum, 12 second-feet Oct. 1, 2 (gage height, 0.95 foot).
Maximum stage known, determined in 1935 from floodmarks, about 11 feet (date unknown).

Remarks.- Records good except those below 50 second-feet, which are fair. Daily discharge for Oct. 5, 6, 11-13, 22-31 based on a comparison with the flow of Mosby Creek near Cottage Grove. No diversions above gage; mill pond 3 miles upstream may cause slight regulation at times.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.9	9	3.5	775
1.1	21	4.0	1,050
1.4	51	4.5	1,350
1.7	96	5.5	2,000
2.0	169	6.5	2,690
2.5	335	7.5	3,420
3.0	540		

Discharge, in second-feet, September 1935

Sept. 18 17

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	46	47	279	139	513	228	111	76	48	24	26
2	12	34	44	1,020	127	447	199	104	76	47	24	32
3	21	28	42	608	117	371	254	104	72	48	23	23
4	30	26	40	2,060	122	307	351	243	68	48	23	20
5	40	28	39	1,460	119	268	310	390	74	46	23	18
6	20	31	56	725	175	235	272	435	102	43	22	18
7	17	40	68	540	276	209	282	318	124	42	21	17
8	17	46	93	540	218	196	279	247	144	42	20	15
9	16	73	76	725	190	187	250	196	124	44	20	15
10	17	61	106	972	169	172	247	166	104	44	20	14
11	20	48	383	2,010	193	163	247	141	93	49	20	15
12	50	239	852	1,980	221	169	228	127	84	43	20	18
13	70	258	415	2,760	266	161	205	117	81	40	20	32
14	205	122	266	1,520	262	152	175	175	81	38	19	33
15	73	129	187	1,020	209	169	155	134	86	37	18	24
16	52	178	144	1,080	187	155	141	117	86	36	18	20
17	34	136	119	852	175	141	131	106	113	35	18	18
18	30	100	94	630	169	136	122	102	94	34	18	16
19	28	93	89	562	178	127	111	104	84	33	18	15
20	27	96	79	487	255	119	104	181	78	32	17	15
21	46	84	73	415	914	115	100	199	72	31	17	15
22	80	141	68	358	962	111	98	175	68	30	16	14
23	45	129	66	318	800	115	127	149	64	29	16	14
24	40	102	64	286	585	131	153	129	61	29	15	14
25	33	82	68	258	536	129	136	115	59	28	15	14
26	28	70	66	228	652	131	113	102	58	27	15	14
27	26	63	129	221	630	404	117	96	55	27	15	13
28	25	59	141	167	652	780	127	96	51	26	15	12
29	48	54	161	166	585	459	139	93	49	26	15	12
30	45	50	215	172	-	339	122	84	49	26	16	13
31	45	-	324	161	-	276	-	78	-	25	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,272	205	12	41.0	0.594	0.68	2,520
November.....	2,646	258	26	88.2	1.28	1.43	5,250
December.....	4,614	852	39	149	2.16	2.49	9,150
Calendar year							
January.....	24,301	2,760	161	784	11.4	13.14	48,200
February.....	10,093	962	117	348	5.04	5.44	20,020
March.....	7,357	750	111	237	3.43	3.95	14,590
April.....	5,528	351	98	184	2.57	2.98	10,960
May.....	4,934	435	78	159	2.30	2.65	9,790
June.....	2,430	144	49	81.0	1.17	1.30	4,820
July.....	1,133	49	25	36.5	.529	.61	2,250
August.....	576	24	15	18.6	.270	.31	1,140
September.....	539	33	12	18.0	.261	.29	1,070
Water year 1935-36	65,423	2,760	12	179	2.59	35.27	129,800

Coast Fork of Willamette River at Saginaw, Oreg.

Location.- Chain gage, lat. 43°50'5", long. 123°2'30", in NW¼ sec. 15, T. 20 S., R. 3 W., at Saginaw, 1 mile below mouth of Row River. Zero of gage is 595.47 feet above mean sea level (general adjustment of 1929).

Drainage area.- 529 square miles.

Records available.- October 1923 to September 1936 (incomplete, 1924-27).

Average discharge.- 10 years (1925-26, 1927-36), 1,076 second-feet.

Extremes.- Maximum discharge during year, 22,300 second-feet Jan. 13 (gage height, 11.7 feet, from graph based on gage readings); minimum discharge observed, 20 second-feet Sept. 29.

1923-36: Maximum discharge, 28,600 second-feet Feb. 20, 1927 (gage height, 12.9 feet); minimum, 7 second-feet July 31, 1928.

Remarks.- Records poor. No diversions or regulation above station. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 13					Jan. 14 to Sept. 30				
0.7	25	2.0	675	6.0	5,950	0.8	20	2.5	760
.9	60	2.5	1,150	7.0	7,710	1.1	74	3.0	1,230
1.1	115	3.0	1,690	8.0	10,000	1.4	172	4.0	2,510
1.4	250	4.0	2,900	9.0	12,700	1.7	295	6.0	5,680
1.7	440	5.0	4,310	11.0	19,500	2.0	450	8.0	10,000

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	131	*173	1,470	930	3,520	1,180	930	505	*210	90	56
2	28	115	*170	7,350	800	3,070	1,120	840	478	*210	85	121
3	*50	109	*160	4,310	800	2,650	1,180	885	*460	*200	85	135
4	*100	91	*155	11,300	760	2,100	2,230	1,250	450	*190	79	85
5	*110	91	*150	12,100	760	1,710	1,970	2,100	450	*180	79	74
6	*80	*120	182	5,780	690	1,470	*1,700	3,670	473	*175	74	74
7	*60	*220	370	3,720	710	1,290	1,970	2,650	*700	*170	74	70
8	*50	*300	760	3,300	1,290	1,120	2,510	1,840	*1,300	*170	74	61
9	48	*600	515	4,010	1,120	1,350	2,100	1,290	1,020	*178	65	52
10	48	516	555	5,610	1,020	1,120	2,510	1,120	840	*180	65	52
11	48	370	1,050	15,900	975	1,020	*2,900	975	725	*168	61	56
12	109	*1,000	6,630	11,600	1,470	950	*2,800	840	625	*175	74	61
13	500	1,800	3,300	18,400	1,840	975	2,100	1,250	565	*168	70	65
14	760	2,030	1,910	11,600	1,840	975	1,710	1,120	535	*155	65	172
15	370	555	*1,400	7,620	1,590	975	1,470	1,070	725	*147	61	165
16	344	*1,100	*1,000	7,620	1,230	975	1,350	930	*660	*140	61	96
17	155	*850	850	6,230	1,120	930	1,180	690	760	*135	61	79
18	103	675	855	4,140	1,120	840	1,070	760	800	*130	61	74
19	*95	500	*550	3,670	1,120	*800	975	565	690	*125	61	70
20	*90	*450	*500	3,220	1,710	*760	930	760	625	*120	56	61
21	*200	*430	*460	2,790	*5,000	*740	840	*1,600	565	*118	56	56
22	250	515	*430	2,510	8,290	725	760	1,350	*450	*115	56	52
23	250	850	*400	2,230	6,040	690	725	1,120	*400	*110	56	48
24	240	718	*380	2,230	4,140	*700	930	1,020	*360	*110	52	45
25	147	675	*400	2,100	3,070	*720	1,020	800	*325	*107	48	41
26	115	555	*400	*1,700	3,670	800	760	690	*290	*105	45	38
27	109	500	*450	1,590	3,820	1,070	725	690	*270	*100	41	23
28	103	518	*600	1,470	4,630	4,970	800	658	*250	*100	46	25
29	*130	283	805	*1,150	4,140	3,220	930	595	*230	*98	52	20
30	*150	240	1,470	1,020	-	1,710	1,020	*580	*220	*96	72	23
31	139	-	1,690	1,020	-	*1,500	-	565	-	96	52	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				5,009	760	28	162	0.306	.75	9,940		
November.....				16,765	2,030	91	557	1.05	1.17	33,140		
December.....				28,500	6,630	150	919	1.74	2.01	56,530		
Calendar year 1935.....				351,942	7,170	25	964	1.82	24.72	698,100		
January.....				168,760	18,400	1,020	5,444	10.3	11.87	354,700		
February.....				65,695	8,290	690	2,265	4.28	4.62	130,300		
March.....				45,425	4,970	690	1,465	2.77	3.19	90,100		
April.....				43,465	2,900	725	1,449	2.74	3.06	86,210		
May.....				35,163	3,670	565	1,134	2.14	2.47	69,740		
June.....				16,751	1,300	220	558	1.05	1.17	33,230		
July.....				4,601	210	96	145	.274	.32	8,930		
August.....				1,979	90	41	63.8	.121	.14	3,930		
September.....				2,048	172	20	66.3	.129	.14	4,060		
Water year 1935-36.....				434,002	18,400	20	1,186	2.24	30.51	860,800		

*Discharge computed on basis of records of tributaries and records for station at Springfield and those in basin of Middle Fork of Willamette River.

Row River at Star, Oreg.

Location.- Staff gage, lat. 43°44', long. 122°53', in N½ sec. 24, T. 21 S., R. 2 W., half a mile west of Star and 3 miles above Teeter Creek.

Drainage area.- 211 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge observed during period, 13,000 second-feet Jan. 13 (gage height, 12.0 feet, from graph based on gage readings); minimum, 13 second-feet Oct. 1 (gage height, 0.32 foot).

Maximum stage known, determined in 1935 from floodmarks, about 18 feet in February 1927.

Remarks.- Records good. No diversions above station; possibly slight regulation at times by logging ponds.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.3	12	3.5	695
.5	19	4.0	850
.7	30	4.5	1,100
1.0	51	5.0	1,410
1.4	88	6.0	2,200
1.8	138	7.0	3,250
2.2	206	8.0	4,650
2.6	300	9.0	6,450
3.0	423	10.0	8,500

Discharge, in second-feet, September 1935 to September 1936

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	13	73	94	760	372	1,780	540	500	250	111	46	37
2	-	14	59	83	4,170	327	1,620	442	442	238	111	48	66
3	-	15	51	78	1,780	300	1,410	500	480	216	105	45	46
4	-	32	46	73	7,040	287	1,050	1,000	900	206	99	45	39
5	-	32	48	68	4,790	262	900	805	1,480	196	94	43	35
6	-	25	68	94	1,940	300	760	715	1,780	216	94	42	32
7	-	21	145	152	1,220	540	625	1,220	1,280	406	88	40	30
8	-	20	152	372	1,100	442	540	1,410	1,000	670	88	39	29
9	-	19	442	216	1,780	388	760	1,160	805	500	99	37	28
10	-	18	216	442	2,480	356	625	1,340	670	406	99	37	26
11	-	26	131	670	8,080	500	500	1,700	580	342	99	36	25
12	-	94	760	2,480	4,470	805	500	1,700	500	300	94	36	30
13	-	131	715	1,050	7,480	1,160	500	1,340	423	250	88	35	40
14	-	388	356	625	4,960	900	480	1,050	670	227	78	35	83
15	-	138	250	460	3,350	715	500	900	540	356	78	35	51
16	36	111	580	372	2,890	625	460	850	460	314	73	34	39
17	-	73	406	300	2,020	580	423	715	423	356	68	34	36
18	-	55	262	250	1,410	580	406	525	372	308	66	32	30
19	19	45	196	216	1,480	580	342	500	356	342	68	31	29
20	-	39	160	177	1,490	900	356	460	460	287	64	31	29
21	-	83	160	152	1,160	2,780	356	460	805	250	64	30	28
22	-	152	227	138	1,100	3,230	342	423	715	216	59	30	28
23	18	78	327	124	1,220	2,020	327	423	540	196	59	30	25
24	-	59	287	118	1,100	1,550	327	580	460	177	59	29	25
25	-	55	168	124	950	1,160	314	500	372	160	55	29	24
26	14	48	168	118	805	1,220	327	372	356	152	51	29	23
27	-	43	152	168	760	1,410	900	372	423	138	51	28	23
28	-	43	124	250	670	2,020	1,700	442	356	131	51	28	23
29	-	78	111	423	580	1,940	1,100	460	327	124	49	28	22
30	-	68	99	625	490	-	805	540	300	118	49	28	22
31	-	68	-	760	423	-	670	-	250	-	48	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	2,084	388	13	67.2	0.318	0.37	4,130
November.....	6,939	760	46	231	1.09	1.22	13,760
December.....	11,272	2,480	68	364	1.73	1.99	22,360
Calendar year							
January.....	73,908	8,080	423	2,384	11.3	13.03	146,600
February.....	28,249	3,230	262	974	4.62	4.98	56,050
March.....	21,705	1,780	314	700	3.32	3.83	43,050
April.....	23,544	1,700	372	785	3.72	4.15	46,700
May.....	19,045	1,780	250	614	2.91	3.36	37,780
June.....	8,128	670	118	271	1.28	1.43	16,120
July.....	2,361	111	48	76.2	3.61	.42	4,680
August.....	1,076	46	28	34.7	1.64	.19	2,150
September.....	1,002	83	22	33.4	1.58	.18	1,990
Water year 1935-36	199,313	8,080	13	545	2.68	35.15	395,300

Mosby Creek near Cottage Grove, Oreg.

Location.- Staff gage, lat. 43°45', long. 122°59', in NW¼ sec. 18, T. 21 S., R. 2 W., 5 miles southeast of Cottage Grove.

Drainage area.- 85 square miles.

Records available.- February to September 1936.

Extremes.- Maximum discharge during period, 1,900 second-feet Feb. 21 (gage height, about 4.3 feet, from graph based on gage readings); minimum, 5 second-feet Sept. 29, 30 (gage height, 0.40 foot).

Remarks.- Records fair. No diversions or regulation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.4	5
.6	22
.8	50
1.0	91
1.3	175
1.6	282
2.0	460
2.5	715
3.0	990
3.5	1,300
4.0	1,660

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					-	560	229	111	61	32	12	8
2					-	460	188	106	61	32	12	17
3					-	370	182	97	54	29	12	14
4					-	282	488	215	54	27	12	11
5					-	229	415	370	47	27	12	11
6					-	195	325	535	61	27	11	9
7					-	163	370	482	78	24	11	9
8					-	139	392	282	156	22	11	9
9					-	156	325	201	169	29	11	8
10					-	133	304	163	127	27	9	8
11					144	111	325	127	101	32	9	6
12					222	122	304	106	87	27	9	6
13					222	116	282	96	73	24	9	11
14					282	111	208	182	69	22	9	24
15					215	122	169	144	96	22	9	20
16					182	116	150	116	101	20	8	12
17					160	106	127	101	127	20	8	11
18					160	96	111	87	122	18	8	11
19					160	87	101	32	96	18	8	11
20					325	82	82	144	78	18	8	9
21					1,110	82	82	215	69	16	8	9
22					1,230	82	82	188	61	16	8	8
23					1,050	82	78	156	54	16	8	8
24					688	91	111	127	50	16	8	6
25					535	111	116	111	47	16	8	6
26					715	111	87	91	40	14	6	6
27					715	175	90	87	37	14	6	6
28					825	935	101	82	34	14	6	6
29					688	535	133	87	34	14	6	5
30					-	392	133	69	32	14	6	5
31					-	304	-	65	-	12	6	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....				-	-	-	-	-	-			
February 11-29.....				9,888	1,230	144	509	5.99	4.23	19,180		
March.....				6,855	935	82	215	2.53	2.92	13,200		
April.....				6,070	488	78	202	2.38	2.66	12,040		
May.....				5,021	535	65	162	1.91	2.20	9,960		
June.....				2,276	169	32	75.9	.893	1.00	4,510		
July.....				659	32	12	21.3	.251	.29	1,310		
August.....				274	12	6	8.84	.104	.12	543		
September.....				290	24	5	9.67	.114	.13	575		
The period.....				30,913						61,300		

McKenzie River at McKenzie Bridge, Oreg.

Location.- Water-stage recorder, lat. 44°11', long. 122°7', in NE½ sec. 18, T. 16 S., R. 6 E., 1.7 miles east of McKenzie Bridge. Zero of gage is 1,418.92 feet above mean sea level (general adjustment of 1929).

Drainage area.- 345 square miles (revised) at measuring section three-quarters of a mile above gage.

Records available.- August 1910 to September 1936.

Average discharge.- 17 years (1913-14, 1915-16, 1918-21, 1923-25, 1926-36), 1,636 second-feet.

Extremes.- Maximum discharge during year, 8,350 second-feet Jan. 11 (gage height, 4.46 feet); minimum, 970 second-feet Nov. 2-7 (gage height, 1.00 foot).

1910-36: Maximum discharge, 18,000 second-feet Jan. 6, 1923 (gage height, 8.3 feet, from floodmarks at former gage at highway bridge); minimum, 805 second-feet Oct. 20, 1931.

Remarks.- Records excellent except those above 3,000 second-feet, which are fair. Daily discharge for Oct. 1-8 computed on basis of records of McKenzie River near Vida. No diversions or regulation above station. Water-stage recorder inspected by employee of U. S. Forest Service.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.0	970	2.6	2,880
1.2	1,120	3.0	3,550
1.4	1,300	3.4	4,270
1.7	1,620	3.8	5,020
2.0	1,990	4.2	5,780
2.3	2,420		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,000	977	1,000	1,460	1,400	1,620	1,400	2,130	1,680	1,460	1,220	1,100
2	1,000	970	1,000	3,640	1,400	1,740	1,390	2,130	1,680	1,460	1,210	1,090
3	1,010	970	1,000	2,500	1,380	1,800	1,400	2,130	1,620	1,460	1,200	1,070
4	1,020	970	998	4,450	1,360	1,600	1,380	2,200	1,620	1,460	1,200	1,070
5	1,010	970	998	3,820	1,340	1,740	1,350	2,500	1,620	1,460	1,190	1,060
6	1,000	970	1,020	2,800	1,360	1,740	1,340	2,340	1,620	1,400	1,190	1,060
7	1,010	970	1,060	2,420	1,320	1,680	1,360	2,200	1,630	1,400	1,180	1,060
8	1,000	977	1,100	2,200	1,290	1,680	1,400	2,130	1,740	1,390	1,170	1,060
9	998	1,030	1,070	2,340	1,270	1,860	1,400	2,200	1,620	1,400	1,170	1,060
10	991	998	1,100	3,520	1,260	1,800	1,510	2,340	1,680	1,380	1,170	1,050
11	998	998	1,170	5,800	1,260	1,680	1,740	2,420	1,620	1,380	1,160	1,050
12	1,020	1,100	1,200	4,340	1,280	1,740	1,990	2,420	1,620	1,370	1,160	1,050
13	1,070	1,060	1,200	4,360	1,350	1,680	2,060	2,340	1,620	1,360	1,160	1,070
14	1,060	1,030	1,160	3,820	1,310	1,680	2,060	2,420	1,620	1,340	1,160	1,060
15	1,030	1,080	1,130	3,350	1,280	1,680	2,130	2,340	1,620	1,330	1,160	1,060
16	1,010	1,130	1,110	3,210	1,270	1,620	2,270	2,340	1,680	1,330	1,140	1,040
17	1,000	1,080	1,100	2,800	1,260	1,620	2,340	2,200	1,680	1,320	1,140	1,030
18	998	1,050	1,080	2,570	1,250	1,560	2,340	2,130	1,620	1,310	1,120	1,030
19	998	1,030	1,070	2,420	1,240	1,560	2,270	2,060	1,620	1,310	1,110	1,030
20	1,000	1,030	1,060	2,340	1,250	1,560	2,270	2,130	1,560	1,300	1,110	1,030
21	1,020	1,020	1,050	2,270	1,680	1,560	2,340	2,130	1,560	1,290	1,100	1,030
22	1,010	1,030	1,040	2,040	1,920	1,560	2,420	2,060	1,560	1,280	1,100	1,030
23	1,000	1,060	1,030	1,390	1,800	1,510	2,420	1,990	1,560	1,270	1,100	1,030
24	998	1,050	1,030	1,860	1,680	1,510	2,640	1,990	1,510	1,270	1,100	1,030
25	998	1,040	1,040	1,800	1,620	1,460	2,640	1,990	1,510	1,260	1,090	1,020
26	991	1,030	1,040	1,740	1,560	1,460	2,420	1,990	1,510	1,260	1,090	1,010
27	991	1,030	1,120	1,680	1,560	1,620	2,270	1,920	1,510	1,250	1,090	1,010
28	998	1,020	1,130	1,560	1,560	1,620	2,200	1,860	1,460	1,240	1,090	1,010
29	998	1,020	1,140	1,510	1,560	1,560	2,200	1,800	1,460	1,240	1,090	1,010
30	991	1,010	1,330	1,510	-	1,510	2,130	1,800	1,460	1,230	1,080	1,010
31	984	-	1,460	1,460	-	1,460	-	1,740	-	1,230	1,070	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	31,202	1,070	984	1,007	2.92	3.37	61,930
November.....	30,690	1,130	970	1,023	2.74	3.31	60,370
December.....	34,116	1,460	998	1,101	3.19	3.68	67,690
Calendar year 1935.....	515,548	2,590	970	1,412	4.09	54.52	1,022,000
January.....	85,700	5,500	1,460	2,700	7.83	9.03	166,000
February.....	41,070	1,920	1,240	1,416	4.10	4.42	81,460
March.....	50,570	1,860	1,460	1,635	4.74	5.46	100,500
April.....	59,080	2,340	1,340	1,969	5.71	6.37	117,200
May.....	66,370	2,500	1,740	2,141	6.21	7.16	131,600
June.....	47,980	1,740	1,460	1,599	4.63	5.17	95,170
July.....	41,440	1,460	1,230	1,337	3.88	4.47	82,200
August.....	35,320	1,220	1,070	1,139	3.30	3.80	70,060
September.....	31,360	1,100	1,010	1,045	3.03	3.38	62,800
Water year 1935-36.....	553,008	5,500	970	1,511	4.38	59.62	1,097,000

McKenzie River near Vida, Oreg.

Location.- Water-stage recorder, lat. 44°07', long. 122°28', in NE¼ sec. 5, T. 17 S., R. 3 E., 1 mile above head of Martin Rapids and 5 miles east of Vida. Zero of gage is 855.56 feet above mean sea level (general adjustment of 1929).

Drainage area.- 930 square miles.

Records available.- September 1924 to September 1936. At Martin Rapids (gage heights only) June 1910 to March 1911.

Average discharge.- 12 years (1924-36), 3,633 second-feet.

Extremes.- Maximum discharge during year, 23,700 second-feet Jan. 4 (gage height, 8.28 feet); minimum, 1,500 second-feet Nov. 3 (gage height, 0.57 foot).
1924-36: Maximum discharge, 47,200 second-feet Feb. 20, 1927 (gage height, 14.2 feet); minimum, 1,260 second-feet Nov. 7, 1930, Sept. 17, Oct. 4, 8, 9, 1931 (gage height, 0.36 foot).
Flood of Jan. 6, 1923, reached a stage of 17.25 feet (estimated discharge, 60,000 second-feet).

Remarks.- Records good. No diversion or regulation above station. Water-stage recorder inspected by Eugene Water Board.

Rating table, water year, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.5	1,410	3.5	7,240
0.7	1,670	4.0	8,500
1.0	2,080	4.5	10,100
1.3	2,540	5.0	11,600
1.6	3,020	5.5	13,200
2.0	3,720	6.0	15,000
2.5	4,730	7.0	18,800
3.0	5,850	8.0	22,600

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,550	1,590	1,750	4,170	3,190	5,580	3,360	4,730	3,540	2,540	2,010	1,770
2	1,550	1,570	1,720	15,600	3,100	6,200	3,190	4,730	3,630	2,540	2,010	1,870
3	1,550	1,540	1,710	9,360	3,020	6,460	3,280	4,840	3,450	2,540	2,010	1,770
4	1,590	1,570	1,890	19,400	3,020	5,820	3,540	5,920	3,560	2,540	2,010	1,740
5	1,580	1,570	1,670	15,000	2,940	5,450	3,280	6,330	3,280	2,460	1,940	1,710
6	1,550	1,570	1,800	8,880	3,360	5,080	3,190	6,460	3,450	2,460	1,940	1,700
7	1,570	1,620	2,010	6,980	3,450	4,620	3,630	5,700	3,910	2,380	1,940	1,700
8	1,550	1,660	2,620	6,200	3,020	4,510	4,100	5,320	4,400	2,380	1,940	1,880
9	1,540	2,160	2,250	7,240	2,940	5,700	4,100	5,200	4,100	2,460	1,940	1,870
10	1,530	1,940	2,460	10,700	2,760	5,080	4,510	5,580	3,820	2,380	1,870	1,660
11	1,550	1,790	2,880	19,800	2,860	4,620	5,950	5,950	3,630	2,460	1,870	1,640
12	1,680	2,860	4,510	14,300	3,190	4,620	7,240	5,950	3,450	2,380	1,870	1,660
13	2,080	2,540	3,360	15,600	4,300	4,510	7,510	5,820	3,560	2,300	1,870	1,760
14	2,230	2,080	2,860	12,300	3,720	4,400	6,980	5,950	3,280	2,230	1,800	2,080
15	1,940	2,300	2,540	11,600	3,450	4,510	6,980	5,700	3,540	2,230	1,800	1,800
16	1,770	3,020	2,380	9,770	3,280	4,200	7,240	5,580	3,720	2,230	1,800	1,710
17	1,670	2,540	2,250	8,050	3,100	4,000	6,980	5,080	4,000	2,230	1,790	1,660
18	1,600	2,230	2,160	6,720	3,020	3,820	6,720	4,730	3,720	2,160	1,770	1,640
19	1,590	2,010	2,080	6,720	3,020	3,630	6,080	4,730	3,540	2,160	1,760	1,630
20	1,580	1,940	2,010	6,720	3,280	3,720	5,820	5,820	3,560	2,160	1,750	1,630
21	1,710	1,870	1,940	5,950	7,090	3,910	5,950	5,700	3,190	2,160	1,750	1,630
22	1,800	1,940	1,940	5,450	6,600	3,820	6,080	5,200	3,100	2,080	1,750	1,620
23	1,670	2,080	1,870	5,500	6,980	3,630	6,080	4,840	3,020	2,080	1,740	1,620
24	1,600	2,080	1,870	5,080	5,700	3,540	6,980	4,620	2,940	2,080	1,720	1,620
25	1,600	2,010	1,940	4,730	4,960	3,360	6,980	4,620	2,860	2,080	1,720	1,620
26	1,590	1,940	2,010	4,300	4,730	3,360	6,080	4,620	2,860	2,080	1,710	1,590
27	1,580	1,870	2,460	4,100	4,840	4,950	5,450	4,820	2,780	2,080	1,710	1,590
28	1,800	1,800	2,780	3,910	5,320	5,820	5,200	4,300	2,700	2,080	1,710	1,580
29	1,670	1,800	2,780	3,630	5,320	4,300	4,960	4,000	2,620	2,010	1,710	1,580
30	1,630	1,770	3,360	3,540	-	3,820	4,840	3,910	2,620	2,010	1,710	1,580
31	1,630	-	4,200	3,540	-	3,540	-	3,720	-	2,010	1,700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	51,360	2,230	1,530	1,657	1.78	2.05	101,900
November.....	59,260	3,020	1,540	1,975	2.12	2.36	117,500
December.....	73,810	4,510	1,670	2,581	2.56	2.95	146,400
Calendar year 1935.....	1,167,660	6,980	1,530	3,199	3.44	46.87	2,316,000
January.....	264,350	19,800	3,360	8,527	9.17	10.57	524,300
February.....	117,580	8,600	2,780	4,054	4.36	4.70	233,200
March.....	140,610	6,460	3,360	4,636	4.68	5.63	278,900
April.....	162,280	7,510	3,190	5,409	5.82	6.49	321,900
May.....	159,080	6,460	3,720	5,131	5.52	6.36	315,500
June.....	101,230	4,400	2,620	3,374	3.53	4.05	200,800
July.....	69,970	2,540	2,010	2,337	2.43	2.80	138,800
August.....	56,620	2,010	1,700	1,826	1.96	2.26	112,300
September.....	50,510	2,080	1,580	1,684	1.81	2.02	100,200
Water year 1935-36.....	1,306,630	19,800	1,530	3,570	3.84	52.24	2,592,000

Blue River near Blue River, Oreg.

Location.- Water-stage recorder, lat. 44°11', long. 122°17', near line between secs. 13 and 14, T. 16 S., R. 4 E., 3 miles above North Fork and $\frac{3}{4}$ miles northeast of Blue River, Oreg.

Drainage area.- 75 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge during period, 5,500 second-feet Jan. 4 (gage height, 6.29 feet); minimum, 18 second-feet Nov. 3 (gage height, 1.02 feet).
Maximum stage in recent years, about 7 feet, determined in 1935 from floodmarks.

Remarks.- Records good except those for Nov. 12 to Dec. 30, which are fair. No diversions or Regulation above station.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 12 to Dec. 30)

1.0	13	3.2	1,390
1.2	51	3.6	1,820
1.4	123	4.0	2,300
1.7	249	4.5	2,980
2.0	403	5.0	3,620
2.4	675	5.5	4,320
2.8	1,000	6.3	5,500

Discharge, in second-feet, september 1935 to September 1936

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	18	33	54	879	268	774	263	364	209	104	42	33
2	-	19	28	51	3,810	240	902	240	364	209	96	40	42
3	-	22	25	46	1,820	231	928	249	386	188	96	40	35
4	-	24	30	42	4,620	227	798	268	434	180	104	40	30
5	-	24	28	40	2,510	218	712	249	622	171	96	37	28
6	-	22	28	75	1,270	249	645	249	615	188	93	37	28
7	-	22	17	158	879	249	544	347	510	236	85	37	26
8	-	20	49	296	766	240	544	453	459	327	82	35	25
9	-	19	192	214	1,110	205	735	453	440	296	93	35	25
10	-	18	112	268	2,510	197	586	600	453	258	85	33	25
11	-	19	93	420	3,700	197	494	902	446	231	89	33	25
12	18	37	478	660	2,660	272	510	1,110	409	209	78	33	25
13	-	201	245	392	2,360	472	504	1,040	375	182	75	33	46
14	-	231	147	287	1,760	364	478	918	392	184	71	33	103
15	-	123	253	227	1,490	316	498	910	392	214	68	30	54
16	28	75	403	192	1,070	291	440	894	397	272	68	28	37
17	24	46	258	187	806	277	403	806	342	296	65	28	33
18	24	37	167	151	645	258	364	712	306	258	61	28	30
19	-	35	119	9	690	268	342	600	306	231	58	28	28
20	20	33	96	119	735	306	375	551	453	205	54	26	26
21	-	46	89	108	622	1,410	409	558	551	188	54	26	26
22	-	65	112	96	565	1,540	358	551	504	171	51	25	25
23	20	46	163	93	565	1,060	327	510	434	159	49	26	25
24	19	42	155	89	544	735	306	600	361	151	49	26	25
25	19	37	123	100	524	579	272	551	353	139	46	26	24
26	18	35	104	108	488	517	277	453	327	131	46	26	24
27	18	33	93	222	386	544	622	403	296	123	44	25	22
28	18	33	82	311	358	622	682	375	253	115	44	25	22
29	18	44	71	337	322	652	440	364	240	112	44	25	22
30	18	37	65	718	301	-	342	381	240	108	42	25	22
31	-	35	-	862	277	-	296	-	218	-	42	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-foot
October.....	1,518	231	18	49.0	0.653	0.75	3,010
November.....	3,878	478	25	129	1.72	1.92	7,690
December.....	7,104	862	40	229	3.05	3.52	14,090
Calendar year							
January.....	40,773	4,620	277	1,315	17.5	20.18	80,970
February.....	12,984	1,540	197	449	5.97	6.44	25,750
March.....	15,897	928	272	513	6.84	7.89	31,530
April.....	16,561	1,110	240	552	7.36	8.21	32,850
May.....	12,272	622	218	396	5.28	6.09	24,340
June.....	5,951	327	108	198	2.64	2.94	11,800
July.....	2,132	104	42	68.8	.917	1.06	4,230
August.....	956	42	25	30.8	.411	.47	1,900
September.....	947	108	22	31.6	.421	.47	1,880
Water year 1935-36.....	120,973	4,620	18	331	4.41	59.94	239,900

Mohawk River near Springfield, Oreg.

Location.- Chain gage, lat. 44°6', long. 122°57', in sec. 17, T. 17 S., R. 2 W., 1 mile above mouth and 4½ miles northeast of Springfield.

Drainage area.- 180 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge observed during period, 5,550 second-feet Jan. 11 (gage height, 17.04 feet); minimum, 13 second-feet Oct. 1 (gage height, 0.99 foot).

Remarks.- Records fair. Daily discharge for Oct. 17, Nov. 28, May 15, July 12 computed on basis of records on McKenzie River and Mill Creek. No diversions above gage; possibly some regulation from logging ponds.

Rating tables, 1935-36 (gage height, in feet, and discharge, in second-feet)

Sept. 3 to Jan. 11				Jan. 12 to Sept. 30			
1.0	14	6.0	1,210	1.0	14	6.0	1,350
1.5	79	8.0	1,870	2.0	187	8.0	2,030
2.0	170	10.0	2,590	3.0	445	11.0	3,170
2.5	272	12.0	3,380	4.0	740	14.0	4,410
3.0	382	15.0	4,640				
4.0	635	18.0	6,020				
5.0	910						

Discharge, in second-feet, September 1935 to October 1936

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	13	68	104	716	445	1,350	740	272	260	132	56	37
2	-	17	56	101	2,220	417	1,200	620	250	260	132	54	93
3	18	16	38	99	1,760	390	1,070	710	272	260	132	56	66
4	18	18	40	93	2,820	445	950	740	502	248	132	54	48
5	16	19	45	84	3,580	417	830	650	710	235	132	53	41
6	17	19	41	160	2,330	620	740	620	740	223	132	53	41
7	-	18	47	160	1,800	800	650	560	590	248	132	54	41
8	-	18	52	230	1,590	650	560	560	502	238	121	44	41
9	15	18	252	190	1,560	560	590	531	417	272	132	44	37
10	16	19	131	272	2,080	502	531	502	390	235	132	42	35
11	-	18	103	583	5,180	502	502	502	363	223	142	42	37
12	18	31	770	1,460	4,540	560	502	531	324	211	120	41	42
13	-	230	609	910	4,900	620	473	502	311	199	113	41	75
14	-	220	230	609	3,860	560	445	473	560	199	113	41	153
15	-	131	240	406	3,010	502	502	445	500	298	109	35	90
16	-	88	406	337	2,790	502	445	417	363	337	90	41	61
17	-	55	315	293	2,700	473	445	390	324	272	95	38	54
18	-	41	230	262	2,110	445	390	363	298	248	90	40	50
19	-	47	190	240	1,860	445	390	337	298	223	86	41	45
20	22	40	170	210	1,680	560	363	324	590	199	75	40	48
21	-	62	150	190	1,450	1,350	337	298	590	199	75	38	45
22	-	60	100	190	1,260	2,070	337	311	531	199	75	34	42
23	-	44	190	180	1,070	1,960	337	298	473	187	71	33	45
24	-	42	160	170	960	1,610	363	417	417	164	69	34	45
25	-	35	140	180	860	1,480	337	337	390	164	66	33	47
26	-	33	131	160	770	1,750	363	298	337	164	66	31	41
27	-	34	122	315	690	1,680	1,320	324	311	153	69	31	40
28	-	38	118	362	620	1,860	2,030	337	285	153	73	31	41
29	-	60	113	359	560	1,550	1,320	324	298	142	68	27	41
30	-	60	110	557	502	-	1,010	311	311	142	59	33	42
31	-	56	-	940	473	-	860	-	285	-	68	33	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	1,597	230	13	51.5	0.286	0.33	5,170
November.....	5,487	770	38	183	1.02	1.14	10,880
December.....	10,416	1,460	84	336	1.37	2.16	20,600
Calendar year							
January.....	62,301	5,180	473	2,010	11.2	12.91	123,600
February.....	25,695	2,070	390	586	4.92	5.31	50,970
March.....	21,542	2,030	337	695	3.85	4.45	42,730
April.....	13,772	740	298	459	2.55	2.94	27,320
May.....	12,814	740	260	413	2.39	2.64	25,420
June.....	6,615	337	142	220	1.22	1.36	13,120
July.....	3,101	142	59	100	.566	.64	6,150
August.....	1,268	56	27	40.9	.227	.26	2,520
September.....	1,564	153	35	52.1	.289	.32	3,100
Water year 1935-36.....	166,172	5,180	13	454	2.52	34.36	329,600

WILLAMETTE RIVER BASIN

Mill Creek at Wendling, Oreg.

Location.- Staff gage, lat. 44°11', long. 122°47', in sec. 11, T. 16 S., R. 1 W., 0.9 mile east of Wendling.

Drainage area.- 23 square miles.

Records available.- September 1935 to November 1936 (discontinued).

Extremes.- Maximum discharge observed during period, 805 second-feet Jan. 13 (gage height, 4.14 feet); minimum, 2.8 second-feet Oct. 1 (gage height, 1.05 feet).
Maximum stage in recent years, about 12 feet, determined in 1935 from floodmarks (discharge not determined).

Remarks.- Records fair. No diversions or regulation above station.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

1.0	2.4	2.4	123
1.2	5.4	2.8	250
1.4	12	3.2	419
1.7	30	3.6	589
2.0	60	4.1	805

Discharge, in second-feet, September 1935 to September 1936

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	2.8	9.8	16	119	65	178	113	50	41	19	8.3	19
2	-	2.9	8.3	16	314	63	152	106	47	42	20	8.3	16
3	-	3.9	7.4	15	201	60	136	106	44	39	21	8.3	8.3
4	-	3.9	7.1	14	761	66	123	104	78	37	24	8.0	7.1
5	-	3.6	7.4	14	461	60	112	101	144	37	19	8.0	6.8
6	-	3.6	7.4	30	335	129	101	96	136	42	19	7.7	6.6
7	-	3.9	7.7	31	276	96	91	91	114	53	19	7.7	6.0
8	-	3.9	8.3	33	246	88	86	85	96	49	19	7.7	5.7
9	-	3.6	53	37	267	74	82	80	84	40	20	7.4	5.7
10	-	3.2	19	38	482	72	76	74	72	35	19	7.4	5.4
11	2.9	4.5	17	186	718	79	70	70	65	33	18	7.7	5.4
12	2.9	11.0	106	193	675	79	68	66	60	30	17	7.1	6.6
13	-	56.0	53	115	761	88	70	64	54	29	16	7.1	12
14	-	32.0	33	88	503	82	73	60	61	42	16	6.8	14
15	-	19.0	53	69	419	76	73	58	55	50	14	6.8	9.0
16	-	12.0	52	58	461	72	70	55	60	44	14	6.6	7.4
17	-	8.3	40	50	356	73	66	52	55	39	14	6.6	6.6
18	-	7.1	32	43	314	69	63	49	52	35	12	6.6	6.0
19	-	6.6	35	38	276	66	59	46	59	32	12	6.0	5.7
20	3.2	7.1	24	36	242	76	55	45	85	30	12	6.0	6.0
21	-	3.3	22	33	197	293	54	43	90	28	12	5.7	5.7
22	-	7.4	29	32	160	272	52	42	79	27	11	6.3	5.4
23	-	6.3	26	30	142	267	53	41	68	26	11	5.7	5.0
24	-	5.0	25	30	131	208	60	65	61	25	11	6.0	6.0
25	-	5.4	24	30	115	242	60	50	58	26	11	5.4	5.7
26	-	5.2	21	29	106	267	63	42	54	24	10	5.2	5.4
27	-	5.2	20	53	96	242	482	48	50	23	9.8	5.0	5.2
28	-	9.8	19	55	88	267	335	56	50	22	9.4	4.5	5.0
29	-	9.8	18	64	82	225	171	58	47	21	9.4	5.0	5.4
30	-	8.3	17	136	76	-	144	54	44	20	9.0	5.4	6.0
31	-	12	-	131	72	-	127	-	41	-	8.7	5.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	281.6	56	2.8	9.08	0.395	0.46	559
November.....	781.4	106	7.1	26.0	1.15	1.26	1,550
December.....	1,743	193	14	56.2	2.44	2.81	3,460
Calendar year							
January.....	9,452	761	72	305	13.3	15.33	18,750
February.....	3,516	293	60	132	5.74	6.19	7,570
March.....	3,404	482	52	110	4.78	5.51	6,750
April.....	2,022	115	41	37.4	2.35	3.27	4,010
May.....	2,123	144	41	69.5	2.98	3.44	4,210
June.....	1,021	53	20	34.0	1.48	1.65	2,030
July.....	1,456.3	24	8.7	14.7	.639	.74	905
August.....	205.7	8.3	4.5	6.64	.289	.33	408
September.....	221.1	19	5.0	7.37	.320	.36	439
Water year 1935-36.....	25,527.1	761	2.8	69.7	3.05	41.35	50,640

Mill Creek at Wendling, Oreg.

(Continued)

Discharge, in second-feet, October 1 to November 30, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	5.7										
2	6.3	5.7										
3	6.3	6.0										
4	6.8	8.3										
5	7.4	7.7										
6	6.3	6.6										
7	5.7	6.3										
8	6.0	6.0										
9	6.0	6.0										
10	5.2	6.3										
11	5.4	6.3										
12	6.0	6.3										
13	6.3	6.3										
14	7.4	6.3										
15	6.6	6.3										
16	5.7	6.6										
17	5.2	7.7										
18	5.2	7.1										
19	5.4	6.6										
20	5.7	6.6										
21	5.7	6.6										
22	6.0	6.6										
23	6.0	6.6										
24	6.3	6.3										
25	6.3	6.3										
26	6.3	6.3										
27	6.0	6.0										
28	6.0	6.0										
29	6.0	6.0										
30	6.0	5.7										
31	5.7	-										
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				187.2	7.4	5.2	6.04	0.363	0.50	371		
November.....				193.3	8.3	5.7	6.44	0.380	.31	383		
December.....				-	-	-	-	-	-	-		
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

Long Tom River near Noti, Oreg.

Location.- Staff gage, lat. 44°3', long. 123°26', in sec. 33, T. 17 S., R. 6 W., an eighth of a mile above railroad bridge, 1 mile below Noti Creek, and 1½ miles southeast of Noti.

Drainage area.- 88 square miles.

Records available.- October 1935 to September 1936.

Extremes.- Maximum discharge during year, 3,970 second-feet Jan. 13 (gage height, 18.3 feet, from graph based on gage readings); minimum observed discharge, 12 second-feet Sept. 11, 12, 24 (gage height, 0.86 foot).

Remarks.- Records good except those between 250 and 500 second-feet, which are fair. No diversions above station. Slight diurnal fluctuation caused by operation of logging pond above Noti.

Rating table, water-year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.8	10	6.0	635
1.0	18	7.0	755
1.3	35	8.0	900
1.6	59	10.0	1,210
2.0	106	12.0	1,590
2.5	185	14.0	2,090
3.0	277	16.0	2,820
3.5	356	18.0	3,800
4.0	423	20.0	5,000
5.0	540		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	32	47	508	222	569	277	100	80	45	20	17
2	20	30	48	1,150	203	508	250	106	86	44	23	17
3	22	23	45	870	194	460	310	100	78	45	25	20
4	20	27	47	1,190	259	410	326	120	76	42	22	19
5	20	28	47	1,590	250	370	277	168	74	44	22	15
6	17	25	50	1,040	341	341	259	151	70	43	22	17
7	18	27	106	915	448	310	241	120	72	42	22	17
8	18	27	212	855	384	294	222	113	76	44	19	18
9	15	27	151	825	328	277	212	106	71	44	20	17
10	16	39	161	975	277	259	203	106	67	44	23	17
11	15	36	222	2,390	277	241	185	93	63	43	20	13
12	20	143	605	3,090	341	241	168	93	63	41	21	13
13	73	151	410	3,580	277	222	168	86	65	42	20	18
14	74	79	241	2,190	268	222	160	160	79	38	20	28
15	63	71	168	1,350	241	212	151	120	73	38	17	24
16	44	128	120	1,160	222	203	143	113	76	36	19	20
17	25	113	106	1,130	212	194	143	93	74	36	22	16
18	23	86	106	865	203	185	135	93	69	33	19	18
19	22	65	93	729	203	176	120	93	65	33	19	22
20	25	63	80	615	212	160	128	250	59	35	18	16
21	35	63	80	550	484	160	120	203	55	32	18	18
22	38	60	80	496	1,150	160	180	160	55	31	17	16
23	30	86	69	460	1,150	160	120	168	53	30	18	16
24	26	93	71	410	811	168	136	118	52	30	20	13
25	25	93	77	370	646	168	120	106	50	25	20	14
26	22	68	93	341	870	151	113	100	50	28	20	16
27	23	61	168	310	811	310	106	93	50	30	18	14
28	28	56	268	294	840	578	120	100	47	28	18	13
29	33	54	310	259	680	448	113	93	48	27	18	14
30	35	48	423	241	-	384	106	86	46	25	16	15
31	33	-	587	232	-	341	-	86	-	24	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	897	74	15	28.9	0.328	0.38	1,780
November.....	1,207	151	25	65.6	.723	.81	3,780
December.....	5,261	605	45	170	1.93	2.22	10,470
Calendar year							
January.....	31,000	3,580	232	1,000	11.4	13.14	61,490
February.....	12,802	1,150	194	441	5.01	5.40	25,390
March.....	8,882	578	151	287	3.26	3.78	17,620
April.....	5,259	328	106	175	1.99	2.22	10,430
May.....	3,652	250	86	118	1.34	1.54	7,240
June.....	1,942	86	46	64.7	.735	.82	3,850
July.....	1,122	45	24	36.2	.411	.47	2,230
August.....	616	25	16	19.9	.226	.26	1,220
September.....	511	28	13	17.0	.193	.22	1,010
Water year 1935-36.....	73,871	3,580	13	202	2.30	31.24	146,500

Long Tom River at Monroe, Oreg.

Location.— Staff gage, lat. 44°18'55", long. 123°17'45", in NE¼ sec. 33, T. 14 S., R. 5 W., at Monroe, a quarter of a mile below mouth of Shafer Creek. Zero of gage is 282.27 feet above mean sea level (general adjustment of 1929).

Drainage area.— 391 square miles.

Records available.— November 1920 to September 1936 (1925-27 incomplete).

Average discharge.— 13 years (1921-25, 1927-36), 687 second-feet.

Extremes.— Maximum discharge observed during year, 15,300 second-feet Jan. 13, 14 (gage height, 16.1 feet); minimum, 14 second-feet Sept. 29 (gage height, 0.34 foot).
1920-36: Maximum discharge, about 18,600 second-feet Jan. 7, 1923; minimum, 8 second-feet Sept. 5-19, 23, 1924.

Maximum stage known, 281.8 feet above mean sea level in February 1890, from flood-marks at bridge at Monroe; corresponding stage at gage, about 19 feet (discharge not determined).

Remarks.— Records fair. No diversions above station. Some fluctuation at low stages, owing to pondage at mill dam at Monroe.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.3	12	2.5	305	8.0	1,800
.5	24	3.0	398	9.0	2,150
.7	43	3.5	477	10.0	2,520
.9	66	4.0	584	11.0	3,040
1.2	106	5.0	840	12.0	4,100
1.6	164	6.0	1,140	14.0	8,100
2.0	225	7.0	1,460	16.0	14,800

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	33	106	1,870	540	2,920	1,020	257	172	79	35	18
2	16	37	99	2,520	513	2,330	730	241	172	76	33	18
3	17	33	92	3,110	477	1,940	750	225	164	74	31	21
4	16	33	86	3,680	497	1,590	990	241	164	72	29	21
5	17	33	79	4,420	584	1,260	1,020	239	156	71	29	23
6	13	31	86	4,940	629	1,110	900	354	149	69	31	21
7	21	31	120	4,940	780	930	405	149	69	26	21	20
8	20	34	149	4,100	990	810	584	393	142	59	29	20
9	18	34	225	3,560	1,020	725	540	321	142	64	28	18
10	18	36	321	3,680	900	652	497	273	149	64	28	18
11	20	37	371	4,940	750	606	458	241	134	64	26	18
12	23	45	606	15,000	840	562	458	225	127	66	18	18
13	26	92	1,020	15,300	950	540	358	202	120	66	21	19
14	37	106	1,260	15,300	370	518	371	225	120	66	22	21
15	69	209	1,200	8,880	676	518	337	305	127	61	24	20
16	76	202	840	6,100	629	497	321	405	142	59	25	23
17	86	179	584	5,120	562	477	305	354	156	52	24	28
18	66	179	422	4,940	518	440	305	275	179	50	21	24
19	45	209	354	4,100	497	405	298	241	186	52	21	21
20	37	194	305	3,260	540	371	273	225	164	47	23	20
21	33	149	257	2,650	1,080	354	257	257	142	47	22	21
22	33	134	225	2,180	2,800	337	257	321	127	45	21	20
23	33	142	209	1,800	4,590	337	257	337	113	43	21	20
24	35	156	194	1,490	5,120	337	257	239	106	41	20	18
25	33	194	194	1,260	4,260	337	273	257	99	39	18	18
26	29	194	217	1,110	3,450	354	273	225	92	39	20	17
27	28	179	371	960	3,260	900	257	202	92	38	21	16
28	31	156	652	840	3,350	1,460	241	186	92	37	20	15
29	26	134	990	725	3,260	1,560	257	172	86	37	20	14
30	25	120	1,200	652	-	1,690	273	186	79	37	20	15
31	31	-	1,630	584	-	1,360	-	136	-	35	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,000	86	16	32.3	0.035	0.10	1,990
November.....	3,345	209	31	112	.285	.32	6,630
December.....	14,464	1,630	79	467	1.19	1.37	28,690
Calendar year 1935.....	209,846	5,700	13	575	1.47	19.96	416,200
January.....	132,011	15,300	584	4,258	10.9	12.57	261,800
February.....	44,947	5,120	477	1,550	3.96	4.27	89,150
March.....	28,237	2,920	337	911	2.33	2.59	56,990
April.....	13,893	1,020	241	453	1.18	1.32	27,550
May.....	8,308	405	172	268	.685	.79	16,480
June.....	4,042	166	79	135	.545	.58	8,020
July.....	1,718	79	35	55.4	.142	.16	3,410
August.....	747	35	18	24.1	.062	.07	1,480
September.....	586	28	14	19.5	.050	.06	1,160
Water year 1935-36.....	253,283	15,300	14	692	1.77	24.10	502,300

Coyote Creek near Elmira, Oreg.

Location.- Staff gage, lat. 44°4'15", long. 123°17'25", at southwest corner of sec. 22, T. 17 S., R. 5 W., at road crossing 3 miles east of Elmira. Zero of gage is 353.7 feet above mean sea level (general adjustment of 1929).

Drainage area.- 123 square miles.

Records available.- October 1935 to December 1936 (discontinued).

Extremes.- Maximum discharge observed during period, 5,000 second-feet Jan. 13 (gage height, 10.0 feet); minimum, 0.2 second-foot Oct. 2, 4, 1935 (gage height, 0.92 foot). Maximum stage known, about 13.5 feet, probably Dec. 23, 1935, from floodmarks noted in 1935 (discharge not determined).

Remarks.- Records poor. Drainage area at station and measurements of flood discharge are uncertain because of overflow in wide valley at gage merging into overflow of other streams; flood measurements include all flow crossing road for 1½ miles west and 2 miles east of station, which is considered to be the total discharge from the tributary area. No diversions or artificial regulation.

Rating tables, 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 5-29, Aug. 15 to Dec. 3)

Oct. 1 to Apr. 28					Apr. 29 to Dec. 3				
0.9	0.1	2.6	146	6.0	1.1	0.3	2.3	78	
1.2	4	3.0	227	7.0	1.3	2	2.7	140	
1.5	17	3.5	340	8.0	1.5	7			
1.8	41	4.0	460	9.0	1.7	16			
2.2	85	5.0	745	10.0	2.0	42			

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	3	20	610	104	590	185	38	25	10	3	.7
2	.2	4	18	1,170	96	436	175	36	23	9	3	.9
3	.3	3	17	1,170	90	364	227	34	25	9	2	1
4	.2	3	16	1,450	120	271	271	34	23	9	2	.9
5	.6	3	14	1,310	120	238	175	68	22	9	2	1
6	.6	3	16	1,890	165	196	156	100	23	9	2	1
7	.5	3	45	1,080	282	175	137	92	25	9	2	.9
8	1	3	111	1,000	206	156	104	73	28	8	2	.9
9	1	3	111	1,040	185	156	104	59	27	8	1	.7
10	1	3	96	1,220	156	137	90	53	25	9	1	.6
11	1	3	104	4,480	156	120	83	49	23	9	1	.6
12	1	3	620	4,100	249	120	83	44	20	8	1	.6
13	2	53	535	4,740	185	120	77	38	19	8	1	.4
14	5	71	340	2,940	156	111	71	92	20	8	1	.6
15	18	37	227	1,810	146	111	71	132	32	6	1	.9
16	15	37	156	1,890	137	104	67	92	53	6	1	2
17	8	56	120	1,810	120	96	68	78	6	1	1	
18	6	96	111	1,270	111	90	53	58	5	1	1	
19	4	41	71	920	120	83	51	53	42	5	1	1
20	3	32	60	690	227	83	49	65	30	5	.9	.9
21	3	34	48	485	960	83	47	63	28	5	.9	.9
22	3	34	43	388	2,530	77	46	60	22	4	.9	.8
23	3	71	41	294	2,060	71	44	53	19	4	.9	.7
24	3	77	39	249	1,390	83	46	44	16	4	.9	.7
25	3	58	50	216	1,120	96	44	40	15	4	.9	.6
26	2	56	58	185	1,040	83	42	38	14	3	.9	.6
27	2	39	111	156	1,000	185	40	36	13	3	.9	.4
28	2	30	317	146	1,080	560	42	34	13	3	.9	.4
29	2	26	412	128	815	510	57	40	12	3	.9	.3
30	2	23	460	120	-	436	51	38	11	3	.9	.3
31	3	-	620	111	-	260	-	36	-	3	.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	98.7	18	0.2	3.18	0.326	0.03	196
November.....	872	77	3	29.1	.237	.26	1,750
December.....	4,992	620	14	161	1.31	1.51	9,900
Calendar year							
January.....	38,958	4,740	111	1,257	10.2	11.76	77,270
February.....	15,126	2,530	90	522	4.24	4.57	30,000
March.....	6,201	590	71	200	1.83	1.88	12,300
April.....	2,748	271	40	91.6	.745	.83	5,450
May.....	1,760	132	34	56.8	.462	.53	3,450
June.....	779	78	11	26.0	.211	.24	1,550
July.....	194	10	3	6.28	.051	.06	385
August.....	39.8	3	.9	1.28	.010	.01	79
September.....	23.3	2	.3	.78	.0063	.007	46
Water year 1935-36.....	71,791.8	4,740	.2	196	1.59	21.39	142,400

Coyote Creek near Elmira, Oreg.

(Continued)

Discharge, in second-feet, October 1 to December 3, 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.9	1									
2	.4	.9										
3	.4	.9										
4	.5	1										
5	.8	.9										
6	.8	.9										
7	.6	.9										
8	.6	1										
9	.6	1										
10	.6	1										
11	.6	1										
12	.6	1										
13	.6	1										
14	.5	1										
15	.4	1										
16	.4	1										
17	.4	1										
18	.3	1										
19	.3	1										
20	.3	1										
21	.3	1										
22	.4	1										
23	.4	1										
24	.5	1										
25	.5	1										
26	.7	2										
27	.9	2										
28	.7	2										
29	.7	1										
30	.7	1										
31	.9	-										
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				16.6	0.9	0.3	0.54	0.0044	0.005	33		
November.....				32.4	2	.9	1.08	.0088	.01	64		
December.....				-	-	-	-	-	-	-		
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
Water year												

WILLAMETTE RIVER BASIN

Calapooya River at Holley, Oreg.

Location.- Staff gage, lat. 44°21', long. 122°47', near line between secs. 14 and 15, T. 14 S., R. 1 W., a quarter of a mile southwest of Holley and 4 miles above Brush Creek. Zero of gage is 527.24 feet above mean sea level (subject to change, for the general adjustment of 1929).

Drainage area.- 99 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge during period, 6,200 second-feet Jan. 4 (gage height, about 9.2 feet, from graph based on gage readings); minimum, 17 second-feet Oct. 1, 2. Maximum stage known, 10.6 feet, probably in February 1927, from floodmarks noted in 1935 (discharge not determined).

Remarks.- Records fair. No diversions or regulation above station.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.6	16	3.0	740
.6	32	3.5	1,030
1.0	68	4.0	1,350
1.3	107	5.0	2,040
1.6	172	6.0	2,810
2.0	295	7.0	3,740
2.5	495	8.0	4,810

Discharge, in second-feet, September 1935

Sept. 19	28	Sept. 25	23
20	25	26	23
23	22	27	23
24	23	30	17

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	44	87	740	295	1,030	450	260	198	113	51	30
2	17	40	84	2,570	278	1,030	410	244	227	109	51	70
3	19	38	79	1,620	260	970	450	244	198	111	50	47
4	21	39	78	4,120	260	795	540	390	185	105	48	39
5	21	37	73	2,980	244	685	450	740	172	113	47	34
6	20	34	91	1,760	370	610	410	795	172	100	45	32
7	19	42	119	1,220	450	512	472	610	192	96	44	30
8	18	57	227	1,090	330	472	585	495	430	94	44	29
9	18	227	172	1,350	295	610	540	410	312	103	43	28
10	18	149	198	2,190	295	495	562	370	260	102	42	28
11	19	94	350	4,370	278	430	740	330	212	111	42	28
12	32	795	1,150	5,840	410	480	795	295	198	96	40	30
13	227	450	610	4,150	740	430	795	278	185	89	39	35
14	227	244	450	2,490	518	430	635	450	160	103	40	100
15	172	260	350	2,040	430	562	585	390	295	81	39	81
16	96	430	295	1,690	370	472	540	390	330	79	38	48
17	70	380	244	1,350	330	430	472	370	390	76	37	38
18	54	244	212	1,090	330	390	450	330	330	75	37	35
19	44	185	1,090	312	350	370	295	260	72	36	31	
20	39	160	172	1,160	390	330	330	740	227	70	34	30
21	48	138	160	670	1,480	330	312	850	198	68	33	29
22	76	149	145	860	1,760	312	312	685	185	66	32	28
23	60	160	138	740	1,410	295	295	540	172	64	32	28
24	50	149	131	685	1,090	295	390	450	160	62	32	27
25	42	131	136	610	970	278	370	390	149	61	32	27
26	38	123	131	540	1,030	278	312	330	142	60	31	26
27	34	111	198	472	1,030	1,220	295	295	136	58	30	25
28	34	105	330	430	1,150	1,280	312	278	131	57	30	25
29	52	100	350	390	1,030	795	278	260	123	55	29	24
30	58	93	685	350	-	635	278	244	119	54	29	25
31	47	-	910	312	-	540	-	227	-	52	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,707	227	17	55.1	0.557	0.64	3,390
November.....	2,178	795	34	173	1.75	1.95	10,270
December.....	8,540	1,150	73	275	2.78	3.20	16,940
Calendar year							
January.....	49,309	4,370	312	1,591	16.1	18.56	97,880
February.....	19,135	1,760	244	625	6.31	6.90	35,970
March.....	17,747	1,280	278	572	5.78	6.66	35,200
April.....	13,715	795	278	487	4.62	5.16	27,200
May.....	12,975	850	227	419	4.23	4.88	25,740
June.....	6,454	430	119	215	2.17	2.42	12,800
July.....	2,555	113	52	82.4	.832	.96	5,070
August.....	1,185	51	28	38.2	.386	.44	2,350
September.....	1,089	100	24	36.3	.367	.41	2,160
Water year 1935-36.....	138,589	4,370	17	379	3.83	52.08	274,900

North Santiam River at Detroit, Oreg.

Location.- Water-stage recorder, lat. 44°43', long. 122°0', in NE¼ sec. 12, T. 10 S., R. 5 E., 1 mile east of Detroit. Zero of gage is 1,475.4 feet above mean sea level.

Drainage area.- 224 square miles (revised).

Records available.- January 1907 to October 1909, October 1928 to September 1936. Comparable records at gage above Boulder Creek near Hoover August 1910 to October 1913.

Average discharge.- 10 years (1907-8, 1910-11, 1928-36), 904 second-feet.

Extremes.- Maximum discharge during year, 6,500 second-feet Jan. 11 (gage height, 6.62 feet); minimum, 335 second-feet Nov. 3 (gage height, 0.58 foot).
1907-9, 1928-36: Maximum discharge, 15,000 second-feet Mar. 31, 1931 (gage height, about 12.0 feet); minimum, 295 second-feet Oct. 9-12, 14-16, 20, 21, 1931.

Remarks.- Records excellent. No diversions or regulation above station. Water-stage recorder inspected by employee of U. S. Forest Service.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.5	315	2.5	1,290
.7	370	3.0	1,650
.9	435	3.5	2,070
1.1	510	4.0	2,550
1.4	650	4.5	3,120
1.7	810	5.0	3,780
2.1	1,040	6.0	5,390

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	370	370	438	1,040	728	1,160	810	1,540	1,130	675	474	470
2	373	361	432	3,240	700	1,260	782	1,570	1,130	675	482	482
3	382	364	424	2,350	700	1,360	782	1,690	1,070	675	482	446
4	373	387	418	5,210	700	1,360	755	1,940	1,010	675	486	435
5	382	370	410	3,920	675	1,320	728	2,120	1,010	675	486	435
6	376	370	446	2,450	700	1,280	700	1,890	1,070	650	474	424
7	373	367	506	1,850	675	1,190	755	1,770	1,320	625	463	421
8	373	373	625	1,570	625	1,220	782	1,650	1,260	600	460	414
9	370	460	578	1,650	625	1,500	810	1,690	1,190	600	460	407
10	364	407	625	2,860	600	1,400	892	1,890	1,130	625	460	404
11	373	446	675	5,210	625	1,290	1,220	2,020	1,100	550	456	404
12	452	578	892	4,070	728	1,320	1,650	2,070	1,070	600	449	410
13	675	510	755	3,640	838	1,290	1,940	2,070	1,040	578	449	438
14	578	463	675	2,770	782	1,260	2,020	2,250	1,010	578	449	502
15	502	555	600	2,250	723	1,190	2,200	2,300	1,070	555	449	460
16	446	650	578	1,890	700	1,130	2,500	2,200	1,070	555	449	428
17	418	555	550	1,610	675	1,100	2,500	1,890	1,190	555	442	418
18	404	506	512	1,430	675	1,040	2,490	1,770	1,070	555	435	407
19	394	470	494	1,360	650	1,010	2,200	1,690	980	550	435	404
20	388	446	478	1,290	675	1,010	2,120	1,650	920	550	432	400
21	407	438	466	1,220	1,210	1,070	2,120	1,570	892	550	435	400
22	404	463	456	1,130	1,690	1,010	2,120	1,500	920	542	432	394
23	398	555	446	1,100	1,540	980	2,070	1,480	892	524	428	381
24	382	506	446	1,070	1,320	950	2,200	1,430	865	510	424	394
25	379	514	490	1,010	1,220	920	2,200	1,500	810	502	421	385
26	379	498	514	950	1,130	892	1,940	1,570	782	502	418	376
27	376	482	728	920	1,130	1,070	1,810	1,570	755	498	418	376
28	385	470	728	865	1,130	1,100	1,690	1,460	728	498	418	376
29	391	456	728	858	1,130	980	1,610	1,320	700	494	418	376
30	379	446	755	810	782	892	1,540	1,220	700	490	414	376
31	376	-	1,040	-	-	865	-	1,160	-	482	410	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	12,612	675	364	407	1.82	2.10	25,020
November.....	13,816	650	361	461	2.06	2.30	27,400
December.....	18,028	1,040	410	582	2.60	3.00	35,760
Calendar year 1935.....	302,271	1,980	361	828	3.70	49.83	599,600
January.....	62,355	5,210	782	2,011	8.98	10.35	123,700
February.....	26,304	1,690	600	873	3.90	4.21	50,190
March.....	35,399	1,500	865	1,142	5.10	5.88	70,210
April.....	47,846	2,500	700	1,595	7.12	7.94	94,900
May.....	53,420	2,300	1,160	1,723	7.59	8.87	106,000
June.....	29,884	1,320	700	996	4.45	4.96	59,270
July.....	17,753	675	482	574	2.65	2.95	35,290
August.....	13,606	456	410	445	1.99	2.29	27,390
September.....	12,453	502	376	415	1.85	2.06	24,700
Water year 1935-36.....	342,718	5,210	361	936	4.18	56.91	679,800

North Santiam River at Mehama, Ore.

Location.- Water-stage recorder, lat. 44°47', long. 122°37', in NW¼ sec. 18, T. 9 S., R. 2 E., at Mehama, half a mile below Little North Santiam River. Zero of gage is 601.78 feet above mean sea level (general adjustment of 1929).

Drainage area.- 665 square miles.

Records available.- July 1905 to March 1907, October 1910 to September 1914, September 1921 to September 1936.

Average discharge.- 19 years (1905-6, 1911-14, 1921-36), 3,272 second-feet.

Extremes.- Maximum discharge during year, 30,600 second-feet Jan. 4 (gage height, 10.98 feet); minimum, 517 second-feet Oct. 1, 2 (gage height, 1.56 feet).

1905-7, 1910-14, 1921-36: Maximum discharge, 62,900 second-feet Nov. 20, 1921, Jan. 6, 1923 (gage height, 17.5 feet); minimum, 400 second-feet Sept. 29, Oct. 13, 1924; minimum daily discharge, 420 second-feet Sept. 18, 1924.

Remarks.- Records good. Slight regulation of low-water flow by mill dam at Mill City. No diversions for irrigation above station. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.5	475	5.0	6,350
1.7	620	5.5	7,690
2.0	885	6.0	9,150
2.5	1,440	6.5	10,800
3.0	2,160	7.0	12,600
3.5	3,040	8.0	16,800
4.0	4,030	10.0	25,700
4.5	5,140	12.0	35,600

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	524	376	1,900	5,020	2,000	5,140	2,490	3,620	2,400	1,400	800	628
2	531	636	1,120	17,500	1,850	5,610	2,320	3,720	2,580	1,380	781	731
3	538	605	1,030	10,800	1,780	5,980	2,400	4,350	2,400	1,370	763	700
4	628	644	1,020	26,200	1,780	5,490	2,320	5,260	2,320	1,340	754	644
5	612	628	985	17,400	1,780	4,300	2,160	6,870	2,160	1,390	745	644
6	568	628	1,140	10,100	2,320	4,460	2,080	6,610	2,320	1,260	727	628
7	552	644	1,440	7,410	2,320	3,920	2,400	5,490	2,940	1,210	709	612
8	545	692	2,490	6,480	1,920	4,030	2,650	4,800	3,320	1,190	700	598
9	532	1,500	2,000	7,140	1,780	6,100	2,940	4,570	3,230	1,190	692	590
10	531	1,320	2,320	12,600	1,710	4,910	3,520	4,910	2,850	1,250	692	582
11	545	1,190	2,760	22,700	1,710	4,240	5,370	5,260	2,670	1,380	676	575
12	628	3,180	5,140	15,600	3,750	4,350	7,140	5,020	2,490	1,300	676	590
13	1,700	2,680	3,720	15,400	3,020	4,350	7,690	4,910	3,220	1,190	663	660
14	2,080	1,850	2,850	11,100	3,520	4,240	7,140	5,730	2,320	1,120	668	915
15	1,730	2,150	2,400	9,150	2,940	4,460	7,140	6,350	2,670	1,090	668	886
16	1,220	3,820	2,080	7,140	2,580	3,920	7,970	6,430	3,140	1,040	660	700
17	985	2,850	1,950	5,980	2,240	3,520	7,410	5,370	3,320	1,020	652	680
18	858	2,080	1,710	8,140	2,160	3,320	6,870	4,570	3,140	985	644	636
19	781	1,710	1,540	5,950	2,080	3,040	5,980	4,460	2,670	955	644	620
20	754	1,450	1,440	5,980	2,080	3,140	5,610	5,730	2,400	945	644	612
21	847	1,370	1,340	5,140	3,180	3,320	5,610	6,220	2,240	925	636	605
22	996	1,440	1,280	4,460	9,150	3,140	5,610	5,140	2,130	905	636	590
23	958	2,320	1,220	4,140	7,410	2,940	5,260	4,570	2,080	885	628	590
24	790	2,950	1,210	3,620	5,490	2,760	5,730	4,240	1,920	866	628	575
25	754	2,000	1,330	3,620	4,880	2,580	5,950	4,030	1,750	847	620	575
26	736	1,730	1,530	3,140	4,460	2,580	4,910	4,140	1,710	828	620	560
27	718	1,580	2,490	2,850	4,800	4,350	4,460	4,030	1,640	838	612	552
28	727	1,440	3,230	2,670	5,020	5,020	4,140	3,620	1,570	813	598	552
29	790	1,340	2,940	2,400	4,800	3,720	3,920	3,140	1,480	809	598	545
30	745	1,270	3,720	2,240	5,140	3,520	5,260	2,760	1,450	809	598	545
31	700	-	5,490	2,080	-	2,760	-	2,580	-	800	598	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	25,565	2,080	524	825	1.24	1.43	50,710
November.....	47,953	3,820	605	1,598	2.40	2.68	95,110
December.....	66,065	5,490	985	2,131	3.20	3.69	131,000
Calendar year 1935.....	873,192	7,140	524	2,406	3.32	49.11	1,742,000.
January.....	262,150	26,200	2,080	8,456	12.7	14.64	520,000
February.....	96,320	9,150	1,710	3,321	4.99	5.33	191,000
March.....	125,430	6,100	2,580	4,046	6.08	7.01	243,800
April.....	143,140	7,970	2,080	4,771	7.17	8.00	283,900
May.....	148,560	6,870	2,580	4,792	7.21	8.31	294,600
June.....	71,860	3,320	1,420	2,339	3.59	4.00	142,100
July.....	33,335	1,400	800	1,075	1.62	1.97	66,120
August.....	20,735	800	598	669	1.01	1.16	41,150
September.....	18,930	915	545	631	.949	1.06	37,550
Water year 1935-36.....	1,059,833	26,200	524	2,896	4.35	59.23	2,102,000

Breitenbush River above French Creek, near Detroit, Oreg.

Location.- Water-stage recorder, lat. 44°45', long. 122°8', in NE $\frac{1}{4}$ sec. 36, T. 9 S., R. 5 E., 0.1 mile below Canyon Creek, $1\frac{1}{2}$ miles above French Creek, and 2 miles east of Detroit. Zero of gage is 1,559.4 feet above mean sea level.

Drainage area.- 108 square miles.

Records available.- June 1932 to September 1936. October 1910 to October 1913 fragmentary record below French Creek comparable except for inflow from French Creek.

Extremes.- Maximum discharge during year, 5,530 second-feet Jan. 4 (gage height, 7.26 feet); minimum, 108 second-feet Oct. 1-3 (gage height, 0.50 foot).
1932-36: Maximum discharge, 8,100 second-feet Dec. 22, 1933 (gage height, 9.08 feet); minimum, 93 second-feet Sept. 27, 1934 (gage height, 0.42 foot).

Remarks.- Records excellent except those for Sept. 8-14, 16-23, which were based on records of North Santiam River at Detroit and are fair. No diversion or regulation above station. Water-stage recorder inspected by employee of U. S. Forest Service.

Rating table, water year 1945-36 (gage height, in feet, and discharge, in second-feet)

0.4	94	2.5	765
.6	120	3.0	1,080
.8	151	3.5	1,400
1.0	190	4.0	1,780
1.3	265	5.0	2,720
1.6	363	6.0	3,870
2.0	520	7.0	5,140

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	128	220	924	346	792	393	738	529	328	171	140
2	109	122	211	3,520	321	940	378	792	542	325	169	155
3	116	122	202	2,080	312	1,060	374	910	512	318	167	143
4	137	119	192	4,680	312	970	349	1,160	520	332	165	140
5	122	116	164	3,020	302	850	335	1,300	508	318	164	140
6	116	120	216	1,620	328	792	335	1,060	610	292	162	134
7	114	126	299	1,120	302	710	399	880	765	280	120	130
8	112	137	400	940	283	792	432	820	665	268	158	129
9	110	233	328	1,090	274	1,030	468	850	560	265	156	128
10	110	190	378	2,520	265	850	610	1,030	610	274	155	127
11	114	168	444	4,110	274	738	1,000	1,190	588	292	155	127
12	191	352	610	2,940	424	792	1,440	1,160	565	265	153	130
13	367	277	480	2,320	610	765	1,540	1,160	552	254	151	140
14	312	233	404	1,660	492	710	1,500	1,330	556	243	149	170
15	236	387	352	1,360	428	710	1,620	1,330	610	236	149	156
16	166	484	318	1,060	389	635	1,820	1,220	610	230	148	145
17	164	367	289	850	356	610	1,700	970	660	228	146	138
18	156	268	268	710	338	538	1,540	880	529	220	146	132
19	145	243	249	685	325	547	1,360	850	472	216	143	131
20	145	226	236	685	332	568	1,220	820	476	211	141	130
21	165	228	226	635	832	635	1,260	820	468	208	140	127
22	169	280	218	588	1,330	588	1,220	765	492	204	140	126
23	151	560	211	588	1,030	538	1,190	710	484	199	140	125
24	145	464	213	565	765	500	1,260	738	436	195	140	124
25	141	363	257	539	660	468	1,190	850	400	190	140	123
26	140	312	308	492	610	468	1,000	940	385	156	138	120
27	137	283	520	460	660	660	910	940	367	166	135	119
28	146	260	538	428	710	635	820	792	349	184	132	117
29	148	246	516	396	710	516	792	635	335	180	132	116
30	139	233	710	378	-	460	738	547	328	175	132	116
31	137	-	680	367	-	428	-	512	-	173	130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	4,768	367	109	154	1.43	1.65	6,500
November.....	7,665	560	116	256	2.37	2.64	15,240
December.....	10,677	880	164	351	3.25	3.75	21,570
Calendar year 1935.....	153,252	1,160	104	420	3.89	52.75	304,000
January.....	43,520	4,880	367	1,404	13.0	14.99	86,320
February.....	14,320	1,330	265	494	4.57	4.93	28,400
March.....	21,365	1,060	428	639	6.38	7.36	42,380
April.....	29,183	1,820	335	973	9.01	10.05	57,680
May.....	26,639	1,330	512	926	8.57	9.88	56,920
June.....	15,603	765	328	520	4.81	5.37	30,950
July.....	7,475	332	173	241	2.23	2.57	14,830
August.....	4,606	171	130	149	1.38	1.59	9,140
September.....	3,980	170	116	133	1.23	1.37	7,690
Water year 1935-36.....	192,101	4,880	109	525	4.86	66.15	381,000

WILLAMETTE RIVER BASIN

Little North Santiam River near Mehama, Oreg.

Location.- Staff and wire-weight gages, lat. 44°48', long. 122°34', in NW¼ sec. 16, T. 9 S., R. 2 E., 2 miles east of Mehama and mouth of river. Zero of gage is 855.41 feet above mean sea level (general adjustment of 1929).

Drainage area.- 110 square miles.

Records available.- October 1931 to September 1936. Comparable records at station 4 miles upstream July to September 1924, July to September 1931.

Extremes.- Maximum discharge during year, 12,200 second-feet Jan. 4 (gage height, 11.8 feet, from graph based on gage readings); minimum, 27 second-feet Oct. 2, 3 (gage height, 2.12 feet).
1924, 1931-36: Maximum discharge, 18,900 second-feet Dec. 22, 1933 (gage height, 14.7 feet); minimum, 21 second-feet Sept. 11, 1934 (gage height, 2.08 feet).

Remarks.- Records fair. No regulation or diversions above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

2.0	17	4.6	695
2.2	34	5.0	905
2.4	53	5.5	1,210
2.6	74	6.0	1,620
2.8	99	6.5	2,140
3.1	144	7.0	2,740
3.4	208	8.0	4,270
3.8	335	9.0	6,180
4.2	500	11.0	10,400

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	11.5	222	1,620	335	1,280	545	595	375	162	71	39
2	27	106	208	6,580	318	1,620	478	620	415	162	67	57
3	27	106	196	3,140	300	1,620	500	850	375	162	65	53
4	44	99	173	9,960	318	1,280	545	1,080	335	162	61	45
5	48	92	162	4,530	300	1,080	435	2,030	318	184	58	38
6	39	92	184	2,370	645	960	415	1,530	300	162	55	37
7	35	86	282	1,920	595	850	545	1,140	415	153	55	34
8	32	113	745	1,720	455	850	695	960	745	144	53	34
9	30	695	545	1,620	415	1,720	695	850	645	144	52	34
10	29	395	745	4,090	375	1,210	905	905	545	162	50	34
11	29	282	645	6,790	435	850	1,440	905	478	265	51	34
12	38	1,280	1,720	3,590	850	905	2,030	795	395	208	49	34
13	478	850	1,140	3,920	1,820	960	1,720	745	355	184	46	74
14	795	595	745	2,740	1,080	905	1,530	1,080	395	173	45	144
15	645	645	620	2,140	795	905	1,530	1,360	455	153	44	144
16	355	1,140	570	1,620	695	850	1,620	1,210	695	144	43	92
17	235	795	478	1,280	595	795	1,020	1,020	745	127	41	74
18	173	595	415	1,440	545	695	1,140	850	795	127	41	63
19	144	455	375	1,720	500	645	960	745	645	120	40	55
20	127	355	318	1,920	478	645	905	1,720	522	120	40	45
21	173	318	265	1,360	2,140	695	960	2,030	395	113	39	45
22	250	355	250	1,140	2,610	645	905	1,280	395	113	38	44
23	184	795	235	1,020	1,620	570	795	1,020	300	106	41	39
24	153	695	250	960	1,210	522	960	1,140	300	92	41	38
25	144	545	300	850	1,020	500	1,020	795	250	96	41	37
26	136	455	375	745	1,080	500	850	695	235	86	41	36
27	113	620	795	620	1,140	1,280	695	645	222	80	40	36
28	127	335	960	545	1,280	1,210	645	570	222	80	39	36
29	144	300	795	500	1,210	795	645	500	235	80	39	35
30	127	265	1,530	435	-	745	645	435	196	74	38	35
31	120	-	1,920	415	-	620	-	395	-	74	36	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	5,029	795	27	162	1.47	1.70	9,970
November.....	13,572	1,280	86	452	4.11	4.59	26,920
December.....	18,163	1,920	162	596	5.33	6.14	36,030
Calendar year 1935.....	180,512	2,400	24	495	4.50	61.02	358,000
January.....	73,290	9,960	415	2,364	21.5	24.79	145,400
February.....	25,159	2,510	300	868	7.89	8.51	49,900
March.....	28,707	1,720	500	926	8.42	9.71	56,940
April.....	28,113	2,030	435	937	8.52	9.51	55,760
May.....	30,495	2,030	395	984	8.95	10.32	60,490
June.....	12,678	795	196	423	3.85	4.30	25,150
July.....	4,202	265	74	136	1.24	1.43	8,330
August.....	1,460	71	36	47.1	.428	.49	2,900
September.....	1,545	144	34	51.5	.468	.52	3,060
Water year 1935-36.....	242,413	9,960	27	662	6.02	82.01	480,800

South Santiam River below Cascadia, Oreg.

Location.- Water-stage recorder, lat. 44°24', long. 122°30', in SE $\frac{1}{4}$ sec. 36, T. 13 S., R. 2 E., 100 feet below bridge at Cascadia ranger station, half a mile below Tollgate Creek, three-quarters of a mile above Deer Creek, and 1 $\frac{1}{2}$ miles southwest of Cascadia. Staff gage used prior to Nov. 1, 1935. Gaging cable is 0.7 mile upstream, above Tollgate Creek. Zero of gage is 759.29 feet above mean sea level (general adjustment of 1929).

Drainage area.- 174 square miles, at gaging cable.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge during period, 9,200 second-feet Jan. 4 (gage height, 11.45 feet); minimum observed discharge, 35 second-feet Oct. 2 (gage height, 1.19 feet).

Remarks.- Records good except those for September and October 1935, which are fair. Daily discharge for Oct. 5, 6, 12, 13, 19, 20, 26, 27 based on records of South Santiam River at Waterloo and Middle Santiam River near Foster. No diversions or regulation above station.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

1.1	29	3.2	585	6.0	2,460
1.4	54	3.6	785	7.0	3,410
1.7	92	4.0	1,000	8.0	4,500
2.0	138	4.5	1,310	9.0	5,720
2.4	237	5.0	1,680	10.0	7,050
2.8	400	5.5	2,050	11.0	8,540

Discharge, in second-feet, September 1935

Sept.	27	38
	30	37

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	84	163	1,050	486	1,450	585	760	468	189	79	55
2	35	79	158	4,270	450	1,590	528	750	476	179	76	98
3	38	67	152	2,640	422	1,560	575	868	427	179	74	83
4	42	72	143	7,360	422	1,340	660	1,120	404	172	74	60
5	43	70	138	5,090	404	1,180	605	1,660	378	184	71	52
6	41	71	184	2,640	610	1,060	580	1,660	409	165	69	48
7	40	76	241	1,810	660	950	785	1,310	550	154	66	46
8	39	96	436	1,560	504	975	950	1,120	895	149	66	43
9	38	436	339	1,660	468	1,340	922	1,030	760	168	65	42
10	38	264	445	3,280	414	1,090	1,120	1,030	635	170	65	42
11	39	200	787	6,830	458	950	1,560	1,030	565	189	64	42
12	70	1,000	1,450	5,460	760	975	1,890	950	490	181	64	44
13	300	695	922	5,100	1,120	975	1,890	895	432	145	61	71
14	382	414	685	3,210	868	975	1,660	1,030	418	135	61	149
15	252	526	535	2,460	710	1,090	1,620	1,000	535	130	59	124
16	172	840	463	1,970	630	960	1,620	1,090	555	124	58	86
17	126	655	400	1,620	570	840	1,480	895	735	118	55	69
18	106	463	347	1,340	560	760	1,340	760	515	115	54	56
19	95	355	303	1,930	555	685	1,150	785	517	110	53	53
20	90	295	275	1,810	660	660	1,030	1,150	458	108	52	51
21	138	267	245	1,420	2,360	685	1,060	1,480	409	106	50	49
22	218	291	224	1,210	3,010	660	1,060	1,210	364	102	49	46
23	138	378	208	1,120	2,290	650	1,000	1,030	335	99	48	45
24	110	360	202	1,030	1,590	610	1,310	895	307	96	48	44
25	99	303	231	922	1,280	560	1,310	812	279	95	47	42
26	90	271	234	812	1,280	600	1,030	760	260	92	47	41
27	80	237	463	760	1,340	1,290	922	710	241	89	45	39
28	89	215	570	710	1,520	1,520	868	635	237	88	44	39
29	115	197	630	635	1,450	975	812	575	215	86	44	38
30	96	182	1,060	585	-	765	765	580	200	83	44	38
31	93	-	1,210	530	-	685	-	508	-	82	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	3,291	382	35	106	0.609	0.70	6,830
November.....	9,431	1,000	67	314	1.80	2.01	13,710
December.....	13,828	1,450	138	446	2.56	2.95	27,430
Calendar year							
January.....	72,674	7,360	530	2,344	13.5	15.56	144,100
February.....	27,831	3,010	404	960	5.62	5.95	55,200
March.....	30,425	1,690	560	981	5.64	6.50	60,550
April.....	32,705	1,890	526	1,090	6.26	6.98	64,870
May.....	30,123	1,660	508	972	5.59	6.44	59,750
June.....	13,569	895	200	452	2.60	2.90	26,910
July.....	4,062	189	82	131	.753	.87	8,060
August.....	1,795	79	43	57.9	.333	.36	3,560
September.....	1,737	149	36	57.9	.333	.37	3,450
Water year 1935-36.....	241,471	7,360	35	660	3.79	51.61	478,900

South Santiam River at Waterloo, Oreg.

Location.- Water-stage recorder, lat. 44°29'55", long. 122°49'20", in NW¼ sec. 28, T. 12 S., R. 1 W., 200 yards below highway at Waterloo and 2¼ miles above Hamilton Creek. Zero of gage is 370.2 feet above mean sea level.

Drainage area.- 640 square miles.

Records available.- July 1905 to March 1907, October 1910 to December 1911, July 1923 to September 1936.

Average discharge.- 14 years (1905-6, 1923-36), 2,728 second-feet.

Extremes.- Maximum discharge during year, 37,200 second-feet Jan. 4 (gage height, 15.0 feet); minimum, 111 second-feet Oct. 2 (gage height, 2.00 feet).
1905-7, 1910-11, 1923-36: Maximum discharge, 70,000 second-feet Mar. 31, 1931 (gage height, 22.5 feet); minimum, 100 second-feet several days in September, October, November, 1925.

Remarks.- Records good. No diversions or regulation above station. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 4						Jan. 5 to Sept. 30	
2.0	111	3.6	1,490	7.0	8,610	2.0	101
2.2	178	4.0	2,040	8.0	11,800	2.2	187
2.4	280	4.5	2,630	9.0	14,800	2.4	268
2.6	420	5.0	3,770	10.0	18,100	2.6	390
2.9	680	5.5	4,830	12.0	25,300	3.2	925
3.2	1,000	6.0	6,000	14.0	33,100	4.0	1,950

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	332	700	4,080	1,880	5,640	2,440	2,530	1,550	758	327	188
2	111	293	661	17,800	1,700	5,880	2,270	2,440	1,560	749	314	306
3	114	246	604	10,700	1,580	6,000	2,360	2,620	1,440	720	301	355
4	126	224	578	28,200	1,800	5,290	2,800	3,570	1,350	720	301	277
5	156	241	542	21,500	1,550	4,610	2,440	5,060	1,290	749	295	233
6	148	241	623	11,000	2,110	4,080	2,270	5,520	1,260	682	289	213
7	138	252	989	8,050	2,800	3,670	2,710	4,390	1,550	635	277	208
8	126	306	1,900	6,990	2,110	3,370	3,280	3,670	2,440	608	270	196
9	123	1,240	1,540	8,050	1,800	5,180	3,280	3,370	2,270	635	264	186
10	120	1,250	1,850	13,100	1,650	4,280	3,670	3,280	1,890	692	264	183
11	120	846	2,260	27,600	1,620	3,570	5,400	3,280	1,770	730	253	179
12	148	3,290	6,990	19,500	2,360	3,570	6,740	2,990	1,470	682	248	188
13	1,100	3,280	4,280	20,200	4,390	3,670	6,740	2,800	1,340	608	253	233
14	1,830	1,900	3,010	12,800	3,470	3,570	6,000	3,370	1,290	563	248	458
15	1,440	1,720	2,340	9,800	2,800	4,180	5,640	3,470	1,800	545	243	635
16	780	3,280	1,970	8,050	2,360	3,570	5,760	3,870	2,030	529	238	405
17	561	2,660	1,700	6,990	2,110	3,280	5,180	3,280	2,440	505	233	301
18	428	1,900	1,490	5,760	2,030	2,900	4,720	2,800	2,190	481	223	253
19	352	1,420	1,310	6,740	1,950	2,530	4,080	2,530	1,800	473	223	228
20	212	1,190	1,190	7,250	2,190	2,440	3,570	4,380	1,580	458	213	213
21	398	1,060	1,100	6,000	7,840	2,530	3,570	6,000	1,400	435	213	204
22	730	1,100	1,020	5,060	11,000	2,440	3,570	4,720	1,270	412	208	200
23	576	1,340	956	4,610	8,900	2,270	3,370	3,970	1,160	398	208	192
24	436	1,530	901	4,180	6,490	2,270	3,370	3,370	1,100	390	208	192
25	382	1,300	956	3,770	5,290	2,110	4,390	2,990	1,020	383	208	188
26	345	1,130	1,010	3,280	5,290	2,110	3,470	2,620	978	369	204	179
27	319	1,010	1,020	2,990	5,520	4,500	3,030	2,360	925	362	200	171
28	319	901	2,920	2,620	6,000	6,740	2,990	2,110	915	355	196	164
29	420	813	2,580	2,440	5,640	4,500	2,710	1,680	855	348	192	160
30	420	760	3,380	2,190	-	3,470	2,620	1,880	796	334	188	160
31	352	-	4,940	2,030	-	2,900	-	1,700	-	334	183	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	12,934	1,830	111	417	0.652	0.75	25,550
November.....	37,055	3,290	241	1,235	1.93	2.15	75,500
December.....	57,888	6,990	542	1,867	2.92	3.37	114,800
Calendar year 1935.....	726,009	7,780	111	1,995	3.12	42.30	1,444,000
January.....	293,430	28,200	2,030	9,465	14.8	17.06	582,000
February.....	106,030	11,000	1,550	3,656	5.71	6.16	210,300
March.....	117,120	6,740	2,110	3,778	5.90	6.80	232,500
April.....	114,940	6,740	2,270	3,831	5.99	6.68	228,000
May.....	102,820	6,000	1,700	3,317	5.18	5.97	203,900
June.....	44,719	2,440	796	1,491	2.33	2.60	85,700
July.....	15,642	758	334	537	.839	.97	33,010
August.....	7,485	327	183	241	.377	.43	14,850
September.....	7,252	635	160	242	.378	.42	14,380
Water year 1935-36.....	918,315	28,200	111	2,509	3.92	53.36	1,821,000

Middle Santiam River near Foster, Oreg.

Location.- Water-stage recorder, lat. 44°28', long. 122°31', in SE¼ sec. 2, T. 13 S., R. 2 E., half a mile above mouth of Green Peter Creek and 8 miles northeast of Foster.
Zero of gage is 733.44 feet above mean sea level.

Drainage area.- 271 square miles.

Records available.- August 1931 to September 1936.

Extremes.- Maximum discharge during year, 24,300 second-feet Jan. 4 (gage height, 16.08 feet); minimum, 64 second-feet Oct. 10, 11 (gage height, 1.36 feet).
1931-36: Maximum discharge, 29,500 second-feet Mar. 18, 1932 (gage height, 17.84 feet); minimum, 62 second-feet Oct. 9, 1932.

Remarks.- Records excellent except those above 400 second-feet, which are good. No regulation or diversions above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.3	58	5.0	1,530
1.5	80	6.0	2,400
1.7	105	7.0	3,510
2.0	162	8.0	4,960
2.5	260	10.0	8,550
3.0	405	12.0	13,100
3.5	600	14.0	19,300
4.0	855	16.0	24,000

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	106	390	2,640	970	2,700	1,120	1,340	772	378	165	109
2	65	149	363	13,100	910	3,140	1,060	1,300	772	353	161	178
3	65	130	342	7,400	855	3,260	1,120	1,490	720	360	187	160
4	85	142	321	20,500	855	2,700	1,230	1,850	670	360	154	119
5	88	142	301	11,500	828	2,350	1,060	2,310	645	375	150	109
6	76	140	402	5,790	1,260	2,120	1,030	2,600	670	339	147	105
7	70	149	686	4,190	1,160	1,850	1,370	2,120	828	321	142	102
8	63	192	1,230	3,810	940	1,930	1,610	1,810	1,120	312	136	98
9	65	394	382	4,900	855	3,030	1,610	1,690	1,000	324	135	95
10	64	555	1,230	10,100	800	2,350	2,060	1,730	882	333	132	93
11	68	454	1,830	14,800	800	1,940	3,260	1,730	772	366	130	92
12	145	2,300	3,260	10,900	1,420	2,030	4,050	1,570	695	330	125	96
13	1,000	1,530	1,930	9,200	2,600	1,990	3,810	1,450	645	304	124	149
14	1,120	940	1,450	6,130	1,770	1,990	3,350	1,690	645	297	122	351
15	558	1,260	1,160	4,640	1,410	2,210	3,260	1,900	828	274	119	263
16	387	1,810	1,000	3,770	1,230	1,850	3,260	2,080	970	263	118	166
17	276	1,340	882	3,030	1,120	1,690	2,920	1,650	1,230	252	115	135
18	219	910	772	2,600	1,060	1,490	2,600	1,410	1,000	242	113	121
19	186	720	695	3,510	1,030	1,340	2,210	1,370	855	233	112	113
20	176	578	622	3,640	1,120	1,370	2,030	3,030	745	228	111	106
21	307	555	578	2,620	5,020	1,450	2,080	3,140	670	221	108	104
22	412	600	555	2,450	5,620	1,340	2,030	2,400	622	212	105	100
23	276	855	511	2,350	3,910	1,230	1,900	1,950	555	208	105	96
24	224	882	495	2,160	2,810	1,120	2,260	1,690	535	201	105	93
25	203	720	555	1,900	2,260	1,030	2,350	1,490	499	194	104	92
26	192	622	578	1,690	2,300	1,120	1,850	1,340	475	198	102	87
27	176	555	1,490	1,490	2,500	2,680	1,650	1,230	450	184	100	85
28	190	495	1,730	1,370	2,600	2,810	1,530	1,090	447	180	97	84
29	240	454	1,610	1,230	2,600	1,850	1,410	970	412	176	95	84
30	203	419	2,220	1,120	-	1,490	1,340	940	393	170	95	82
31	186	-	2,700	1,060	-	1,260	-	828	-	166	93	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	7,559	1,120	64	244	0.900	1.04	14,980
November.....	20,358	2,300	130	832	2.54	2.83	40,970
December.....	32,820	3,260	301	1,059	3.91	4.51	65,100
Calendar year 1935.....	382,903	-	64	1,049	3.97	52.54	759,500
January.....	165,890	20,500	1,060	5,351	19.7	22.71	329,000
February.....	52,613	5,620	800	1,814	6.69	7.22	104,400
March.....	60,740	3,260	1,030	1,859	7.23	9.34	120,500
April.....	62,570	4,050	1,030	2,086	7.70	8.59	124,100
May.....	53,718	3,140	828	1,733	6.39	7.37	106,500
June.....	21,522	1,230	393	717	2.55	2.96	42,690
July.....	8,344	378	166	269	.993	1.14	16,550
August.....	3,779	165	93	122	.450	.52	7,500
September.....	3,657	351	82	122	.450	.50	7,250
Water year 1935-36.....	493,870	20,500	64	1,349	4.98	67.73	979,600

Albany power canal near Lebanon, Oreg.

Location.- Staff gage, lat. 44°32'55", long. 122°54'20", in SW¼ sec. 2, T. 12 S., R. 2 W., an eighth of a mile below spillway and 1 mile north of Lebanon.

Records available.- April 1926 to September 1936. February to December 1919 at station near Albany.

Average discharge.- 10 years, 207 second-feet.

Extremes.- Maximum discharge observed during year, 317 second-feet Dec. 9-13, Mar. 23-25, Apr. 6-24, July 10 (gage height, 3.60 feet); minimum, 25 second-feet Sept. 16-20, 1919, 1926-36; Maximum discharge, that of Dec. 9-13, Mar. 23-25, Apr. 6-24, July 10, 1935; no flow at times.

Remarks.- Records poor. Gage read about three times a week; discharge estimated or interpolated on days gage was not read. This canal diverts from South Santiam River at Lebanon and discharges into Calapooya River at mouth. Lebanon ditch discharges into canal just below canal intake. Water is used for power and water supply at Albany. Gage readings furnished by Mountain States Power Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	242	284	298	288	284	304	310	284	304	282	162
2	78	234	284	282	286	284	304	308	284	304	280	160
3	78	226	284	285	284	284	304	306	284	304	278	242
4	76	219	284	278	284	284	308	304	288	302	278	155
5	80	202	284	216	284	284	312	298	291	300	278	155
6	80	186	284	155	284	284	317	291	291	298	271	155
7	82	186	295	155	284	284	317	288	291	301	266	155
8	82	186	306	155	284	284	317	284	291	304	266	151
9	82	212	317	155	284	284	317	284	294	310	266	149
10	82	236	317	155	284	284	317	284	298	317	266	145
11	82	264	317	155	284	284	317	284	294	312	266	145
12	88	291	317	155	284	284	317	284	291	308	266	145
13	278	291	317	155	284	284	317	284	296	304	266	140
14	291	291	306	198	284	286	317	284	300	304	266	135
15	291	291	295	242	282	288	317	284	304	304	262	135
16	291	291	284	260	280	291	317	286	304	304	268	62
17	291	291	284	278	278	294	317	288	304	304	254	25
18	291	291	284	278	278	298	317	291	304	304	248	25
19	295	291	284	278	278	298	317	291	304	304	242	25
20	300	291	284	278	278	298	317	291	304	304	242	69
21	304	291	284	278	278	304	317	298	304	304	242	135
22	298	291	284	278	280	310	317	304	304	304	238	135
23	291	291	284	278	282	317	317	298	304	304	234	135
24	284	291	284	278	284	317	317	291	304	304	230	135
25	278	291	284	282	284	317	314	284	304	302	227	135
26	278	288	284	286	284	300	312	284	304	300	224	135
27	278	284	284	291	284	284	310	284	304	298	201	135
28	278	284	283	291	284	291	310	281	304	284	180	135
29	266	284	302	291	284	298	310	278	304	291	175	135
30	254	-	310	291	-	304	310	280	304	288	170	135
31	248	284	304	291	-	304	-	282	-	284	165	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	6,355	304	78	205	12,600
November.....	7,893	291	186	263	15,660
December.....	9,108	317	284	294	18,070
Calendar year 1935.....	90,460	317	74	248	179,400
January.....	7,546	288	155	243	14,970
February.....	8,200	288	278	283	16,260
March.....	9,091	317	284	293	18,030
April.....	9,421	317	304	314	18,690
May.....	8,988	310	278	290	17,830
June.....	8,941	304	284	298	17,750
July.....	9,369	317	284	302	18,580
August.....	7,587	282	165	245	15,060
September.....	3,904	242	25	130	7,740
Water year 1935-36.....	96,403	317	25	263	191,200

Luckiamute River near Hoskins, Oreg.

Location.- Water-stage recorder, lat. 44°43', long. 123°30', in NE $\frac{1}{4}$ sec. 11, T. 10 S., R. 7 W., a quarter of a mile below Benton County line and $\frac{3}{4}$ miles northwest of Hoskins. Zero of gage is 378.7 feet above mean sea level (river profile survey).

Drainage area.- 34 square miles.

Records available.- May 1934 to September 1936.

Extremes.- Maximum discharge during year, 3,620 second-feet Jan. 12 (gage height, 9.90 feet); minimum, 9 second-feet Oct. 1, 2, 6-10, Sept. 27, 28.

1934-36: Maximum discharge, that of Jan. 12, 1936; minimum, 7 second-feet Sept. 2-5, 10, 21, 22, 1934.

Remarks.- Records good except those for Jan. 27-31, Feb. 2-5, 9-14, 16-20, Mar. 6, 7, which were based on records of Willamina Creek near Willamina and are fair. No regulation or diversions above station.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 3				Jan. 4 to Sept. 30			
0.8	9	3.0	390	0.7	7	2.5	268
1.1	22	3.5	535	.8	10	3.0	405
1.4	52	4.0	885	1.1	23	4.0	745
1.7	96	5.0	1,030	1.4	54	5.0	1,160
2.0	150	5.0	1,400	1.7	98	5.0	1,600
2.5	265	7.5	2,000	2.0	153	8.0	2,580
						10.0	3,680

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	16	46	691	166	435	276	62	88	36	17	15
2	9	15	43	1,440	150	353	238	53	84	35	17	15
3	10	14	40	838	145	299	225	62	80	41	17	13
4	12	14	38	2,480	180	258	203	79	76	44	17	13
5	11	14	36	1,420	180	226	187	145	70	41	16	12
6	10	14	107	985	241	190	176	120	70	35	16	13
7	10	14	171	885	231	170	170	106	68	32	15	12
8	9	16	233	805	210	224	161	96	74	32	15	12
9	9	32	175	865	200	210	149	86	66	32	15	11
10	9	25	216	1,380	195	187	141	80	59	34	15	11
11	10	41	288	1,790	190	176	133	74	55	39	15	11
12	29	146	430	2,620	210	185	126	68	53	32	15	12
13	32	90	315	1,890	200	194	119	68	50	31	15	16
14	37	60	230	1,110	190	226	112	82	54	29	14	19
15	32	86	186	845	187	250	106	98	80	29	14	15
16	21	103	162	745	170	243	101	124	92	26	14	13
17	18	98	129	635	160	219	96	103	82	25	13	12
18	16	78	113	582	150	196	92	95	73	25	13	12
19	15	61	101	670	140	178	88	255	66	24	14	12
20	16	52	93	600	135	164	84	600	59	23	13	11
21	21	48	85	495	376	155	80	375	55	22	13	11
22	20	56	78	420	845	147	78	261	50	22	13	10
23	17	169	72	350	725	139	76	219	48	22	14	11
24	16	158	71	307	480	133	82	183	46	21	15	10
25	15	113	72	268	420	124	73	155	44	21	14	10
26	14	90	76	236	512	164	70	135	43	20	13	10
27	14	74	178	210	625	962	67	124	43	19	13	9
28	16	62	199	205	805	805	70	115	45	19	12	9
29	20	56	216	200	562	495	66	106	40	18	12	9
30	18	50	560	190	-	390	63	103	36	18	12	10
31	17	-	802	180	-	317	-	95	-	18	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	512	37	9	16.5	0.485	0.56	1,020
November.....	1,866	169	14	62.2	1.85	2.04	3,700
December.....	5,531	802	36	178	5.24	6.04	10,970
Calendar year 1935.....	49,185	1,170	8	135	3.97	53.67	97,560
January.....	26,537	2,620	180	850	25.0	26.82	52,240
February.....	9,190	945	317	9.32	10.05	15,210	
March.....	6,424	962	124	62.2	8.00	9.22	15,710
April.....	3,711	276	63	124	3.65	4.07	7,550
May.....	4,359	600	62	141	4.15	4.78	8,650
June.....	1,839	88	38	61.3	1.80	2.01	3,650
July.....	865	44	18	27.9	.921	.95	1,720
August.....	443	17	12	14.3	.421	.49	879
September.....	560	19	9	12.0	.353	.39	714
Water year 1935-36.....	63,427	2,620	9	173	5.09	69.42	125,800

WILLAMETTE RIVER BASIN

South Yamhill River near Willamina, Oreg.

Location.- Water-stage recorder, lat. 45°3', long. 123°30', in sec. 14, T. 6 S., R. 7 W., a third of a mile above Wallace Bridge, 2 miles above mouth of Willamina Creek, and 2 miles southwest of Willamina. Zero of gage is 235.01 feet above mean sea level (general adjustment of 1929).

Drainage area.- 133 square miles (revised).

Records available.- May 1934 to September 1936.

Extremes.- Maximum discharge during year, 12,900 second-feet Jan. 12 (gage height, 13.36 feet); minimum, 12 second-feet Oct. 1, 2 (gage height, 0.82 foot).
1934-36: Maximum discharge, that of Jan. 12, 1936; minimum, 5 second-feet Sept. 23, 1935 (gage height, 0.38 foot).

Remarks.- Records good above and fair below 100 second-feet. Daily discharge for July 24-29, 31, Aug. 1-5, 7-12, 14-19 computed on basis of records of Willamina Creek near Willamina. Slight occasional regulation during summer by operation of mill pond upstream; no diversions above gage.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.6	11	2.5	580	6.0	3,190
.9	41	3.0	850	7.0	4,270
1.2	108	3.5	1,160	8.0	5,430
1.6	225	4.0	1,480	10.0	8,030
2.0	365	5.0	2,240	12.0	10,800

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	30	111	2,240	303	1,290	920	142	225	98	30	19
2	12	25	103	5,430	278	1,030	700	149	212	86	29	35
3	13	23	96	3,190	275	850	630	151	209	89	29	27
4	16	25	88	8,170	373	708	548	190	196	100	28	22
5	19	25	81	5,430	401	605	494	154	178	106	26	21
6	17	25	246	3,720	655	526	454	476	187	93	25	20
7	16	26	558	2,990	680	425	365	151	131	81	24	19
8	16	27	708	2,510	558	544	405	310	203	75	23	18
9	16	61	458	2,420	508	576	377	272	190	79	22	17
10	15	61	566	3,560	468	472	361	251	168	88	21	17
11	15	70	874	4,830	468	433	350	232	159	106	21	16
12	31	339	1,620	9,600	590	517	339	215	148	83	20	17
13	74	222	1,030	5,970	548	508	317	190	140	74	20	36
14	53	142	708	3,290	486	650	295	245	148	88	20	100
15	61	326	548	2,420	445	850	278	215	187	65	20	45
16	38	369	450	2,000	413	735	265	265	255	59	20	30
17	28	282	381	1,800	381	655	255	219	275	57	19	25
18	26	196	328	1,560	361	566	242	199	232	53	19	23
19	23	149	289	1,820	343	504	232	428	203	49	19	28
20	23	124	258	1,360	343	454	219	1,320	178	47	19	22
21	34	106	235	1,190	1,070	417	212	880	165	45	20	22
22	45	148	215	1,000	3,480	397	212	680	145	41	19	22
23	33	508	199	850	2,330	393	212	540	134	43	20	22
24	27	397	187	708	1,660	369	228	450	124	41	23	23
25	26	275	190	615	1,480	332	215	359	121	39	24	24
26	25	222	206	535	1,620	401	196	339	116	38	22	23
27	24	181	680	481	2,420	2,480	184	306	111	36	21	21
28	25	154	655	433	2,080	2,330	196	285	118	34	20	19
29	40	131	910	385	1,580	1,580	174	268	103	33	18	20
30	40	118	1,840	354	-	1,220	154	268	96	33	18	21
31	37	-	2,890	328	-	1,000	-	255	-	32	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-foot
October.....	879	74	12	28.4	0.214	0.25	1,740
November.....	4,786	508	23	160	1.20	1.54	47,350
December.....	17,708	2,890	81	571	4.29	4.95	35,120
Calendar year 1935.....	146,997	3,630	11	403	3.03	40.34	291,600
January.....	80,899	9,600	328	2,603	19.6	22.60	160,100
February.....	26,587	3,480	275	917	6.89	7.43	52,730
March.....	23,880	2,480	532	770	5.79	6.38	47,350
April.....	9,998	920	154	333	2.50	2.79	19,850
May.....	10,997	1,320	142	355	2.67	3.08	21,810
June.....	5,107	275	96	170	1.28	1.43	10,130
July.....	1,961	106	32	63.3	.476	.55	3,890
August.....	676	30	17	21.8	.164	.19	1,340
September.....	771	100	16	25.7	.193	.22	1,630
Water year 1935-36.....	184,029	9,600	12	503	3.78	51.51	365,000

Willamina Creek near Willamina, Oreg.

Location.- Water-stage recorder, lat. 45°9', long. 123°30', in N $\frac{1}{2}$ sec. 13, T. 5 S., R. 7 W., 4 miles north of Willamina. Zero of gage is 316.1 feet above mean sea level (river profile survey).

Drainage area.- 62 square miles (revised).

Records available.- June 1934 to September 1936.

Extremes.- Maximum discharge during year, 3,900 second-feet Jan. 12 (gage height, 7.36 feet); minimum, 10 second-feet Oct. 1-3, 1934-36: Maximum discharge, that of Jan. 12, 1936; minimum, 9 second-feet Sept. 3, 4, 1934, Sept. 9, 1935.

Remarks.- Records excellent. No regulations or diversions above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.1	7.5	3.5	800
.3	13.9	4.0	1,050
.5	21	4.5	1,330
.8	38	5.0	1,640
1.2	88	5.5	2,000
1.6	158	6.0	2,410
2.0	250	6.5	2,880
2.5	405	7.4	3,900
3.0	585		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	18	30	771	178	565	355	93	107	44	20	17
2	10	18	28	1,690	138	492	319	98	104	42	19	18
3	11	20	27	1,140	163	419	298	106	104	46	19	17
4	17	17	26	2,760	189	364	271	125	96	49	16	16
5	16	17	26	1,780	207	319	247	187	88	47	18	16
6	15	18	59	1,460	331	286	234	176	90	43	17	16
7	14	18	160	1,210	307	259	227	148	93	59	18	16
8	13	15	156	1,000	259	325	217	132	96	39	17	14
9	13	37	111	1,050	234	323	205	119	90	41	17	14
10	13	28	137	1,360	219	281	193	111	80	46	17	14
11	13	36	200	1,540	219	259	185	102	76	47	17	13
12	20	96	367	2,900	262	271	176	98	72	39	17	14
13	23	55	222	1,920	245	274	168	94	68	37	17	25
14	26	36	166	1,360	227	346	160	109	78	35	18	28
15	26	49	137	1,180	212	408	152	106	93	32	17	20
16	21	88	118	1,020	200	364	145	116	98	30	17	17
17	19	73	104	900	189	323	139	101	91	29	17	16
18	17	49	93	800	180	295	134	93	79	28	17	15
19	16	38	84	875	174	268	126	177	73	28	17	15
20	19	33	76	755	170	242	123	367	66	26	16	14
21	28	30	72	645	346	229	119	271	64	25	15	14
22	25	38	68	545	928	217	118	210	60	25	16	13
23	20	78	65	458	773	207	114	191	56	24	17	14
24	18	73	64	393	585	193	119	168	55	24	18	13
25	17	56	66	349	528	180	109	154	53	23	18	13
26	16	47	70	307	625	210	106	141	52	23	17	13
27	16	42	222	277	950	759	104	132	53	22	16	12
28	18	36	227	245	875	710	104	125	56	21	15	11
29	24	34	227	222	688	545	98	121	50	21	14	12
30	21	32	521	205	-	458	96	121	46	21	14	14
31	20	-	963	193	-	393	-	112	-	21	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	557	23	10	18.0	0.290	0.33	1,100
November.....	1,229	26	17	41.0	0.681	.74	2,440
December.....	4,962	983	26	160	2.58	2.97	9,840
Calendar year 1935.....	66,680	1,150	10	183	2.95	38.86	132,200
January.....	31,305	2,900	193	1,010	16.3	18.79	62,090
February.....	10,639	950	186	367	5.92	6.38	21,100
March.....	10,304	759	180	349	5.63	6.49	21,430
April.....	5,161	355	96	172	2.77	3.09	10,240
May.....	4,413	367	93	142	2.29	2.64	8,750
June.....	2,284	107	46	76.1	1.23	1.37	4,530
July.....	1,019	49	21	32.9	.531	.61	2,020
August.....	525	20	14	16.9	.273	.31	1,040
September.....	463	28	11	15.4	.248	.28	918
Water year 1935-36.....	73,361	2,900	10	200	3.23	44.00	145,500

Haskins Creek above Idlewild Creek, near McMinnville, Oreg.

Location.- Water-stage recorder, lat. 45°20', long. 123°24', in SW $\frac{1}{4}$ sec. 2, T. 3 S., R. 6 W., 2 miles above Idlewild Creek and 13 miles northwest of McMinnville.

Drainage area.- 2.3 square miles.

Records available.- October 1933 to September 1936 (discontinued).

Extremes.- Maximum discharge during year, 235 second-feet Jan. 12 (gage height, 2.65 feet); minimum, 0.8 second-foot Oct. 1, 2.
1933-36: Maximum discharge, about 315 second-feet Dec. 21, 1933 (gage height, 3.41 feet); minimum, 0.6 second-foot Sept. 7, 8, 1935.

Remarks.- Records good except those for Mar. 8, 9, which were based on comparison with records of daily discharge of Haskins Creek near McMinnville and are fair. No diversions or regulation above station. Water-stage recorder inspected at times by employees of city of McMinnville.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	1.2	3.0	56	11	42	18	5.6	6.1	2.8	1.6	1.4
2	.8	1.2	2.8	96	9.7	35	16	6.1	6.1	2.8	1.6	1.3
3	1.1	1.2	2.7	77	9.7	29	15	6.1	6.1	3.1	1.6	1.2
4	1.7	1.2	2.5	155	9.7	24	14	7.0	5.6	3.1	1.6	1.2
5	1.1	1.2	2.5	106	12	21	13	10	5.4	3.0	1.4	1.2
6	1.1	1.2	5.1	77	15	19	12	9.7	5.4	2.8	1.4	1.1
7	1.1	1.3	7.0	67	13	19	12	8.8	5.4	2.7	1.4	1.1
8	1.1	1.6	7.5	63	12	25	12	7.9	5.6	2.7	1.4	1.0
9	1.0	2.8	6.6	87	11	23	12	7.0	5.4	2.8	1.4	1.0
10	1.1	1.7	9.0	81	10	22	12	6.5	5.1	3.1	1.4	1.0
11	1.1	3.0	13	92	12	19	12	6.1	4.8	3.0	1.4	1.0
12	1.8	5.1	18	183	15	20	12	6.1	4.6	2.7	1.4	1.1
13	1.6	3.3	14	137	14	19	12	5.6	4.4	2.5	1.3	1.4
14	2.1	2.8	12	85	13	25	11	7.0	4.4	2.4	1.3	1.4
15	1.7	5.6	10	63	12	29	10	7.0	5.1	2.2	1.2	1.2
16	1.4	5.9	8.5	50	12	26	9.7	7.4	5.1	2.2	1.2	1.1
17	1.3	4.6	7.0	41	12	23	9.3	6.5	5.1	2.2	1.2	1.0
18	1.2	3.8	6.2	36	12	19	8.3	6.1	4.8	2.2	1.2	1.0
19	1.1	3.3	5.9	37	10	16	8.4	9.3	4.6	2.0	1.2	1.0
20	1.8	3.0	5.6	36	11	14	7.9	16	4.4	1.9	1.2	1.0
21	1.9	2.7	5.1	33	37	13	7.4	14	4.1	1.8	1.1	1.0
22	1.6	3.3	4.9	28	71	12	7.4	13	3.8	1.8	1.2	1.0
23	1.4	7.5	4.9	25	48	11	7.0	12	3.6	1.8	1.2	1.0
24	1.3	7.0	4.9	23	35	9.7	7.0	9.7	3.6	1.7	1.2	1.0
25	1.2	5.6	4.9	19	33	9.3	6.5	9.3	3.4	1.7	1.2	1.0
26	1.2	4.9	5.9	18	86	12	6.1	8.4	3.1	1.7	1.2	1.0
27	1.1	4.2	17	16	115	49	5.6	7.9	3.6	1.7	1.1	.9
28	1.6	3.8	16	14	78	41	5.6	7.4	3.6	1.7	1.1	.9
29	1.5	3.4	18	13	55	29	5.6	7.0	3.1	1.7	1.1	1.0
30	1.3	3.3	36	12	-	23	5.4	7.0	3.0	1.6	1.1	1.0
31	1.3	-	59	12	-	20	-	6.5	-	1.6	1.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	41.4	2.1	0.8	1.34	0.583	0.67	82
November.....	100.7	7.5	1.2	3.36	1.46	1.63	200
December.....	325.5	59	2.5	10.5	4.57	5.27	646
Calendar year 1935.....	4,211.4	80	.8	11.5	5.00	68.17	8,350
January.....	1,818	183	12	58.6	25.5	29.40	3,610
February.....	774.1	115	9.7	26.7	11.6	12.51	1,540
March.....	695.0	49	9.3	22.5	9.78	11.28	1,380
April.....	300.7	18	5.4	10.0	4.35	4.85	596
May.....	254.0	16	5.6	8.19	3.56	4.10	504
June.....	135.4	6.1	3.0	4.61	2.00	2.23	275
July.....	71.0	3.1	1.6	2.29	.996	1.15	141
August.....	39.8	1.6	1.0	1.28	.567	.64	79
September.....	32.5	1.4	.9	1.08	.470	.52	64
Water year 1935-36.....	4,594.1	183	.8	12.6	5.48	74.25	9,120

Haskins Creek near McMinnville, Oreg.

Location.— Water-stage recorder, lat. 45°19', long. 123°22', in NE¼ sec. 13, T. 3 S., R. 8 W., 300 feet above flow line of McMinnville water-supply reservoir and 11 miles northwest of McMinnville.

Drainage area.— 5.7 square miles.

Records available.— October 1928 to September 1936.

Extremes.— Maximum discharge during year, 440 second-feet Jan. 12 (maximum gage height, 3.35 feet); minimum, 1.5 second-feet Sept. 23-28.

1928-36: Maximum discharge, 610 second-feet Mar. 31, 1931 (gage height, 4.00 feet); minimum, 1.0 second-foot Oct. 8, 1932 (gage height, 0.55 foot).

Remarks.— Records good except those for Nov. 9-14, Dec. 28 to Jan. 9, Jan. 23, 28, 30, Apr. 4-8, Sept. 10-13, which are fair and are based on comparison with daily discharge records of Haskins Creek above Idlewild Creek, near McMinnville. No diversions or regulation above station. Water-stage recorder graph furnished by city of McMinnville.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	3.1	5.5	110	23	82	40	12	11	5.5	3.2	2.6
2	1.9	2.9	5.2	200	22	66	36	12	11	5.3	3.2	2.5
3	2.2	2.7	4.6	180	21	59	35	12	10	5.5	3.1	2.2
4	3.6	2.7	4.4	300	22	51	31	14	10	5.3	2.8	2.1
5	2.6	2.7	4.6	210	23	46	28	20	9.7	5.5	2.8	2.2
6	2.3	2.7	11	170	35	40	27	18	9.3	5.5	2.8	2.2
7	2.2	2.6	16	140	30	37	26	15	10	5.1	2.8	2.2
8	2.2	3.1	16	130	26	52	27	14	10	5.1	2.7	2.1
9	2.2	6.0	13	140	23	49	27	14	10	5.1	2.7	2.1
10	2.2	4.0	17	174	23	45	26	13	8.9	5.1	2.7	2.0
11	2.2	6.0	25	178	23	40	26	12	8.5	5.3	2.7	1.9
12	4.0	11	34	338	30	41	24	12	8.2	4.9	2.7	2.0
13	3.6	7.0	25	224	28	38	23	12	8.2	4.7	2.7	2.5
14	4.9	6.0	21	159	26	52	22	14	8.2	4.5	2.6	2.5
15	4.0	14	17	126	25	56	21	14	9.7	4.5	2.6	2.2
16	2.9	13	15	102	23	51	20	14	10	4.3	2.6	1.9
17	2.9	9.3	13	88	23	46	20	12	10	4.3	2.6	1.7
18	2.7	7.3	12	76	21	40	19	12	9.3	4.1	2.6	1.7
19	2.6	5.8	11	76	21	36	19	17	8.9	3.9	2.6	1.7
20	4.2	5.2	11	72	20	33	18	31	7.9	3.7	2.5	1.7
21	4.2	4.6	9.3	63	38	30	18	25	7.9	3.5	2.3	1.6
22	3.6	6.4	8.9	62	140	28	18	21	7.3	3.7	2.2	1.6
23	2.7	16	8.4	57	100	27	17	20	7.0	3.7	2.5	1.5
24	2.6	14	8.9	53	69	24	17	18	6.7	3.4	2.3	1.5
25	2.4	11	9.3	49	60	23	16	17	6.7	3.4	2.5	1.5
26	2.2	8.9	14	41	70	30	15	15	6.4	3.4	2.3	1.5
27	2.3	7.6	46	36	169	98	15	14	6.4	3.4	2.2	1.5
28	2.7	7.0	40	33	146	79	15	13	6.4	3.4	2.1	1.5
29	3.3	6.7	45	30	106	61	14	12	6.4	3.4	2.1	1.6
30	2.9	6.1	70	28	-	52	14	12	6.1	3.4	2.1	1.7
31	3.1	-	120	26	-	47	-	12	-	3.2	2.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	89.2	4.9	1.8	2.88	0.505	0.58	177
November.....	205.4	16	2.6	6.85	1.20	1.34	407
December.....	661.1	120	4.4	21.3	3.74	4.31	1,310
Calendar year 1935.....	8,251.1	158	1.8	22.6	3.96	53.79	16,360
January.....	3,651	338	26	118	20.7	23.86	7,240
February.....	1,386	169	20	47.8	8.39	9.05	2,750
March.....	1,458	98	23	47.0	8.25	9.51	2,890
April.....	674	40	14	22.5	3.95	4.41	1,340
May.....	473	31	12	15.3	2.68	3.09	938
June.....	256.1	11	6.1	8.54	1.50	1.67	508
July.....	135.5	5.8	3.2	4.37	.767	.88	269
August.....	79.7	3.2	2.1	2.57	.451	.52	158
September.....	57.5	2.6	1.5	1.92	.337	.38	114
Water year 1935-36.....	9,126.6	338	1.5	24.9	4.37	59.60	18,100

WILLAMETTE RIVER BASIN

Molalla River above Pine Creek, near Wilhoit, Oreg.

Location.- Water-stage recorder, lat. 45°1', long. 122°29', near line between secs. 30 and 31, T. 6 S., R. 3 E., 1,700 feet above Pine Creek and 5 miles southeast of Wilhoit. Staff gage used prior to Oct. 27, 1935.

Drainage area.- 96 square miles.

Records available.- October 1935 to September 1936.

Extremes.- Maximum discharge during year, 6,700 second-feet Jan. 4 (gage height, 7.15 feet); minimum observed, 24 second-feet Oct. 1 (gage height, 0.76 foot).

Remarks.- Records good except those for Oct. 2, 5, 6, 12, 13, 19, 20, Dec. 6-13, which are fair and were computed on basis of records of Molalla River near Canby. No diversions or regulation near station.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 3				Jan. 4 to Sept. 30			
0.7	20	3.5	1,210	0.7	18	3.5	1,230
1.3	36	4.0	1,710	1.9	40	4.0	1,710
1.9	75	4.5	2,290	1.2	37	7.2	6,700
1.5	140	5.0	2,970	1.5	153		
1.8	227	5.5	3,710	1.8	246		
2.2	375	6.4	5,200	2.2	400		
2.6	555	7.2	6,700	2.6	595		
3.0	800			3.0	840		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	56	120	1,250	312	980	380	409	275	146	62	44
2	25	51	111	3,710	290	1,080	348	422	278	140	62	73
3	26	56	104	2,110	278	1,060	344	530	260	143	59	58
4	55	54	97	5,380	278	910	328	698	246	159	59	48
5	90	51	93	3,180	264	762	309	1,320	232	156	57	43
6	40	50	120	1,760	336	668	309	1,100	232	140	56	40
7	51	51	200	1,620	328	584	380	840	293	128	54	38
8	29	56	400	1,230	230	600	445	692	454	126	53	35
9	28	218	300	1,560	268	840	465	600	440	128	51	34
10	27	160	320	3,500	253	668	600	562	384	143	50	34
11	26	162	350	4,510	253	556	960	530	332	187	50	33
12	35	690	900	4,510	525	600	1,230	476	293	159	48	36
13	160	415	600	3,950	840	590	1,180	445	264	143	48	79
14	375	288	451	2,480	606	573	1,080	612	264	128	48	159
15	319	383	363	1,930	490	612	1,020	820	316	121	47	89
16	193	469	303	1,460	422	546	1,060	768	414	113	46	65
17	135	397	264	1,100	376	515	910	612	481	106	44	56
18	102	298	230	910	344	463	820	515	450	102	44	50
19	95	230	205	1,020	324	427	680	540	398	96	44	47
20	90	193	188	1,100	336	418	622	1,140	340	93	43	44
21	102	174	171	945	1,330	440	628	1,230	301	89	41	43
22	115	174	157	827	1,930	414	606	910	268	85	41	40
23	91	250	146	775	1,410	388	551	723	243	84	41	39
24	82	257	146	698	950	364	668	595	219	80	41	38
25	72	218	174	617	782	332	698	505	206	78	41	36
26	69	196	176	530	794	340	562	450	190	75	40	35
27	62	176	420	476	945	788	600	409	184	73	39	34
28	72	160	505	432	945	840	458	364	193	70	36	33
29	80	146	492	388	910	612	445	356	164	68	35	33
30	66	132	922	360	-	486	427	309	153	67	36	32
31	60	-	1,450	336	-	432	-	282	-	65	35	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,764	375	24	69.2	0.929	1.07	5,480
November.....	6,191	690	50	206	2.15	2.40	12,280
December.....	10,478	1,450	93	338	3.52	4.06	20,780
Calendar year							
January.....	54,154	5,380	336	1,747	18.2	20.98	107,400
February.....	17,459	1,930	253	601	6.26	6.75	34,590
March.....	19,868	1,060	332	609	6.34	7.31	37,420
April.....	19,011	1,230	309	634	6.60	7.36	37,710
May.....	19,744	1,320	282	637	6.64	7.66	39,160
June.....	8,757	481	153	292	3.04	3.39	17,370
July.....	3,491	187	65	113	1.18	1.36	6,920
August.....	1,451	62	35	46.8	.498	.56	2,880
September.....	1,463	159	32	48.8	.508	.57	2,900
Water year 1935-36.....	163,800	5,380	24	448	4.67	65.47	324,900

Molalla River near Canby, Oreg.

Location.- Water-stage recorder, lat. 45°15', long. 122°41', in NE¼ sec. 9, T. 4 S., R. 1 E., at bridge 1½ miles south of Canby. Zero of gage is 104.56 feet above mean sea level (general adjustment of 1929).

Drainage area.- 323 square miles.

Records available.- August 1928 to September 1936.

Extremes.- Maximum discharge during year, 11,900 second-feet Jan. 4 (gage height, 10.2 feet); minimum, 38 second-feet Oct. 3; minimum daily discharge, 47 second-feet Oct. 3, 1928-36; Maximum discharge, 22,300 second-feet Mar. 31, 1931 (gage height, 14.7 feet); minimum, 32 second-feet Sept. 11, 1934; minimum daily discharge, 38 second-feet Sept. 7, 1935.

Remarks.- Records excellent. A few small irrigation diversions above gage.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 4				Jan. 5 to Sept. 30			
1.4	23	3.5	1,450	1.4	34		
1.6	89	4.0	1,910	1.6	91		
1.8	175	5.0	3,090	1.8	175		
2.0	260	6.0	4,490	2.3	475		
2.3	475	8.0	7,780	3.0	1,010		
2.6	695	10.0	11,500	6.0	4,490		
3.0	1,010			8.0	7,780		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	144	242	1,960	718	1,960	1,130	778	568	304	114	72
2	57	134	236	6,160	665	1,960	1,010	770	598	292	103	88
3	47	118	220	4,640	820	2,010	970	898	560	292	107	130
4	89	114	200	8,900	628	1,910	954	1,480	551	292	103	99
5	157	130	195	8,080	612	1,910	874	2,490	496	334	107	95
6	110	118	225	4,490	688	1,380	826	2,700	475	292	103	82
7	97	110	340	3,160	818	1,210	882	2,060	590	247	103	91
8	78	118	810	2,640	710	1,130	994	1,680	786	247	107	79
9	82	220	672	2,640	658	1,480	1,010	1,380	882	247	85	76
10	71	360	695	4,050	612	1,300	1,090	1,250	818	310	99	76
11	67	304	732	9,220	598	1,130	1,520	1,170	725	366	99	72
12	89	895	2,010	7,780	890	1,170	2,010	1,050	650	353	91	72
13	269	898	1,560	8,860	1,910	1,210	2,060	962	582	310	91	82
14	433	635	1,170	5,740	1,560	1,130	1,860	1,250	552	274	99	190
15	665	545	938	4,490	1,300	1,210	1,710	1,520	770	258	88	210
16	405	810	788	3,910	1,130	1,170	1,780	1,680	1,010	225	85	144
17	280	725	658	3,220	978	1,090	1,610	1,430	1,130	205	103	130
18	225	590	598	2,580	882	1,010	1,480	1,250	1,090	195	82	103
19	190	482	524	2,520	818	930	1,250	1,130	962	185	88	95
20	166	412	461	2,640	778	874	1,130	1,500	922	180	79	85
21	175	353	426	2,280	1,820	882	1,090	2,060	725	162	79	99
22	242	322	386	1,910	3,910	850	1,090	1,660	650	148	79	88
23	220	360	366	1,710	3,490	818	994	1,380	588	139	72	85
24	180	433	340	1,560	2,580	810	1,090	1,210	510	134	91	88
25	162	398	366	1,380	2,010	762	1,250	1,050	461	130	91	72
26	152	360	392	1,210	1,910	748	1,090	930	426	126	88	79
27	134	328	810	1,090	1,960	1,410	954	850	398	126	82	66
28	152	310	914	994	2,420	2,340	890	770	398	130	82	76
29	195	286	914	898	1,960	1,810	866	810	366	126	76	72
30	185	264	1,130	826	-	1,480	818	680	334	122	57	63
31	162	-	2,230	770	-	1,300	-	612	-	110	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	5,589	665	47	180	0.557	0.64	11,090
November.....	11,276	898	110	376	1.16	1.29	22,370
December.....	21,276	2,230	195	686	2.12	2.44	42,200
Calendar year 1935.....	266,518	4,030	38	730	2.26	30.66	528,700
January.....	112,308	9,220	770	3,623	11.2	12.91	222,800
February.....	39,333	3,910	598	1,356	4.20	4.53	78,020
March.....	39,934	2,340	743	1,288	3.99	4.60	79,210
April.....	36,262	2,060	818	1,209	3.74	4.17	71,920
May.....	40,300	2,700	612	1,300	4.02	4.64	79,930
June.....	19,533	1,130	334	651	2.02	2.25	38,740
July.....	6,861	366	110	221	0.64	0.79	13,610
August.....	2,799	114	57	90.3	0.280	0.32	5,550
September.....	2,859	210	63	95.3	0.295	0.33	5,670
Water year 1935-36.....	338,330	9,220	47	924	2.86	38.91	671,100

Pudding River at Aurora, Oreg.

Location.- Wire-weight gage, lat. 45°14', long. 122°45', in SE¼ sec. 12, T. 4 S., R. 1 W., at highway bridge at Aurora, half a mile above mouth of Mill Creek. Zero of gage is 76.79 feet above mean sea level (general adjustment of 1929).

Drainage area.- 493 square miles.

Records available.- October 1928 to September 1936.

Extremes.- Maximum discharge observed during year, 8,790 second-feet Jan. 13 (gage height, 20.26 feet); minimum, 47 second-feet Oct. 1, 3.

1928-36: Maximum discharge, 10,200 second-feet Dec. 23, 1933 (gage height, 21.64 feet); minimum, 37 second-feet Sept. 9, 12, 1935.

Maximum known stage, 25.0 feet Jan. 9, 1923 (discharge, about 14,500 second-feet).

Remarks.- Records fair. Daily discharge interpolated for July 19, Aug. 16. No diversions above station. Slight regulation at times in summer by mills on tributaries.

Rating table, water year, 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-14, June 26 to Sept. 30)

0.3	36	2.5	420	10.0	2,540
.6	80	3.0	520	12.0	3,350
.9	127	4.0	732	15.0	4,660
1.2	177	5.0	960	18.0	6,630
1.6	247	6.0	1,210	21.0	9,610
2.0	322	8.0	1,810		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	143	238	2,230	890	2,700	1,950	561	540	284	92	53
2	49	143	229	2,980	867	2,300	1,540	540	520	274	90	56
3	47	143	211	3,730	775	2,090	1,690	540	520	256	88	90
4	66	121	211	4,210	754	1,810	1,360	624	500	256	86	105
5	88	106	202	5,080	754	1,680	1,270	913	460	274	86	90
6	103	105	211	5,320	867	1,450	1,160	1,420	440	284	82	82
7	108	108	265	5,140	1,160	1,270	1,110	1,420	420	256	75	72
8	88	113	500	4,960	1,110	1,160	1,080	1,180	460	238	77	66
9	76	113	603	4,760	960	1,160	1,080	1,010	540	220	76	64
10	72	143	582	5,140	867	1,240	1,080	890	520	220	72	64
11	66	229	624	5,200	821	1,110	1,110	798	480	238	71	65
12	71	303	1,140	6,630	844	1,040	1,210	710	440	274	68	66
13	94	688	1,660	8,690	1,300	1,110	1,240	645	400	284	65	66
14	152	754	1,480	8,380	1,480	1,140	1,160	666	400	238	64	74
15	247	603	1,210	7,990	1,330	1,180	1,080	936	480	220	62	135
16	380	561	985	7,320	1,160	1,210	1,010	1,010	666	194	61	177
17	284	603	844	7,140	1,040	1,180	960	776	177	60	60	152
18	229	640	732	6,310	960	1,060	890	867	776	177	60	109
19	177	460	666	5,640	890	985	821	798	668	164	64	92
20	160	400	582	5,020	890	913	754	821	624	152	64	88
21	143	360	520	4,480	1,180	867	688	1,160	561	143	64	80
22	143	322	480	3,620	3,690	821	666	1,270	520	135	64	74
23	168	322	460	3,020	4,520	798	645	1,130	460	127	59	63
24	168	341	440	3,380	4,610	821	624	985	420	119	54	65
25	143	360	440	1,880	4,260	844	688	867	400	116	59	60
26	135	341	480	1,600	3,820	821	710	776	360	113	65	59
27	127	322	540	1,420	3,430	960	645	688	341	106	64	59
28	127	284	688	1,270	3,180	2,500	624	645	341	101	62	58
29	135	284	613	1,160	3,020	2,060	624	603	322	98	59	54
30	152	247	1,010	1,040	2,730	582	582	582	303	95	56	53
31	168	-	1,570	960	-	2,260	-	561	-	94	53	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	4,213	380	47	136	0.276	0.32	8,360
November.....	9,562	754	105	319	.647	.72	18,970
December.....	20,716	1,680	202	668	1.55	1.56	41,090
Calendar year 1935.....	299,203	5,710	37	820	1.66	22.58	593,400
January.....	134,900	8,690	960	4,352	8.83	10.18	267,600
February.....	51,430	4,610	754	1,773	3.60	3.88	102,000
March.....	44,270	3,060	798	1,428	2.90	3.34	87,810
April.....	30,051	1,950	582	1,002	2.03	2.26	59,610
May.....	26,628	1,420	540	859	1.74	2.01	52,810
June.....	14,678	776	303	489	.992	1.11	29,110
July.....	5,927	284	94	191	.387	.45	11,760
August.....	2,123	92	53	68.5	.139	.16	4,210
September.....	2,396	177	53	79.9	.162	.18	4,750
Water year 1935-36.....	346,892	8,690	47	948	1.92	26.17	688,100

Tualatin River near Willamette, Oreg.

Location.- Staff gage, lat. 45°21'10", long. 122°40'35", in SW 1/4 sec. 34, T. 2 S., R. 1 E., 300 feet above county bridge and 1 mile northwest of Willamette. Zero of gage is 85.9 feet above mean sea level (surveys of State Emergency Relief Administration).

Drainage area.- 710 square miles.

Records available.- July 1928 to September 1936.

Discharge.- Maximum discharge observed during year, 17,600 second-feet Jan. 14 (gage height, 14.3 feet); minimum, 14 second-feet Oct. 1 (gage height, 0.64 foot).
1928-36: Maximum discharge, 23,300 second-feet Dec. 23, 1933 (gage height, 16.7 feet); minimum, 2 second-feet Aug. 14-21, 1928 (gage height, 0.25 foot).

Remarks.- Records of river discharge good above and fair below 500 second-feet; records of Oswego Canal discharge poor. Oswego Canal diverts from Tualatin River above station and returns water to Willamette River below station. Some regulation in low-water season by flashboards on crest of Oswego Canal diversion dam.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Dec. 11)

Oct. 1 to Jan. 13						Jan. 14 to Sept. 30					
0.6	16	2.5	470	7.0	3,820	0.6	12	2.5	455		
.9	43	3.0	705	8.0	5,100	.9	33	3.0	700		
1.2	86	4.0	1,290	10.0	8,320	1.2	68	4.0	1,290		
1.8	170	5.0	1,990	12.0	12,400	1.6	142	14.0	16,900		
2.0	280	6.0	2,820	14.0	16,900	2.0	260				

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	68	170	2,550	1,410	5,980	2,550	570	432	210	44	27
2	17	62	182	3,390	1,290	6,130	2,390	570	432	195	42	27
3	17	69	182	3,710	1,230	5,980	2,230	545	410	181	42	25
4	26	51	182	5,100	1,170	5,680	1,990	570	432	181	40	28
5	35	51	182	5,240	1,110	5,100	1,830	595	455	195	38	32
6	40	53	195	5,680	1,170	4,300	1,690	672	455	195	34	38
7	51	56	208	6,290	1,170	3,820	1,480	755	432	181	34	36
8	44	56	280	6,770	1,230	3,390	1,410	700	455	167	38	33
9	39	63	370	6,930	1,170	2,910	1,550	620	500	150	44	31
10	34	63	470	6,930	1,050	2,640	1,290	545	545	150	38	26
11	31	69	450	7,270	990	2,390	1,230	500	545	167	34	27
12	33	107	655	7,960	1,050	2,230	1,170	455	500	167	34	24
13	39	145	930	9,860	1,230	1,990	1,110	410	455	181	33	28
14	45	220	1,110	15,000	1,350	1,910	1,050	432	410	162	32	34
15	83	250	930	15,900	1,290	1,830	990	522	410	144	33	39
16	145	235	730	13,500	1,170	1,910	930	570	478	133	33	47
17	135	265	805	11,500	1,050	1,910	870	545	500	116	31	42
18	109	315	538	9,480	930	1,830	810	432	522	102	33	48
19	64	298	430	8,320	930	1,760	755	478	478	108	31	38
20	76	235	370	7,610	930	1,620	755	522	432	104	30	34
21	71	195	332	6,770	1,050	1,480	700	620	390	90	27	29
22	71	158	298	5,980	1,910	1,410	672	670	370	85	26	28
23	79	170	280	5,240	3,600	1,350	645	870	330	80	27	27
24	84	170	265	4,560	4,180	1,290	645	755	295	72	30	26
25	78	280	265	4,060	4,560	1,230	645	645	278	67	33	26
26	65	370	298	3,390	4,960	1,170	620	545	242	62	38	25
27	59	315	410	3,000	5,380	1,350	595	478	242	59	42	22
28	65	250	655	2,640	5,680	2,070	570	455	225	59	40	21
29	66	208	1,170	2,230	5,850	2,550	545	432	225	54	34	19
30	62	195	1,410	1,830	-	2,730	570	432	225	54	30	17
31	61	-	2,150	1,550	-	2,730	-	432	-	51	27	-

Month	River Only				River and Oswego Canal (combined)					
	Maximum	Minimum	Mean	Run-off in Acres-feet	Maximum	Minimum	Mean	Fer square mile	Run-off Inches	Acres-feet
October.....	145	14	59.9	3,690	212	74	124	0.175	0.20	7,630
November.....	370	51	168	10,000	440	113	234	.330	.37	13,900
December.....	2,150	170	540	33,190	2,280	188	603	.849	.98	37,100
Calendar year 1935..	8,880	7	1,197	866,600	8,890	63	1,239	1.75	23.71	897,200
January.....	15,900	1,550	6,459	397,100	16,000	1,610	6,555	9.23	10.64	403,000
February.....	5,850	930	2,071	119,100	5,850	977	2,150	3.00	3.24	122,500
March.....	6,130	1,170	2,731	167,900	6,160	1,220	2,761	3.89	4.48	169,800
April.....	2,550	545	1,136	67,610	2,640	532	1,190	1.68	1.87	70,810
May.....	870	410	566	34,790	870	478	618	.870	1.00	38,020
June.....	545	225	403	24,000	602	255	462	.651	.73	27,490
July.....	210	51	127	7,780	267	113	192	.270	.31	11,810
August.....	44	25	34.5	2,120	106	87	96.7	.138	.16	5,950
September.....	48	17	30.1	1,790	110	79	92.1	.130	.14	5,480
Water year 1935-36..	15,900	14	1,197	866,100	16,000	74	1,258	1.77	24.12	913,500

WILLAMETTE RIVER BASIN

Gales Creek near Gales Creek, Oreg.

Location.- Staff gage, lat. 45°39', long. 123°16', in SE¼ sec. 23, T. 2 N., R. 5 W., half a mile below Beaver Creek and 4½ miles northwest of Gales Creek post office.

Drainage area.- 33 square miles.

Records available.- September 1935 to September 1936.

Extremes.- Maximum discharge during period, 2,590 second-feet Jan. 12 (gage height, 5.8 feet, observed at peak); minimum observed, 6 second-feet Sept. 24, 1936 (gage height, 0.84 foot).

Remarks.- Records good. Discharge interpolated for Dec. 25, Apr. 19, Aug. 8, 15. No diversions above station.

Rating table, 1935-36 (gage height, in feet, and discharge, in second-feet)

0.8	5	2.0	98	3.6	575
1.0	10	2.4	164	4.0	790
1.3	24	2.8	248	5.0	1,590
1.6	47	3.2	363	6.0	2,050

Discharge, in second-feet September 1935

Sept. 10	8
11	24
26	7
27	7

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	9	25	383	98	362	173	48	48	28	14	9
2	7	9	30	960	90	290	155	47	46	28	14	12
3	7	11	24	525	86	248	146	48	52	30	12	10
4	14	9	21	1,770	84	224	146	52	50	31	12	9
5	8	9	20	900	86	192	129	106	46	33	12	9
6	8	9	38	600	113	182	129	72	47	25	14	10
7	8	9	90	475	95	164	129	63	53	25	12	9
8	8	9	94	500	86	192	129	58	51	24	12	9
9	7	12	64	600	82	164	121	54	48	24	12	7
10	7	11	69	680	79	164	121	51	46	27	11	8
11	8	14	113	960	77	155	113	48	45	25	10	8
12	12	77	213	1,900	121	155	106	46	43	24	13	9
13	12	26	155	1,270	113	164	98	45	41	23	11	12
14	20	20	121	790	106	202	90	58	43	22	11	13
15	14	40	95	790	98	236	84	50	45	22	10	12
16	12	52	77	575	95	213	80	49	55	21	10	9
17	11	45	65	427	92	202	77	45	52	20	9	9
18	10	32	59	342	83	173	75	45	47	20	11	8
19	9	28	49	290	82	164	70	59	44	19	11	8
20	12	23	45	275	79	146	64	113	41	18	11	8
21	14	22	39	248	129	138	62	98	40	18	10	8
22	12	20	39	224	600	121	61	86	39	18	10	8
23	10	106	39	202	475	113	57	76	37	18	10	7
24	10	80	36	182	342	106	77	67	36	18	12	6
25	9	58	38	164	262	92	56	62	34	17	12	7
26	9	44	45	155	306	98	54	57	32	17	11	8
27	9	38	173	138	1,140	262	54	55	35	16	10	8
28	11	33	165	129	845	275	52	54	33	16	10	9
29	12	24	164	121	525	284	51	54	30	16	9	8
30	10	29	362	113	-	202	48	55	29	15	9	8
31	9	-	600	106	-	192	-	49	-	14	9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	316	20	7	10.2	0.309	0.36	627
November.....	908	106	9	30.3	.918	1.02	1,800
December.....	3,177	600	20	102	3.09	3.56	6,500
Calendar year 1935.....							
January.....	16,794	1,900	106	542	16.4	18.91	33,310
February.....	6,469	1,140	77	223	6.76	7.29	12,830
March.....	5,815	362	92	188	5.70	6.57	11,530
April.....	2,807	173	48	93.6	2.64	3.17	5,070
May.....	1,870	113	46	60.3	1.93	2.11	3,710
June.....	1,288	65	29	42.9	1.30	1.45	2,550
July.....	672	33	14	21.7	.658	.76	1,330
August.....	344	14	9	11.1	.336	.39	682
September.....	265	13	6	8.8	.267	.30	526
Water year 1935-36.....	40,725	1,900	6	111	3.36	45.89	80,760

Oswego Canal near Oswego, Oreg.

Location.- Staff gage, lat. 45°23'30", long. 122°43'10", in SW¼ sec. 17, T. 2 S., R. 1 E., 3 miles southwest of Oswego.

Records available.- October 1928 to September 1936.

Extremes.- Maximum discharge observed during year, 228 second-feet Jan. 9 (gage height, 7.53 feet); practically no flow at times.
1928-36: Maximum discharge, about 6,000 second-feet Dec. 23, 1933 (gage height, 16.1 feet); no flow at times.

Remarks.- Records poor. Oswego Canal diverts from Tualatin River in NW¼ sec. 20, three-quarters of a mile above gage; diversion dam on Tualatin River is in NE¼ sec. 33, about 3 miles by river below canal.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	62	70	137	60	26	92	37	55	57	62	62
2	60	60	10	155	60	28	86	37	57	57	62	62
3	62	60	7	180	60	28	78	37	57	55	62	62
4	62	62	6	198	60	28	75	67	57	57	62	62
5	62	62	23	198	55	33	75	80	57	70	62	62
6	62	62	30	208	53	53	65	83	57	72	62	62
7	65	60	45	223	49	53	62	83	57	72	67	62
8	65	60	47	228	49	7	62	80	57	72	67	62
9	65	60	62	228	47	6	55	80	57	72	62	62
10	62	62	70	213	47	6	55	80	57	72	62	62
11	62	62	75	208	49	5	53	78	57	70	62	62
12	65	62	89	95	51	7	53	78	57	72	60	62
13	65	62	86	98	107	9	47	78	57	70	60	62
14	65	70	86	72	107	9	49	78	57	70	62	62
15	67	70	86	70	72	10	49	80	57	70	62	62
16	67	70	75	70	28	23	49	83	60	70	62	62
17	67	70	75	70	8	41	49	83	57	70	62	62
18	65	70	72	62	47	49	49	83	57	67	62	62
19	65	70	62	45	47	41	47	0	57	67	62	62
20	65	67	65	0	47	37	45	0	60	67	62	62
21	65	67	62	9	47	37	45	0	60	62	62	62
22	65	65	62	8	47	37	43	0	60	62	62	62
23	65	65	65	8	47	41	43	0	60	62	62	62
24	65	67	65	8	110	53	43	0	57	62	62	62
25	65	70	65	8	86	51	43	0	57	62	62	62
26	65	70	65	6	117	51	43	37	60	62	62	62
27	65	70	70	6	98	62	43	57	72	62	62	62
28	65	70	75	5	22	70	41	57	65	62	62	62
29	65	70	78	41	22	8	37	57	60	62	62	62
30	65	70	98	60	-	7	37	57	60	62	62	62
31	62	-	126	60	-	7	-	57	-	62	62	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				1,990	67	60	64.2	3,950				
November.....				1,967	70	60	65.6	3,900				
December.....				1,972	126	6	63.6	3,910				
Calendar year 1935.....				15,434	126	0	42.3	30,610				
January.....				2,977	228	0	96.0	5,900				
February.....				1,699	117	8	58.6	3,370				
March.....				923	70	5	29.8	1,830				
April.....				1,613	92	37	53.8	3,200				
May.....				1,627	83	0	52.5	3,230				
June.....				1,755	72	55	58.5	3,480				
July.....				2,031	72	55	65.5	4,030				
August.....				1,928	67	60	62.2	3,820				
September.....				1,860	62	62	62.0	3,690				
Water year 1935-36.....				22,342	228	0	61.0	44,310				

Clackamas River at Big Bottom, Oreg.

Location.- Water-stage recorder, lat. 45°1', long. 121°55', in sec. 26, T. 6 S., R. 7 E., just below Pot Creek at lower end of Big Bottom, half a mile above proposed dam site, and 28 miles southeast of Estacada.

Drainage area.- 132 square miles.

Records available.- April 1920 to September 1936.

Average discharge.- 16 years (1920-36), 451 second-feet.

Extremes.- Maximum discharge during year, 2,880 second-feet Jan. 4 (gage height, 5.34 feet); minimum, 231 second-feet Nov. 3 (gage height, 1.55 feet).
1920-36: Maximum discharge, 6,750 second-feet Mar. 31, 1931 (gage height, 8.28 feet); minimum, 190 second-feet several days in August and September 1931 (gage height, 1.25 feet).

Remarks.- Records good except those for Feb. 3 to Mar. 2, which were based on records at stations below and on Oak Grove Fork and are fair. No regulation or diversions above station. Field data furnished by Portland General Electric Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.4	195	3.5	1,050
1.6	244	4.0	1,400
1.9	356	4.5	1,820
2.2	446	5.0	2,300
2.6	605	5.5	2,840
3.0	780		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	252	261	300	588	375	450	404	758	525	320	266	264
2	250	258	297	1,520	364	510	397	780	545	316	266	278
3	255	252	285	1,110	370	545	397	830	505	313	269	264
4	275	264	282	2,400	350	565	386	1,140	485	313	269	264
5	264	264	284	1,640	340	545	371	1,220	485	310	266	272
6	255	261	294	1,050	360	525	368	990	525	303	264	258
7	255	261	323	830	350	525	382	880	605	300	264	258
8	255	266	378	712	330	545	386	805	545	297	264	258
9	255	316	350	712	320	645	390	805	525	303	264	258
10	252	288	382	1,260	310	565	423	880	485	303	261	258
11	255	288	397	2,150	320	565	505	960	469	300	261	258
12	303	371	473	1,820	400	605	605	990	454	291	258	261
13	393	333	412	1,640	500	585	690	990	438	286	258	294
14	333	306	378	1,250	440	565	758	1,140	431	286	258	320
15	310	357	357	1,050	410	545	830	1,220	438	284	258	284
16	284	423	343	880	380	525	930	1,050	435	284	258	266
17	275	368	329	758	360	505	1,020	905	442	281	258	264
18	266	326	323	668	350	465	1,060	830	416	278	258	261
19	264	310	310	645	340	473	1,020	805	397	276	258	261
20	264	297	303	625	340	473	990	780	386	275	258	258
21	278	294	297	585	450	485	960	735	378	272	255	255
22	278	300	297	545	600	473	990	690	368	272	255	255
23	269	390	294	525	550	466	990	668	360	272	255	255
24	266	375	294	505	480	454	1,080	645	354	272	258	255
25	266	346	306	477	430	438	1,080	645	350	272	258	252
26	266	336	316	466	410	438	960	668	343	269	255	252
27	264	329	393	454	420	505	905	712	336	266	255	250
28	269	320	397	435	440	485	855	645	336	266	255	250
29	275	310	386	412	430	454	805	605	333	266	255	250
30	269	306	485	382	-	435	758	565	326	266	252	250
31	264	-	565	368	-	419	-	545	-	266	252	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	8,479	393	250	274	2.08	2.40	16,820
November.....	9,376	423	252	313	2.37	2.64	18,600
December.....	10,856	565	284	350	2.65	3.06	21,490
Calendar year 1935.....	154,629	990	250	424	3.21	43.60	306,700
January.....	28,462	2,400	368	918	6.95	8.01	56,450
February.....	11,519	600	310	397	3.01	3.25	22,850
March.....	15,818	645	419	510	3.86	4.45	31,370
April.....	21,715	1,080	368	724	6.48	6.11	43,070
May.....	25,861	1,220	545	830	6.35	7.30	51,350
June.....	13,020	605	326	434	3.29	3.87	25,820
July.....	8,884	320	266	287	2.17	2.50	17,620
August.....	8,041	269	252	259	1.96	2.26	15,950
September.....	7,873	320	250	282	1.98	2.21	15,620
Water year 1935-36.....	169,904	2,400	250	464	3.52	47.86	337,000

Clackamas River above Three Lynx Creek, Oreg.

Location.- Water-stage recorder, lat. 45°7', long. 122°4', in NE½ sec. 21, T. 5 S., R. 6 E., 500 feet above Three Lynx Creek and 17 miles southeast of Estacada. Zero of gage is 1,098 feet above mean sea level.

Drainage area.- 498 square miles.

Records available.- October 1911 to December 1913, October 1921 to September 1936.

Average discharge.- 17 years (1911-13, 1921-36), 1,849 second-feet.

Extremes.- Maximum discharge during year, 17,300 second-feet Jan. 4 (gage height, 10.2 feet); minimum not recorded, 375 second-feet or less Sept. 20; minimum daily discharge (estimated), 630 second-feet Nov. 3.

1911-13, 1921-36: Maximum discharge, 34,800 second-feet Mar. 31, 1931 (gage height, 16.5 feet); minimum observed, 375 second-feet Aug. 10, 16, 1924, Sept. 20, 1936; minimum daily discharge, 536 second-feet Oct. 22, 1930.

Remarks.- Records good except those for Oct. 1-12, 18-20, 23-31, Nov. 1-8, which were based in part on records at other stations on Clackamas River and are fair. Water diverted from Oak Grove Fork is used in power plant on Clackamas River just above station. Field data furnished by Portland General Electric Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.6	490	2.5	1,690	6.0	6,520
.9	595	3.0	2,180	7.0	8,750
1.2	745	3.5	2,730	9.0	13,900
1.6	995	4.0	3,350	11.0	19,700
2.0	1,270	5.0	4,730		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	660	859	2,620	1,310	2,340	1,510	2,790	1,830	1,030	799	734
2	650	640	859	9,700	1,240	2,730	1,510	2,910	1,830	1,030	787	793
3	660	630	817	5,750	1,350	2,970	1,470	3,210	1,690	1,060	751	740
4	690	650	793	14,200	1,270	2,910	1,390	3,990	1,650	995	781	712
5	670	670	793	9,450	1,270	2,730	1,270	4,420	1,600	995	769	723
6	650	660	853	5,220	1,350	2,510	1,350	3,990	1,740	1,030	751	712
7	650	650	995	3,850	1,310	2,340	1,390	3,460	1,690	995	769	696
8	650	680	1,430	3,330	1,130	2,290	1,470	3,210	1,930	962	745	701
9	650	995	1,200	3,590	1,160	3,090	1,510	3,090	1,780	995	751	690
10	640	853	1,350	6,670	1,160	2,790	1,740	3,330	1,650	995	751	680
11	650	841	1,390	12,000	1,130	2,510	2,460	3,720	1,650	995	745	685
12	720	1,350	1,930	9,700	1,430	2,510	3,350	3,590	1,560	930	728	696
13	1,100	1,160	1,600	8,750	1,890	2,510	3,850	3,590	1,470	930	745	769
14	1,060	995	1,390	5,940	1,650	2,400	3,990	3,990	1,430	930	734	962
15	1,030	1,130	1,240	4,890	1,470	2,400	3,990	4,270	1,560	898	734	781
16	847	1,560	1,130	3,990	1,350	2,180	4,570	3,990	1,600	898	745	734
17	757	1,310	1,030	3,330	1,270	2,080	4,570	3,460	1,600	898	712	712
18	710	1,130	995	2,650	1,270	1,980	4,420	3,210	1,560	865	723	712
19	690	995	930	2,730	1,270	1,880	3,990	3,090	1,470	847	718	712
20	680	898	865	2,790	1,240	1,880	3,850	3,090	1,350	853	718	675
21	793	898	865	2,560	2,080	1,980	3,850	3,090	1,310	841	718	690
22	793	898	865	2,340	3,720	1,930	3,850	2,850	1,270	823	712	690
23	720	1,270	829	2,290	3,210	1,880	3,720	2,730	1,240	829	706	685
24	700	1,350	855	2,240	2,680	1,780	3,850	2,560	1,160	823	745	690
25	680	1,200	930	2,030	2,290	1,690	4,130	2,560	1,160	823	723	670
26	670	1,100	995	1,930	2,130	1,650	3,590	2,560	1,100	817	718	660
27	660	1,060	1,390	1,830	2,180	2,180	3,330	2,680	1,130	805	696	650
28	700	962	1,690	1,690	2,290	2,460	3,090	2,400	1,100	787	696	650
29	710	962	1,600	1,560	2,290	1,980	3,090	2,180	1,100	799	690	660
30	690	930	2,080	1,470	-	1,880	2,850	2,030	1,060	781	680	665
31	680	-	3,090	1,430	-	1,690	-	1,980	-	787	690	-
	Month	Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off				
								Inches	Acres-feet			
	October.....	22,620		1,100	640	730	1.50	1.73	44,870			
	November.....	29,087		1,560	630	970	1.99	2.22	57,690			
	December.....	37,618		3,090	793	1,213	2.49	2.87	74,610			
	Calendar year 1935.....	564,592		3,620	630	1,547	3.17	43.03	1,120,000			
	January.....	142,700		14,200	1,430	4,603	9.43	10.87	283,000			
	February.....	49,380		3,720	1,130	1,703	3.49	3.76	97,940			
	March.....	70,150		3,090	1,650	2,262	4.64	5.35	139,100			
	April.....	88,980		4,570	1,270	2,966	6.08	6.78	176,500			
	May.....	98,020		4,420	1,980	3,162	6.48	7.47	194,400			
	June.....	44,470		1,930	1,060	1,482	3.04	3.39	86,200			
	July.....	28,046		1,060	781	905	1.85	2.13	55,630			
	August.....	22,730		799	680	733	1.50	1.73	45,080			
	September.....	21,329		962	650	711	1.46	1.63	42,310			
	Water year 1935-36.....	655,110		14,200	630	1,790	3.67	49.93	1,299,000			

Clackamas River near Cazadero, Oreg.

Location.- Water-stage recorder, lat. 45°14', long. 122°16', in NE¼ sec. 11, T. 4 S., R. 4 E., half a mile above backwater from Cazadero Dam of Portland General Electric Co. and 3 miles southeast of Cazadero. Zero of gage is 532.0 feet above mean sea level; published gage readings have been reduced to mean sea level datum.

Drainage area.- 665 square miles.

Records available.- January 1909 to September 1936.

Average discharge.- 27 years (1909-36), 2,607 second-feet.

Extremes.- Maximum discharge during year, 24,200 second-feet Jan. 4 (gage height, 545.9 feet); minimum, 535 second-feet Sept. 20; minimum daily discharge, 710 second-feet Oct. 2.

1909-36: Maximum discharge, 60,800 second-feet Mar. 31, 1931 (gage height, 556.5 feet); minimum, 410 second-feet Oct. 20, 1925, Sept. 25, 1930, caused by shutdown in power plant at Three Lynx (gage height, 532.03 feet); minimum daily discharge, 587 second-feet Aug. 17, 1930.

Remarks.- Records good. Some diurnal fluctuation during low water owing to operation of Oak Grove power plant. Field data furnished by Portland General Electric Co.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 3				Jan. 4 to Sept. 30			
532.5	665	36.0	2,320	532.5	535	36.0	3,090
33.0	920	38.0	5,980	33.0	750	38.0	5,660
33.5	1,210	40.0	9,700	33.5	1,020	40.0	9,260
34.0	1,530	42.0	14,200	34.0	1,350	42.0	13,900
35.0	2,320			35.0	2,130	44.0	19,000
						46.0	24,500

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	735	810	1,090	3,900	1,840	3,650	2,130	3,530	2,310	1,280	990	878
2	710	780	1,060	13,500	1,690	4,010	2,040	3,550	2,400	1,220	960	1,110
3	730	755	1,030	8,890	1,800	4,390	2,040	4,130	2,220	1,350	932	932
4	904	805	975	20,500	1,760	4,260	1,960	5,210	2,180	1,280	932	850
5	832	821	975	14,200	1,680	3,770	1,760	6,290	2,080	1,280	905	878
6	765	800	1,060	8,050	1,890	3,420	1,880	5,810	2,220	1,280	905	825
7	755	770	1,240	5,970	1,840	3,300	2,040	4,930	2,510	1,180	905	825
8	750	832	1,900	5,070	1,560	3,200	2,310	4,390	2,680	1,210	905	655
9	755	1,330	1,640	5,210	1,840	4,280	2,400	4,130	2,490	1,180	905	775
10	740	1,150	1,820	9,100	1,560	3,890	2,780	4,260	2,310	1,240	905	800
11	745	1,150	1,860	16,400	1,560	3,420	3,890	4,650	2,220	1,280	905	800
12	870	2,020	2,890	13,200	2,400	3,530	5,210	4,390	2,080	1,210	878	825
13	1,390	1,670	2,410	12,200	3,310	3,530	5,660	4,390	1,960	1,140	878	905
14	1,300	1,330	1,860	9,640	2,680	3,310	5,660	4,790	1,920	1,140	878	1,210
15	1,330	1,460	1,740	7,310	2,310	3,420	5,660	5,210	2,040	1,110	878	960
16	1,090	2,020	1,560	5,810	2,000	3,200	6,290	4,930	2,130	1,110	878	878
17	948	1,700	1,420	4,790	1,880	2,980	6,130	4,260	2,130	1,080	878	850
18	898	1,460	1,360	4,130	1,800	2,680	5,970	3,770	2,080	1,080	850	850
19	860	1,270	1,270	4,390	1,800	2,580	5,360	3,650	1,960	1,050	850	850
20	854	1,180	1,210	4,520	1,760	2,490	4,930	3,890	1,840	1,050	850	800
21	1,030	1,120	1,180	4,010	2,960	2,680	4,790	4,010	1,720	1,050	850	825
22	1,030	1,150	1,120	3,650	5,510	2,580	4,790	3,770	1,720	1,020	850	800
23	914	1,460	1,090	3,420	4,790	2,490	4,620	3,420	1,600	1,020	850	800
24	865	1,670	1,090	3,200	3,890	2,400	4,930	3,200	1,560	1,020	878	800
25	854	1,460	1,180	2,980	3,200	2,310	5,360	3,200	1,520	1,020	850	800
26	821	1,390	1,300	2,780	3,090	2,310	4,520	3,200	1,490	1,020	850	800
27	800	1,330	1,740	2,580	3,200	3,310	4,260	3,200	1,460	990	850	800
28	904	1,240	2,230	2,310	3,530	3,890	3,890	2,880	1,420	990	825	775
29	920	1,210	2,180	2,180	3,420	2,880	3,890	2,680	1,420	990	800	800
30	865	1,150	2,690	2,040	-	2,580	3,650	2,490	1,350	990	825	775
31	843	-	4,270	1,960	-	2,400	-	2,400	-	960	825	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	27,807	1,390	710	897	1.35	1.56	55,150
November.....	37,355	2,020	755	1,245	1.87	2.09	74,090
December.....	50,560	4,270	975	1,681	2.45	2.82	100,300
Calendar year 1935.....	750,487	5,070	706	2,066	3.09	41.95	1,489,000
January.....	206,690	20,500	1,960	6,667	10.0	11.53	410,000
February.....	72,330	5,510	1,560	2,494	3.75	4.04	143,500
March.....	98,920	4,390	2,310	3,191	4.80	5.53	196,200
April.....	120,700	6,290	1,760	4,023	6.05	6.75	239,400
May.....	124,710	6,290	2,400	4,023	6.05	6.98	247,400
June.....	58,820	2,680	1,350	1,961	2.95	3.29	116,700
July.....	34,880	1,350	960	1,125	1.69	1.95	69,180
August.....	27,190	960	800	877	1.32	1.52	53,930
September.....	25,601	1,210	775	853	1.28	1.43	50,780
Water year 1935-36.....	885,561	20,500	710	2,420	3.64	49.49	1,757,000

Oak Grove Fork above power-plant intake, Oreg.

Location.- Water-stage recorder, lat. 45°4', long. 121°57', in SW $\frac{1}{4}$ sec. 3, T. 6 S., R. 7 E., two-thirds of a mile above Kink Creek, 1 mile above intake of Oak Grove power development of Portland General Electric Co., and 24 miles southeast of Estacada.

Drainage area.- 126 square miles.

Records available.- December 1923 to September 1936. At site 1 mile downstream, below Kink Creek, May 1909 to December 1923 (incomplete). Records comparable except for slight inflow from springs and Kink Creek.

Average discharge.- 12 years (1924-36), 462 second-feet.

Extremes.- Maximum discharge during year, 1,650 second-feet Jan. 4 (gage height, 3.69 feet); minimum, 282 second-feet Dec. 2-5, 19-24 (gage height, 1.72 feet). 1909-36: Maximum discharge, 5,000 second-feet Jan. 7, 1923 (gage height, 5.45 feet); minimum, 236 second-feet Oct. 15, 16, 18, 1931 (gage height, 1.42 feet).

Remarks.- Records good. Discharge for Oct. 1 based on record at Big Bottom. Discharge includes flow of Spring Creek, just below gage. No diversions or regulation above station. Field data furnished by Portland General Electric Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.6	240	2.1	450	3.3	1,280
1.8	312	2.5	680	3.7	1,650
		2.9	950		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	298	285	285	386	391	430	405	852	596	386	341	329
2	297	285	282	782	386	450	400	873	590	386	341	333
3	297	285	282	650	382	483	400	908	566	386	341	326
4	301	285	282	1,460	382	505	391	1,110	549	386	337	325
5	301	285	282	1,150	372	500	382	1,190	544	382	337	325
6	297	285	289	810	377	494	382	1,110	578	377	337	316
7	297	285	308	650	363	483	391	998	620	372	333	312
8	297	297	312	578	354	516	410	936	554	372	333	312
9	293	325	301	572	346	584	420	915	544	372	329	312
10	293	297	312	754	346	544	456	929	527	372	329	312
11	293	304	312	1,070	350	527	527	958	516	372	329	312
12	312	325	325	1,030	382	549	614	958	494	368	329	312
13	320	308	308	974	386	544	668	950	488	359	329	333
14	312	301	301	852	363	527	704	1,010	498	354	329	346
15	301	320	297	754	354	510	747	1,070	494	354	325	316
16	301	316	293	680	341	488	831	962	488	350	325	312
17	297	308	293	608	333	494	880	887	488	350	325	312
18	297	297	289	560	333	483	922	838	478	346	325	312
19	297	293	282	566	333	466	915	810	461	346	325	312
20	301	289	282	572	337	472	908	796	450	346	325	308
21	308	289	282	544	410	483	901	803	435	346	325	308
22	304	293	282	516	466	472	915	747	425	341	320	308
23	297	297	282	500	440	466	915	710	420	341	320	306
24	297	293	282	483	415	456	974	692	415	341	320	304
25	293	285	289	472	400	440	1,010	680	410	341	320	304
26	293	293	293	456	400	435	958	680	405	341	320	304
27	297	289	301	440	405	483	922	710	400	341	320	304
28	301	289	316	430	420	461	901	668	400	341	320	304
29	297	285	312	410	415	435	966	644	395	341	316	301
30	293	285	341	405	-	420	894	638	391	341	316	301
31	293	-	382	400	-	415	-	620	-	341	316	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				9,275	320	293	299	2.37	2.73	18,400		
November.....				9,681	325	285	296	2.35	2.62	17,620		
December.....				9,279	382	282	299	2.37	2.73	18,400		
Calendar year 1935.....				155,543	894	282	426	3.28	45.65	308,100		
January.....				20,514	1,460	386	662	5.25	6.05	40,690		
February.....				10,982	466	333	379	3.01	3.25	21,780		
March.....				15,015	584	415	484	3.84	4.43	29,780		
April.....				21,109	1,010	382	704	5.59	6.24	41,670		
May.....				26,672	1,190	620	860	6.33	7.87	52,900		
June.....				14,639	620	391	488	3.87	4.32	29,040		
July.....				11,092	386	341	368	2.84	3.27	22,000		
August.....				10,137	341	316	327	2.60	3.00	20,110		
September.....				9,422	346	301	314	2.49	2.78	18,690		
Water year 1935-36.....				167,017	1,460	282	456	3.62	49.29	331,300		

Lewis River near Cougar, Wash.

Location.- Water-stage recorder, lat. 46°3'30", long. 122°12'50", in SE¼ sec. 29, T. 7 N., R. 5 E., 1 mile below Swift Creek and 4 miles east of Cougar. Zero of present gage is 575.6 feet above mean sea level (general adjustment of 1929).

Drainage area.- 483 square miles.

Records available. July 1910 to March 1912 (gage heights only), June 1924 to September 1936. July 1909 to June 1910 at site 1,000 feet above Swift Creek.

Average discharge.- 12 years (1924-36), 2,819 second-feet.

Extremes.- Maximum discharge during year, 12,300 second-feet Jan. 12 (gage height, 9.24 feet); minimum, 530 second-feet Nov. 3 (gage height, 2.90 feet).
1910-12, 1924-36: Maximum discharge, 54,400 second-feet Dec. 21, 1933 (gage height, 15.7 feet, former datum); minimum, 454 second-feet Oct. 21, 1931 (gage height, 0.01 foot, former datum).

Remarks.- Records good. No diversions or regulation.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

2.9	590	6.0	4,040
3.2	775	6.5	4,950
3.5	990	7.0	5,950
4.0	1,390	7.5	7,110
4.5	1,900	8.0	8,500
5.0	2,500	8.5	10,000
5.5	3,210	9.0	11,600

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	698	644	1,030	5,570	1,900	3,960	2,190	4,400	3,700	2,070	1,150	1,060
2	692	620	990	7,110	1,790	3,870	2,070	4,750	3,530	2,010	1,150	1,070
3	698	614	960	5,850	1,790	3,950	2,010	5,340	3,620	2,130	1,150	915
4	698	632	922	9,610	1,790	3,780	1,900	6,620	3,620	2,260	1,150	880
5	692	650	901	9,250	1,740	3,530	1,840	8,210	3,450	2,190	1,110	865
6	692	650	975	6,860	1,790	3,370	1,790	6,860	3,700	1,900	1,110	866
7	680	650	1,600	5,540	1,630	3,140	1,740	5,740	6,360	1,840	1,060	852
8	686	696	1,840	5,140	1,480	3,450	1,740	5,140	6,860	1,790	1,050	851
9	674	782	1,690	5,340	1,530	3,870	1,740	4,850	5,950	1,680	1,040	917
10	668	716	2,070	6,520	1,490	3,530	1,790	5,140	5,140	1,790	1,020	803
11	668	730	2,320	10,300	1,440	3,290	2,130	5,950	4,760	2,010	1,010	799
12	723	998	2,910	10,600	1,630	3,620	2,630	6,170	4,490	1,740	1,010	810
13	859	922	2,440	10,200	1,480	3,450	3,060	6,390	4,220	1,680	1,010	901
14	908	838	2,130	7,640	1,390	3,450	3,530	6,620	4,130	1,680	998	1,040
15	1,060	968	1,900	6,170	1,510	3,290	4,040	6,620	4,310	1,630	962	901
16	852	1,230	1,740	5,340	1,270	3,060	5,140	6,620	4,400	1,480	975	831
17	817	1,110	1,630	4,490	1,230	2,910	5,740	5,740	4,130	1,480	960	803
18	782	968	1,480	4,040	1,270	2,770	6,170	5,140	3,620	1,440	945	782
19	768	887	1,390	3,700	1,270	2,630	5,950	5,540	3,210	1,390	938	776
20	749	838	1,310	3,870	1,270	2,660	6,540	5,340	3,140	1,390	922	768
21	762	810	1,270	3,620	1,440	2,630	6,540	5,140	3,060	1,390	922	762
22	742	824	1,230	3,290	2,400	2,500	5,950	4,750	3,140	1,350	915	775
23	730	1,440	1,230	3,140	2,250	2,440	5,540	4,670	3,140	1,310	908	768
24	723	1,840	1,270	2,980	1,900	2,310	5,540	4,750	2,980	1,270	922	762
25	704	1,440	1,480	2,770	1,790	2,250	5,540	5,140	2,700	1,230	894	766
26	698	1,270	1,900	2,630	2,390	2,370	5,340	5,540	2,560	1,230	880	730
27	686	1,230	2,480	2,500	4,770	2,420	4,950	5,740	2,600	1,230	866	723
28	730	1,150	2,770	2,370	4,670	3,060	4,590	5,340	2,370	1,230	866	723
29	736	1,110	2,650	2,190	3,950	2,630	4,400	4,750	2,190	1,190	873	730
30	692	1,070	3,430	2,130	-	2,440	4,310	4,220	2,130	1,190	866	723
31	674	-	4,860	2,070	-	2,310	-	3,870	-	1,150	852	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	22,919	1,060	688	739	1.53	1.78	45,460
November.....	28,317	1,840	614	944	1.95	2.18	56,170
December.....	56,598	4,860	901	1,826	3.78	4.36	112,300
Calendar year 1935.....	892,153	7,400	614	2,444	5.06	68.57	1,770,000
January.....	162,930	10,600	2,070	5,256	10.9	12.57	323,200
February.....	56,060	4,770	1,230	1,933	4.00	4.31	111,200
March.....	95,860	3,960	2,250	3,092	6.40	7.38	190,100
April.....	114,430	6,170	1,740	3,814	7.90	8.81	227,000
May.....	171,140	9,210	3,870	5,521	11.4	13.14	359,600
June.....	113,110	6,860	2,130	3,770	7.91	8.71	224,400
July.....	49,140	2,250	1,150	1,685	3.28	3.78	97,470
August.....	30,504	1,150	852	984	2.04	2.35	60,500
September.....	24,812	1,070	723	827	1.71	1.91	49,210
Water year 1935-36.....	925,800	10,600	614	2,630	5.24	71.26	1,837,000

Lewis River at Ariel, Wash.

Location.- Water-stage recorder, lat. 45°57', long. 122°34', in NW¼NE¼ sec. 4., T. 5 N., R. 2 E., at Ariel, half a mile below Ariel Dam and power plant. Zero of gage is 44 feet above mean sea level.

Drainage area.- 733 square miles.

Records available.- July 1922 to September 1936. July to November 1909 for station 3 miles upstream.

Average discharge.- 13 years (1923-36), 4,544 second-feet.

Extremes.- Maximum discharge during year, 35,900 second-feet Jan. 12 (gage height, 15.65 feet); minimum, 319 second-feet July 26 (gage height, 1.61 feet), result of regulation; minimum daily discharge, 670 second-feet July 4, result of regulation. 1909, 1922-36: Maximum discharge, 129,000 second-feet Dec. 22, 1933 (gage height, 35.0 feet, from floodmarks) from rating curve extended above 22,000 second-feet and from spillway gate openings; no flow at times June 30, July 1-3, 6-9, 1931 (caused by regulation during construction of Ariel Dam); minimum mean daily discharge, 1 second-foot July 6, 1931, result of regulation.

Remarks.- Records good. Water-stage recorder inspected by employees of Inland Power & Light Co. No diversions. Regulation caused by operation of power plant and storage in Lake Merwin Reservoir (capacity, 424,000 acre-feet).

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

2.0	500	4.0	2,300	8.0	9,100	12.0	21,300
2.5	500	5.0	3,560	9.0	11,800	13.0	24,000
3.0	1,220	6.0	5,040	10.0	14,700	14.0	29,000
3.5	1,730	7.0	6,880	11.0	17,850		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,220	1,730	*2,650	2,920	2,950	*8,220	3,970	5,120	4,500	2,500	1,040	1,960
2	3,160	1,710	3,220	3,240	*3,060	7,450	3,510	5,550	4,280	2,300	*1,160	1,740
3	3,180	*1,300	2,660	3,610	3,260	7,600	3,100	*6,500	4,380	2,090	1,390	2,200
4	3,190	1,600	1,960	3,200	3,460	6,760	2,800	8,380	4,840	670	1,500	1,800
5	3,220	1,690	1,860	*2,240	3,540	5,800	*3,000	11,000	3,660	*1,630	1,500	1,660
6	*2,100	1,680	2,300	2,990	3,520	5,600	2,900	9,870	4,480	3,000	1,540	*1,500
7	2,890	1,520	3,000	10,300	3,500	5,090	2,760	8,320	*9,350	2,050	1,390	1,150
8	3,120	1,110	*3,120	10,100	3,560	*5,880	2,680	6,560	11,300	1,950	1,150	1,620
9	3,290	1,510	3,270	11,800	*2,310	7,370	2,560	6,280	8,720	2,370	*905	2,380
10	3,460	*1,450	3,560	16,000	3,160	6,060	3,160	*6,290	7,360	2,700	2,020	2,330
11	3,380	1,720	3,560	23,600	3,470	5,380	3,300	7,130	6,610	2,520	1,790	2,350
12	3,460	1,680	3,560	*26,100	3,440	5,780	*4,500	7,640	6,200	*1,300	1,610	1,940
13	*1,680	1,610	3,560	23,800	3,280	5,890	4,700	7,640	5,320	2,560	1,820	*1,390
14	2,740	2,160	3,560	15,000	3,540	6,080	5,350	8,400	*5,080	2,470	1,640	2,210
15	2,760	2,150	*3,340	11,600	3,360	*5,930	5,470	7,820	5,500	2,260	1,600	2,120
16	2,940	2,280	3,310	9,440	*2,240	5,370	7,360	9,030	5,760	1,760	*1,400	2,000
17	3,060	*1,430	3,430	7,860	3,080	5,000	7,410	*7,280	5,440	1,500	2,520	2,350
18	3,300	2,090	3,560	6,740	3,560	4,740	6,200	6,620	4,750	1,650	2,460	1,960
19	3,240	2,060	*2,560	6,330	3,530	4,080	*6,650	6,580	*3,940	*1,310	1,560	1,670
20	*2,440	1,620	3,560	7,980	3,720	4,300	7,000	7,530	3,840	2,120	1,940	*2,060
21	2,980	1,780	3,560	6,940	3,420	4,350	7,230	7,920	*3,990	2,360	1,770	2,640
22	3,400	1,600	*3,080	6,040	3,340	*4,070	7,500	7,110	3,660	2,130	1,930	2,640
23	2,900	1,980	3,220	5,580	*2,680	3,620	6,840	6,720	3,700	2,070	*1,550	2,980
24	2,760	*1,640	3,080	4,960	3,280	3,740	6,980	*6,380	3,340	2,020	1,600	3,050
25	2,720	2,660	1,960	4,630	3,360	3,400	7,080	6,480	3,320	1,340	1,700	3,300
26	2,400	3,180	2,810	*3,960	3,570	4,130	*6,690	6,550	3,150	*750	1,490	3,400
27	*1,300	3,310	3,310	3,840	6,290	7,820	6,150	7,350	1,720	2,020	1,430	*2,490
28	2,450	3,140	3,290	3,670	13,000	6,730	5,670	6,720	*1,550	2,440	1,580	2,920
29	3,030	3,200	*2,640	3,460	9,480	*4,880	5,310	6,060	2,430	2,060	1,630	3,140
30	2,270	3,280	3,260	2,980	-	4,100	5,380	5,260	2,800	1,920	*1,060	3,290
31	1,700	-	3,400	3,540	-	4,080	-	*5,540	-	2,710	1,720	-

Month	Observed				Gain or loss in storage in Lake Mer- win Reservoir (acre-feet)	Corrected for storage			
	Discharge in second-feet			Run-off in acre-feet		Run-off in acre-feet	Discharge in second-feet		Run off in inches
	Maxi- mum	Mini- mum	Mean				Mean	Per square mile	
October.....	3,480	1,300	2,832	174,100	-102,300	71,800	1,168	1.59	1.83
November.....	3,310	1,110	2,006	119,300	-400	118,900	1,198	2.75	3.05
December.....	3,560	1,860	3,102	190,700	+34,200	224,900	3,658	4.99	5.75
Calendar year 1935	16,200	266	3,879	2,808,000	-178,000	2,630,000	3,633	4.96	67.27
January.....	26,100	2,240	8,215	505,100	+180,000	685,100	11,140	15.2	17.52
February.....	13,000	2,060	3,896	224,100	+200	224,300	3,899	5.32	5.74
March.....	8,220	3,400	5,467	336,200	+400	336,600	5,474	7.47	8.61
April.....	8,200	2,560	5,207	309,800	+200	310,000	5,210	7.11	7.93
May.....	11,000	4,340	7,114	437,400	-400	437,000	7,107	9.70	11.18
June.....	11,300	1,550	4,832	287,500	+5,600	293,100	4,926	6.72	7.50
July.....	3,000	670	2,007	123,400	-3,300	120,100	1,953	2.66	3.07
August.....	2,520	905	1,609	98,950	-31,200	67,750	1,102	1.50	1.73
September.....	3,400	1,150	2,275	135,400	-83,600	51,800	871	1.19	1.33
Water year 1935-36	26,100	670	4,053	2,942,000	-600	2,941,000	4,052	5.53	75.24

*Sunday.

LEWIS RIVER BASIN

East Fork of Lewis River near Heisson, Wash.

Location.- Water-stage recorder, lat. 45°50', long. 122°28', in N½ sec. 17, T. 4 N., R. 3 E., just above Basket Creek and 1½ miles northeast of Heisson. Zero of gage is approximately 365 feet above mean sea level (determined by plane table survey, general adjustment of 1929).

Drainage area.- 124 square miles.

Records available.- September 1929 to September 1936.

Extremes.- Maximum discharge during year, 7,670 second-feet Jan. 12 (gage height, 8.85 feet); minimum, 29 second-feet Nov. 3 (gage height, 0.04 foot).

1929-36: Maximum discharge, 15,600 second-feet Dec. 22, 1933 (gage height, 12.3 feet) from rating curve extended above 12,000 second-feet; minimum, that of Nov. 3, 1935.

Remarks.- Records excellent. No diversions or regulation.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0	26	1.0	130	2.0	350	5.0	2,070
.2	41	1.2	165	2.5	515	5.5	2,550
.4	57	1.4	203	3.0	730	6.0	3,130
.6	76	1.6	245	3.5	1,000	6.5	3,800
.8	100	1.8	294	4.0	1,300	7.0	4,550
				4.5	1,650	7.5	5,350

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	59	215	2,280	386	2,300	755	380	389	223	103	69
2	35	63	199	4,180	359	1,940	685	392	395	219	101	105
3	36	57	186	2,780	353	1,770	640	438	434	279	101	77
4	43	59	171	5,350	362	1,440	575	651	438	282	99	71
5	47	59	163	3,620	380	1,180	555	1,200	410	245	96	68
6	47	62	217	2,400	584	1,000	535	1,210	439	215	92	69
7	46	63	539	2,070	464	855	555	940	1,710	199	92	65
8	45	77	701	1,980	398	1,130	640	755	1,850	190	91	62
9	43	324	556	2,450	368	1,440	662	640	1,340	188	87	60
10	42	186	730	3,330	350	1,120	805	575	1,030	257	86	60
11	42	226	963	4,720	347	940	1,090	535	830	391	85	59
12	105	668	1,730	5,940	857	1,120	1,180	480	685	267	83	71
13	118	412	1,180	4,730	910	1,150	1,120	445	595	236	84	113
14	153	305	830	2,900	685	1,330	1,060	480	551	217	85	118
15	162	421	662	2,120	555	1,400	1,030	525	693	203	82	88
16	106	748	535	1,690	480	1,180	1,150	588	730	192	79	71
17	84	598	445	1,440	480	1,060	970	498	640	182	76	64
18	72	411	383	1,240	462	910	830	445	555	171	75	62
19	65	310	338	1,460	462	805	708	490	498	163	74	61
20	70	257	305	1,980	438	755	640	970	445	156	71	60
21	104	221	284	1,650	633	730	618	1,340	410	149	69	59
22	97	205	264	1,340	2,260	662	595	1,150	374	147	71	59
23	77	371	247	1,090	1,920	618	515	890	347	140	76	61
24	69	530	243	940	1,270	555	543	730	324	137	91	56
25	63	404	286	805	1,060	498	618	618	305	133	78	56
26	60	350	336	685	1,380	712	515	555	286	127	75	55
27	58	327	727	618	3,120	2,100	462	498	282	119	69	51
28	106	286	910	555	3,020	1,840	438	445	279	114	63	49
29	106	259	805	480	2,300	1,300	420	480	250	110	62	51
30	82	234	1,560	462	-	1,030	398	414	236	107	65	53
31	70	-	2,560	428	-	880	-	374	-	104	64	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				2,291	162	35	73.9	0.596	0.69	4,540		
November.....				8,552	748	57	285	2.50	2.57	16,960		
December.....				19,270	2,560	163	622	5.02	5.79	38,220		
Calendar year 1935.....				180,616	3,710	35	495	3.99	54.23	358,200		
January.....				67,713	5,940	428	2,184	17.6	20.29	134,300		
February.....				26,643	3,120	347	919	7.41	7.99	52,850		
March.....				35,750	2,300	498	1,153	9.30	10.72	70,910		
April.....				21,287	1,180	398	710	5.73	6.39	42,220		
May.....				20,101	1,340	374	648	5.23	6.03	39,870		
June.....				17,750	1,850	236	592	4.77	5.32	35,210		
July.....				5,862	391	104	189	1.52	1.75	11,630		
August.....				2,525	103	62	81.5	.657	.76	5,010		
September.....				2,023	118	49	67.4	.544	.61	4,010		
Water year 1935-36.....				229,767	5,940	35	628	5.06	68.91	455,700		

Cowlitz River at Packwood, Wash.

Location.- Water-stage recorder, lat. 46°36'40", long. 121°40'45", in SE¼ sec. 16, T. 13 N., R. 9 E., half a mile above Skate Creek and half a mile northwest of Packwood.

Drainage area.- 287 square miles.

Records available.- September 1929 to September 1936. July 1911 to December 1919, 1 mile upstream.

Average discharge.- 15 years. 1,645 second-feet.

Extremes.- Maximum discharge during year, 9,560 second-feet June 7 (gage height, 8.45 feet); minimum, 263 second-feet Nov. 2 (gage height, 2.87 feet).

1911-19, 1929-36: Maximum discharge, 56,600 second-feet Dec. 21, 1933 (gage height, 13.0 feet); minimum, 160 second-feet Nov. 21, 1929 (gage height, 2.10 feet).

Remarks.- Records good except those for February to April, which are fair. No diversions or regulation.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	504	288	464	1,160	610	2,210	641	3,110	3,390	2,280	932	1,030
2	483	280	439	1,700	574	2,160	622	3,690	2,940	2,210	932	708
3	493	284	416	1,600	574	2,200	603	4,200	3,200	2,210	996	594
4	483	295	398	2,360	574	2,130	586	4,770	3,020	2,440	1,050	588
5	473	299	393	2,930	557	1,800	568	4,890	3,020	2,070	1,090	588
6	478	295	402	1,890	551	1,570	563	3,590	3,690	1,740	986	594
7	468	306	473	1,420	524	1,400	563	2,850	8,110	1,680	952	570
8	459	322	535	1,180	498	1,560	568	2,520	7,640	1,560	812	335
9	434	339	551	1,100	509	1,930	568	2,760	5,950	1,430	820	516
10	421	354	660	1,280	498	1,610	610	3,810	5,020	1,620	804	496
11	393	350	709	1,930	483	1,400	664	5,400	4,890	1,740	788	470
12	425	376	709	2,130	498	1,450	1,300	5,530	4,890	1,450	788	452
13	421	372	641	2,140	483	1,400	1,700	6,060	4,540	1,440	804	418
14	421	359	586	1,600	459	1,290	2,220	6,750	4,420	1,410	780	414
15	439	376	546	1,310	454	1,180	2,630	5,930	4,890	1,280	748	394
16	393	359	514	1,120	425	1,080	4,020	5,930	4,420	1,310	740	383
17	430	350	488	990	421	1,040	4,740	4,100	4,200	1,370	700	390
18	421	376	469	1,050	439	963	4,870	3,690	3,300	1,340	693	410
19	425	372	439	1,120	430	909	4,310	4,890	2,940	1,330	672	422
20	402	359	421	1,180	421	918	3,690	3,690	3,020	1,360	679	434
21	393	354	411	1,190	449	954	3,890	3,300	3,390	1,340	693	475
22	376	372	411	1,080	754	956	4,650	3,300	3,990	1,270	637	535
23	354	551	402	1,040	738	900	4,100	3,490	3,990	1,210	600	484
24	350	635	425	981	695	855	3,790	4,100	3,590	1,090	588	525
25	354	580	828	918	660	810	3,790	5,270	3,200	1,000	540	475
26	359	591	1,010	855	730	837	3,300	6,470	2,940	1,010	555	434
27	354	597	1,010	819	1,110	891	3,020	6,900	2,680	1,020	600	426
28	363	563	1,010	762	1,290	837	3,020	6,200	2,280	1,040	624	462
29	350	530	927	709	1,440	770	2,850	5,270	2,000	1,020	630	457
30	322	493	954	681	-	716	2,940	4,310	2,140	1,000	594	444
31	310	-	1,070	647	-	674	-	4,200	-	959	594	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	12,751	504	310	411	1.43	1.65	25,290
November.....	12,027	635	280	401	1.40	1.58	23,860
December.....	18,701	1,070	393	603	2.10	2.42	37,090
Calendar year 1935.....	515,983	7,090	280	1,414	4.93	66.77	1,023,000
January.....	40,872	2,930	547	1,318	4.59	5.29	81,070
February.....	17,818	1,440	421	614	2.14	2.31	35,540
March.....	39,370	2,210	674	1,270	4.43	5.11	78,090
April.....	71,796	4,870	563	2,393	8.34	9.50	142,400
May.....	140,970	6,900	2,520	4,647	15.8	18.22	279,600
June.....	117,670	8,110	2,000	3,922	13.7	15.29	235,400
July.....	46,229	2,440	959	1,459	5.08	5.86	89,710
August.....	23,311	1,090	540	752	2.62	3.02	46,240
September.....	15,115	1,030	383	504	1.76	1.96	29,980
Water year 1935-36.....	555,630	8,110	280	1,518	5.29	71.99	1,102,000

COWLITZ RIVER BASIN

Cowlitz River near Mayfield, Wash.

Location.- Water-stage recorder, lat. 46°30'40", long. 122°36'50", in NE¼ sec. 24, T. 12 N., R. 1 E., 1 mile above Mill Creek and 2½ miles west of Mayfield. Zero of gage is 226.6 feet above mean sea level (general adjustment of 1929).

Drainage area.- 1,400 square miles.

Records available.- April 1934 to September 1936. August 1910 to November 1911 at site 2½ miles upstream.

Extremes.- Maximum discharge during year, 23,400 second-feet June 8 (gage height, 16.57 feet); minimum, 922 second-feet Nov. 4-7 (gage height, 7.39 feet).
1910-11, 1934-36: Maximum discharge, 36,900 second-feet Nov. 6, 1934 (gage height, 20.1 feet) from rating curve extended above 18,000 second-feet; minimum, that of Nov. 4-7, 1935.

Discharge known to have been greater during December 1933, not determined.

Remarks.- Records excellent. Discharge July 11-18 computed on basis of records for Cowlitz River at Castle Rock and for Toutle River near Silver Lake. No diversions or regulation.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

7.3	850	11.0	4,600
7.5	1,020	12.0	8,890
8.0	1,570	13.0	11,550
8.5	2,220	14.0	14,500
9.0	2,950	15.0	17,800
9.5	3,750	16.0	21,250
10.0	4,600	17.0	24,900

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,240	1,030	1,820	6,300	3,670	10,700	4,400	9,930	9,930	4,960	2,360	1,760
2	1,230	984	1,760	8,890	3,430	11,300	4,260	10,700	9,180	4,960	2,290	2,430
3	1,210	948	1,690	9,670	3,270	11,600	4,090	12,100	8,630	5,140	2,290	1,950
4	1,230	939	1,670	15,500	3,190	11,000	3,840	14,500	8,630	5,140	2,290	1,690
5	1,230	930	1,650	17,100	3,190	9,930	3,750	18,100	8,370	5,330	2,360	1,630
6	1,200	922	1,670	13,000	3,510	8,630	3,590	16,500	8,370	4,780	2,360	1,630
7	1,190	922	1,670	9,930	3,270	7,870	3,590	13,200	13,300	4,260	2,290	1,570
8	1,180	993	2,680	8,370	2,950	8,350	3,750	11,300	22,700	4,090	2,150	1,560
9	1,180	1,460	2,680	7,390	2,880	10,500	3,670	10,200	19,500	3,920	2,080	1,490
10	1,130	1,330	2,720	8,890	2,800	9,670	3,840	10,500	15,800	3,750	2,020	1,440
11	1,110	1,260	3,030	13,900	2,800	8,370	4,430	13,000	13,900	4,190	2,020	1,390
12	1,160	1,670	3,870	16,200	2,950	8,370	5,900	15,200	12,700	4,240	1,950	1,380
13	1,290	1,670	3,510	17,100	2,950	8,370	7,390	15,500	11,800	3,750	1,950	1,440
14	1,370	1,450	3,110	13,200	2,720	8,120	8,370	17,100	11,000	3,560	1,950	1,510
15	1,470	1,400	2,680	11,000	2,580	7,870	9,670	17,500	11,300	3,400	1,950	1,460
16	1,400	1,690	2,650	9,150	2,430	7,160	12,100	17,800	11,600	3,280	1,880	1,330
17	1,260	1,690	2,430	6,870	2,360	6,930	15,600	15,600	11,000	3,260	1,820	1,260
18	1,240	1,660	2,290	6,300	2,290	6,300	13,000	13,000	9,930	3,270	1,880	1,210
19	1,210	1,430	2,080	6,500	2,220	5,900	16,200	12,700	8,370	3,190	1,690	1,210
20	1,210	1,350	2,020	7,870	2,220	5,520	14,800	13,000	7,870	3,110	1,630	1,220
21	1,220	1,290	1,950	8,120	2,400	5,520	13,600	11,600	7,630	3,110	1,630	1,240
22	1,210	1,280	1,880	7,390	5,470	5,330	14,200	11,000	7,870	3,110	1,690	1,290
23	1,150	2,170	1,620	6,830	5,900	6,140	14,800	11,000	8,370	2,960	1,690	1,380
24	1,110	2,980	1,820	6,600	4,360	4,960	13,600	10,700	8,120	2,880	1,760	1,340
25	1,080	2,650	2,080	6,900	4,430	4,600	13,600	11,800	7,390	2,720	1,630	1,320
26	1,070	2,430	2,800	5,330	5,140	4,960	12,700	13,200	6,710	2,580	1,530	1,290
27	1,060	2,290	3,510	4,960	9,020	6,930	11,800	14,800	6,500	2,500	1,520	1,250
28	1,190	2,220	4,430	4,780	11,000	5,600	10,700	15,200	6,100	2,500	1,550	1,220
29	1,252	2,080	4,180	4,300	9,410	5,710	10,200	13,600	5,330	2,500	1,570	1,220
30	1,190	1,950	4,000	4,090	-	5,140	9,930	12,100	5,140	2,430	1,570	1,200
31	1,090	-	6,100	3,840	-	4,780	-	10,700	-	2,430	1,530	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	37,360	1,470	1,060	1,205	0.861	0.99	74,100
November.....	45,668	2,880	922	1,556	1.11	1.24	92,563
December.....	81,950	6,100	1,550	2,644	1.89	2.18	162,500
Calendar year 1935.....	1,740,478	20,900	922	4,768	3.41	46.24	3,452,000
January.....	276,730	17,100	3,840	8,927	6.38	7.36	549,900
February.....	115,410	11,000	2,220	3,980	2.84	3.06	228,900
March.....	232,030	11,600	4,600	7,485	5.35	6.17	460,200
April.....	274,800	16,500	3,590	9,160	6.54	7.30	545,100
May.....	413,030	18,100	9,930	13,320	9.51	10.96	819,200
June.....	303,010	22,700	5,140	10,100	7.21	8.04	601,000
July.....	111,280	5,330	2,430	3,590	2.56	2.95	220,700
August.....	58,680	2,360	1,520	1,899	1.36	1.57	116,800
September.....	43,280	2,430	1,200	1,443	1.03	1.16	86,840
Water year 1935-36.....	1,994,428	22,700	922	5,449	3.89	52.97	3,966,000

Cowlitz River at Castle Rock, Wash.

Location.- Water-stage recorder, lat. 46°18'30", long. 122°55'0", in SE¼ sec. 10, T. 9 N., R. 2 W., at highway bridge in Castle Rock, 2½ miles below mouth of Toutle River and 14 miles above mouth. Zero of present gage is 19.75 feet above mean sea level and zero of former gage, 2 miles upstream and used prior to Dec. 11, 1933, is 34.66 feet above mean sea level (general adjustment of 1929).

Drainage area.- 2,210 square miles.

Records available.- December 1926 to September 1936.

Extremes.- Maximum discharge during year, 45,200 second-feet Jan. 12 (gage height, 18.13 feet); minimum, 998 second-feet Nov. 7, 8 (gage height, 6.02 feet).
1926-36: Maximum discharge observed, 139,000 second-feet Dec. 23, 1933 (gage height, 31.6 feet, present datum) from rating curve extended above 65,000 second-feet; minimum, that of Nov. 7, 8, 1935.

Remarks.- Records good October to December, excellent January to September. No di-versions or regulation.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,700	1,420	2,810	12,100	5,810	28,300	7,570	11,600	12,000	6,280	3,000	2,110
2	1,720	1,260	2,630	18,500	5,370	18,700	6,780	12,000	11,000	6,280	2,910	3,090
3	1,680	1,150	2,460	18,100	5,160	17,800	6,530	13,800	10,700	6,530	2,820	2,820
4	1,740	1,140	2,280	34,200	5,060	16,600	6,280	16,600	11,000	6,530	2,820	2,410
5	1,780	1,110	2,200	34,300	5,060	14,600	5,810	22,700	10,400	6,780	2,820	2,180
6	1,730	1,110	2,280	25,000	5,480	12,700	5,590	22,700	10,100	6,280	2,910	2,110
7	1,680	1,050	2,980	19,100	5,480	11,300	5,480	17,800	19,700	5,590	2,820	2,040
8	1,640	1,070	5,000	16,200	4,850	11,300	5,590	14,900	33,800	5,260	2,650	2,040
9	1,600	1,990	4,600	14,600	4,650	14,900	5,590	12,700	28,800	5,060	2,650	1,980
10	1,650	2,250	4,800	16,600	4,550	13,800	5,590	12,700	22,200	4,950	2,670	1,910
11	1,500	1,910	5,300	28,300	4,450	12,000	6,040	14,600	18,700	5,810	2,490	1,850
12	1,640	2,720	6,980	39,800	4,950	12,300	7,570	17,000	16,600	5,590	2,490	1,850
13	2,170	3,370	6,510	39,400	5,370	12,700	9,230	17,800	14,900	5,060	2,410	1,910
14	2,420	2,680	5,410	27,300	4,850	12,700	10,700	20,000	13,800	4,750	2,410	2,110
15	3,070	2,690	4,800	22,200	4,550	13,000	12,000	20,900	13,800	4,550	2,410	2,180
16	2,680	3,370	4,410	17,800	4,250	11,300	14,200	21,400	16,600	4,350	2,410	1,980
17	2,170	3,270	4,030	14,900	4,050	10,400	18,700	19,600	15,700	4,250	2,330	1,790
18	1,910	2,680	3,650	12,700	3,650	9,520	20,400	15,700	13,800	4,250	2,260	1,740
19	1,840	2,250	3,360	12,300	3,850	8,950	20,400	14,600	11,600	4,150	2,260	1,680
20	1,600	1,980	3,180	13,800	3,750	8,110	18,300	15,700	10,400	4,050	2,180	1,680
21	1,930	1,780	2,990	13,800	4,150	7,840	17,000	14,900	9,810	3,950	2,180	1,680
22	1,850	1,760	2,810	12,700	7,200	7,840	17,000	14,200	9,810	3,950	2,110	1,680
23	1,700	3,930	2,630	11,300	17,800	7,300	17,800	13,400	10,100	3,750	2,180	1,740
24	1,650	5,840	2,630	10,400	12,300	7,040	16,600	13,000	9,810	3,660	2,260	1,790
25	1,460	4,900	3,080	9,520	9,810	6,780	16,600	13,400	9,230	3,560	2,330	1,740
26	1,420	4,220	4,120	8,670	12,300	6,780	15,700	15,300	8,390	3,370	2,110	1,740
27	1,580	3,840	5,620	8,110	29,600	13,500	14,600	17,000	8,110	3,280	2,040	1,680
28	1,580	3,650	7,230	7,570	27,300	14,600	13,400	17,400	7,840	3,180	2,040	1,620
29	2,170	3,560	6,740	7,040	20,400	11,000	12,700	16,600	7,040	3,180	2,040	1,570
30	1,650	3,080	7,230	6,650	-	9,230	12,000	14,600	6,530	3,090	2,040	1,620
31	1,640	-	12,100	6,040	-	8,110	-	12,700	-	3,090	2,040	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
October				56,660	3,070	1,380	1,828	0.827	0.95	112,400		
November				76,750	5,840	1,050	2,458	1.16	1.29	162,200		
December				136,650	12,100	2,200	4,515	2.00	2.31	271,400		
Calendar year 1935				2,596,660	42,900	1,050	7,114	3.22	43.70	5,150,000		
January				538,880	39,800	6,040	17,380	7.86	9.06	1,069,000		
February				246,250	29,600	3,750	8,491	3.84	4.15	488,400		
March				371,000	28,300	6,780	11,970	5.42	6.25	735,900		
April				351,750	20,400	5,480	11,720	5.30	5.91	697,700		
May				497,300	22,700	11,600	16,040	7.28	8.37	986,400		
June				402,270	33,800	6,530	13,410	6.07	6.77	797,900		
July				144,410	6,780	3,090	4,658	2.11	2.43	286,400		
August				74,990	3,000	2,040	2,419	1.09	1.26	148,700		
September				58,520	3,090	1,570	1,944	.880	.98	115,700		
Water year 1935-36				2,955,410	39,800	1,050	8,075	3.65	49.72	5,862,000		

Clear Fork of Cowlitz River near Packwood, Wash.

Location.- Water-stage recorder, lat. 46°40'50", long. 121°34'30", in NE $\frac{1}{4}$ sec. 29, T. 14 N., R. 10 E., three-quarters of a mile above mouth and 7 miles northeast of Packwood.

Drainage area.- 56 square miles.

Records available.- August 1907 to September 1917 (gage heights only October 1913 to September 1917), August 1930 to September 1936.

Average discharge.- 11 years (1907-12, 1930-36), 255 second-feet.

Extremes.- Maximum discharge during water year 1934-35, 2,900 second-feet Oct. 25 (gage height, 7.53 feet); minimum, 34 second-feet probably Oct. 19 (gage height, 2.50 feet, from recorded range of stage).

Maximum discharge during water year 1935-36, 1,290 second-feet June 8; maximum gage height, 6.22 feet June 7 (log jam); minimum discharge, 30 second-feet Nov. 2 (gage height, 2.46 feet).

1907-17, 1930-36: Maximum discharge, 8,030 second-feet Dec. 22, 1933 (gage height, 11.7 feet); minimum, that of Nov. 2, 1935.

Remarks.- Records fair except those for period of ice effect, Feb. 8, 12, 13, 16-19, 21-23, 1936, which were computed on basis of gage heights and weather records and are poor. Discharge Oct. 17-22, 1934, computed on basis of recorded range of stage and records for Cowlitz River at Packwood. Shifting-control method used June 1-15, 1935. No regulation. A small diversion a few hundred feet above gage to accommodate fish hatchery. Records for 1934-35 revised in this report.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	456	231	180	431	174	127	306	580	354	146	80
2	42	417	222	180	492	161	122	303	560	334	142	77
3	46	410	213	180	500	169	115	294	560	358	140	76
4	44	448	210	180	452	158	113	300	645	348	134	73
5	42	1,640	205	193	424	146	110	349	785	327	125	73
6	39	1,640	196	188	400	134	108	396	862	300	123	78
7	39	1,560	190	177	365	131	106	396	890	310	123	71
8	42	1,120	185	166	339	129	104	389	810	294	123	70
9	42	712	177	154	306	122	99	400	690	269	119	67
10	42	560	171	141	282	110	99	403	712	282	121	70
11	41	452	169	144	261	106	93	372	645	304	117	70
12	41	392	193	154	246	126	95	335	622	350	113	67
13	42	362	213	129	228	149	148	318	690	373	117	69
14	41	382	216	124	216	258	177	327	712	397	115	85
15	39	434	210	122	202	243	185	375	622	389	104	97
16	38	368	208	119	190	225	193	406	521	348	98	98
17	*87	315	205	115	185	219	193	403	481	310	98	90
18	*35	282	199	108	195	208	193	392	505	275	137	71
19	*34	285	237	95	165	199	193	396	513	249	108	65
20	*50	243	690	87	190	190	202	400	453	234	98	65
21	*80	237	827	138	205	180	222	516	501	234	95	62
22	*150	240	679	230	222	164	219	668	517	234	93	60
23	275	261	488	345	225	169	213	645	429	240	89	58
24	928	275	400	568	219	174	205	560	389	224	68	57
25	2,110	276	333	712	208	164	196	560	405	200	84	56
26	1,090	279	306	645	196	148	199	622	465	172	84	55
27	625	267	267	560	188	141	225	645	493	166	83	53
28	459	255	240	516	182	136	240	668	505	170	83	52
29	378	243	222	480	-	146	258	712	497	157	86	51
30	349	234	202	452	-	144	291	645	401	153	84	51
31	375	-	190	428	-	134	-	600	-	155	81	-
Month	Second-foot-days			Maximum	Minimum	Mean	Per square mile	Run-off				
								Inches	Acres			
October.....	7,633			2,110	34	246	4.39	5.06		15,140		
November.....	15,013			1,640	234	500	8.93	9.96		29,780		
December.....	8,694			827	169	280	5.00	5.76		17,240		
Calendar year 1934.....	111,549			2,280	34	306	5.46	74.01		221,200		
January.....	7,690			712	87	258	4.61	5.32		15,850		
February.....	7,724			500	182	276	4.93	5.13		15,320		
March.....	5,157			258	106	166	2.96	3.41		10,230		
April.....	5,043			291	93	168	3.00	3.35		10,000		
May.....	14,109			712	294	455	8.12	9.36		27,980		
June.....	17,460			890	389	582	10.4	11.60		34,630		
July.....	8,490			397	153	274	4.89	5.64		16,840		
August.....	3,351			146	81	108	1.95	2.22		6,650		
September.....	2,058			98	51	68.6	1.22	1.36		4,080		
Water year 1934-35.....	102,722			2,110	34	281	5.02	68.17		203,700		

*Estimated.

Note.- The above records supersede those published in Water-Supply Paper 794.

Clear Fork of Cowlitz River near Packwood, Wash.

(Continued)

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	33	57	161	88	317	97	517	545	327	125	106
2	50	35	53	215	80	323	93	605	501	304	121	88
3	50	38	51	189	81	354	88	680	521	334	119	77
4	50	44	50	298	81	323	84	802	497	314	119	73
5	50	47	47	304	80	275	81	785	493	278	117	70
6	50	45	49	207	76	243	80	625	565	257	113	69
7	49	44	67	168	74	218	80	509	1,020	246	108	67
8	47	53	74	140	73	254	80	449	1,020	232	106	66
9	46	50	76	132	71	314	80	465	790	221	102	65
10	45	47	102	140	67	266	93	605	722	275	100	62
11	44	46	97	179	66	234	148	768	700	282	100	61
12	68	50	95	192	62	243	237	785	678	232	97	62
13	64	46	83	172	60	232	320	838	632	224	97	66
14	65	44	73	136	58	210	413	890	655	213	95	69
15	66	49	66	117	58	187	469	838	678	202	91	66
16	56	49	62	108	56	172	605	872	632	194	88	62
17	60	45	58	98	55	161	698	698	565	192	86	62
18	57	42	53	93	52	149	715	645	489	184	86	62
19	58	40	50	102	52	138	625	732	453	179	83	61
20	57	38	49	157	53	136	545	605	469	177	81	58
21	57	38	49	168	57	140	545	565	513	172	81	57
22	53	43	51	163	102	138	645	585	565	163	81	56
23	50	69	49	161	93	134	565	605	545	159	81	56
24	49	80	56	153	89	132	521	645	505	155	86	53
25	49	69	99	144	88	125	545	750	453	146	81	52
26	49	71	121	134	97	129	497	838	417	142	81	52
27	49	76	141	126	157	121	453	872	385	138	78	51
28	57	70	142	113	179	123	433	820	337	136	74	50
29	51	64	119	100	202	115	421	732	314	136	73	51
30	46	60	121	97	-	104	457	645	323	132	70	51
31	41	-	144	95	-	100	-	625	-	127	70	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,634	68	41	52.7	0.941	1.08	3,240
November.....	1,525	80	33	50.8	0.907	1.01	3,020
December.....	2,394	144	47	77.2	1.38	1.59	4,750
Calendar year 1935.....	76,935	890	33	211	3.77	51.07	152,600
January.....	4,761	304	93	154	2.75	3.17	9,440
February.....	2,407	202	52	83.0	1.48	1.60	4,770
March.....	6,109	354	100	197	3.52	4.06	12,120
April.....	10,713	715	80	357	6.38	7.12	21,250
May.....	21,395	890	449	690	12.3	14.18	42,440
June.....	16,982	1,020	314	566	10.1	11.27	33,680
July.....	6,473	334	127	209	3.73	4.30	12,840
August.....	2,680	125	70	93.2	1.66	1.91	5,730
September.....	1,901	106	50	63.4	1.13	1.26	3,770
Water year 1935-36.....	79,184	1,020	33	216	3.86	52.55	157,000

COWLITZ RIVER BASIN

Lake Creek near Packwood, Wash.

Location.- Water-stage recorder, lat. 46°35'55", long. 121°34'15", in sec. 21, T. 13 N., R. 10 E., 500 feet below outlet of Packwood Lake and 6 miles east of Packwood.

Drainage area.- 18.8 square miles.

Records available.- September 1911 to September 1924, September 1930 to September 1936.

Average discharge.- 19 years, 103 second-feet.

Extremes.- Maximum discharge observed during year, 512 second-feet June 8 (gage height, 3.94 feet); minimum, 23 second-feet Nov. 21, 22, Dec. 5, 6, 23, 24.
1911-24, 1930-36: Maximum discharge, 1,400 second-feet Dec. 22, 1933 (gage height, 5.9 feet); minimum, that of Nov. 21, 22, Dec. 5, 6, 23, 24, 1935 (gage height, 1.54 feet).
Maximum stage recorded, 6.0 feet (former datum) Dec. 18, 1917 (discharge not determined).

Remarks.- Records fair. Discharge interpolated July 8-13. No diversions. Natural regulation in Packwood Lake.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	25	25	44	36	56	41	158	238	139	62	60
2	30	25	24	59	34	56	40	170	209	143	60	68
3	29	24	24	66	34	59	37	193	200	157	61	61
4	29	24	24	92	36	60	36	228	191	165	64	57
5	29	24	23	117	36	58	35	272	184	153	65	55
6	29	24	24	93	41	55	34	253	200	133	64	53
7	29	24	27	77	39	52	34	206	365	126	61	51
8	29	26	30	63	36	60	34	176	493	124	56	50
9	28	31	30	57	34	77	33	162	397	122	53	46
10	28	30	33	59	33	73	33	172	325	120	51	43
11	28	29	33	69	31	67	35	226	292	117	50	40
12	34	29	34	75	33	38	39	274	276	115	50	40
13	36	27	33	78	33	36	44	311	260	113	49	41
14	38	26	30	71	30	55	52	362	258	111	49	42
15	39	27	29	64	29	60	60	379	273	104	48	41
16	36	28	27	55	28	53	75	372	271	97	46	39
17	36	27	27	50	28	50	109	303	250	97	45	39
18	34	25	26	47	27	48	184	245	209	96	44	40
19	35	25	25	51	27	46	212	250	178	92	43	41
20	35	24	24	62	26	44	212	225	170	97	43	40
21	35	24	24	60	28	44	208	209	176	89	43	39
22	34	24	24	56	39	44	215	200	204	96	43	39
23	31	26	24	52	40	43	215	195	228	89	43	40
24	30	27	24	50	39	42	208	202	223	83	46	38
25	29	27	27	47	39	42	206	240	204	78	47	37
26	28	28	30	46	43	50	193	311	191	73	50	34
27	28	28	32	44	50	64	178	369	180	71	51	34
28	30	27	35	43	51	60	166	382	163	70	52	33
29	30	26	33	41	51	52	154	354	139	70	51	33
30	28	25	34	40	-	47	154	303	133	67	50	32
31	27	-	40	37	-	43	-	276	-	64	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	972	39	27	31.4	1.67	1.92	1,930
November.....	786	31	24	26.2	1.39	1.55	1,560
December.....	879	40	23	28.4	1.51	1.74	1,740
Calendar year 1935.....	29,152	317	23	79.9	4.25	57.67	57,810
January.....	1,865	117	37	60.2	3.20	3.69	3,700
February.....	1,031	51	26	35.6	1.99	2.04	2,040
March.....	1,704	77	42	55.0	2.93	3.38	3,380
April.....	3,276	215	33	109	5.80	6.47	6,500
May.....	7,978	382	188	257	13.7	15.79	15,820
June.....	7,100	483	133	237	12.6	14.06	14,060
July.....	3,281	165	64	106	5.64	6.60	6,510
August.....	1,589	65	43	51.3	2.73	3.15	3,150
September.....	1,305	68	32	43.5	2.31	2.58	2,580
Water year 1935-36.....	31,766	493	23	86.8	4.62	62.87	63,000

Cispus River near Randle, Wash.

Location.- Water-stage recorder, lat. 46°28'50", long. 121°51'35", in NW¼ sec. 18, T. 11 N., R. 8 E. (unsurveyed), 500 feet above suspension bridge to Tower Rock ranger station and 8 miles southeast of Randle.

Drainage area.- 323 square miles.

Records available.- October 1910 to February 1912, September 1929 to September 1936.

Extremes.- Maximum discharge during year, 6,190 second-feet June 7 (gage height, 7.36 feet); minimum, 190 second-feet Nov. 2 (gage height, 2.94 feet).
1910-12, 1929-36: Maximum discharge, 20,000 second-feet Dec. 22, 1933 (gage height, 12.7 feet from rating table extended above 8,000 second-feet); minimum, that of Nov. 2, 1935.

Remarks.- Records fair. Shifting-control method used Apr. 14-19. No diversions or regulation.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	304	210	361	880	632	1,220	686	2,750	2,580	1,340	644	574
2	292	205	347	1,150	596	1,410	668	3,280	2,400	1,340	644	503
3	292	210	340	1,130	596	1,590	641	3,680	2,400	1,370	653	447
4	292	215	328	1,830	587	1,590	623	4,440	2,400	1,400	644	454
5	292	215	322	2,110	569	1,480	596	4,600	2,320	1,270	662	440
6	292	215	340	1,590	569	1,410	596	3,830	2,490	1,150	653	440
7	274	220	424	1,270	536	1,290	605	3,110	4,820	1,100	608	434
8	274	238	480	1,060	520	1,290	614	2,750	5,600	1,040	590	420
9	274	236	446	1,030	520	1,420	623	2,750	4,760	1,000	582	408
10	268	268	445	1,170	504	1,300	695	3,280	4,130	1,080	590	394
11	268	256	466	2,190	488	1,220	1,020	4,280	3,830	1,160	590	376
12	310	280	544	2,690	512	1,300	1,660	4,440	3,600	1,030	582	388
13	304	268	504	2,480	504	1,290	1,960	4,600	3,370	1,000	582	382
14	310	250	473	1,820	466	1,230	2,350	5,080	3,200	978	566	401
15	328	292	452	1,620	462	1,160	2,690	4,760	3,280	923	542	394
16	268	334	417	1,290	438	1,100	4,200	4,600	3,200	901	526	375
17	280	298	403	1,130	431	1,060	5,060	3,830	3,020	890	518	363
18	244	268	382	1,020	445	1,010	6,390	3,630	2,490	887	510	363
19	250	256	361	973	458	962	4,850	3,830	2,160	867	503	363
20	256	256	347	1,060	417	973	4,280	3,370	2,080	868	499	363
21	262	262	347	1,050	466	1,030	3,980	2,930	2,010	846	503	357
22	250	268	340	1,020	951	984	4,280	2,750	2,160	802	496	382
23	244	389	334	995	890	930	3,980	2,840	2,240	780	489	367
24	244	466	340	962	770	890	3,680	3,110	2,010	750	489	357
25	238	410	403	900	713	840	3,600	3,600	1,830	700	461	351
26	238	403	488	840	704	840	3,370	3,980	1,720	700	468	327
27	226	410	641	820	800	910	3,110	4,280	1,610	710	468	327
28	238	410	696	780	840	830	2,840	3,980	1,460	710	468	333
29	238	396	641	713	930	790	2,660	3,600	1,340	700	475	333
30	220	368	722	704	-	731	2,660	3,110	1,340	680	461	333
31	215	-	940	668	-	722	-	2,930	-	671	461	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	9,255	328	215	266	0.824	0.95	16,370
November.....	8,822	466	205	294	0.810	1.02	17,500
December.....	14,072	940	322	454	1.41	1.65	27,910
Calendar year 1935.....	385,945	3,780	205	1,057	3.27	44.44	765,600
January.....	58,835	2,690	668	1,253	3.28	4.47	77,030
February.....	17,284	951	417	596	1.85	2.00	34,280
March.....	34,802	1,590	722	1,123	3.48	4.01	69,030
April.....	73,967	5,390	596	2,466	7.53	8.51	148,700
May.....	113,900	5,080	2,750	3,674	11.4	13.14	225,900
June.....	81,850	5,600	1,340	2,728	8.45	9.43	162,300
July.....	29,603	1,400	671	955	2.96	3.41	58,720
August.....	16,917	662	461	546	1.69	1.95	33,550
September.....	11,738	574	327	391	1.21	1.35	23,280
Water year 1935-36.....	450,045	5,600	205	1,230	3.81	51.87	892,600

COWLITZ RIVER BASIN

Toutle River near Silver Lake, Wash.

Location.- Water-stage recorder, lat. 46°20', long. 122°44', in SE $\frac{1}{4}$ sec. 19, T. 10 N., R. 1 E., under highway bridge half a mile below junction of North and South Forks, 5 miles northeast of Silver Lake.

Drainage area.- 472 square miles.

Records available.- October 1919 to December 1923, September 1929 to September 1936. September 1909 to August 1912 at site 2 miles downstream.

Average discharge.- 12 years (1909-11, 1919-21, 1922-23, 1929-36), 2,092 second-feet.

Extremes.- Maximum discharge during year, 15,700 second-feet Jan. 12 (gage height, 12.15 feet); minimum, 342 second-feet Oct. 11 (gage height, 1.78 feet).
1909-12, 1919-23, 1929-36: Maximum discharge, 35,600 second-feet Mar. 2, 1910; maximum gage height recorded, 22.7 feet Dec. 23, 1933; minimum, 240 second-feet Nov. 21, 1929 (gage height, 1.87 feet).

Remarks.- Records fair. Shifting-control method used Oct. 1-14. Discharge for Dec. 15 determined from recorded range of stage and that for Feb. 3 interpolated. No diversions or regulation.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-14)

1.5	245	6.0	5,550
2.0	445	7.0	7,200
2.5	730	8.0	8,740
3.0	1,100	9.0	10,340
3.5	1,550	10.0	11,980
4.0	2,120	11.0	13,680
5.0	3,700		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	364	425	772	3,280	1,550	4,480	1,820	1,990	1,870	1,180	610	593
2	364	372	750	5,720	1,450	4,080	1,700	2,060	1,930	1,140	598	521
3	364	368	694	5,030	1,380	3,890	1,650	2,250	1,990	1,320	585	550
4	390	368	670	11,300	1,320	3,510	1,550	2,970	1,990	1,320	574	470
5	390	372	640	8,920	1,270	3,080	1,500	4,090	1,870	1,270	562	440
6	372	382	744	5,890	1,400	2,760	1,450	3,700	1,870	1,140	544	415
7	364	390	1,140	4,480	1,270	2,530	1,450	3,080	6,380	1,060	534	395
8	350	430	1,500	3,890	1,180	2,780	1,500	2,680	7,870	1,020	517	386
9	350	765	1,270	3,990	1,180	3,240	1,450	2,390	5,110	1,000	512	377
10	346	616	1,320	4,770	1,140	2,830	1,550	2,320	3,990	1,100	506	359
11	342	580	1,360	9,060	1,140	2,680	1,760	2,460	3,160	1,450	506	354
12	481	1,050	2,060	12,000	1,670	2,990	2,060	2,460	2,760	1,180	495	386
13	580	919	1,820	10,900	1,600	2,990	2,320	2,460	2,460	1,100	495	474
14	702	765	1,560	7,040	1,270	2,910	2,460	2,990	2,250	1,060	495	552
15	828	828	1,400	5,360	1,270	2,830	2,460	3,080	2,580	988	485	528
16	628	1,140	1,270	4,290	1,180	2,530	2,830	3,420	3,080	940	485	460
17	550	956	1,140	3,420	1,140	2,390	3,080	2,830	2,990	898	475	435
18	500	800	1,060	3,160	1,100	2,180	3,080	2,530	2,530	870	470	430
19	475	718	980	3,160	1,100	2,060	2,830	2,530	2,250	828	470	455
20	465	658	912	3,890	1,060	1,980	2,600	2,760	2,120	800	460	450
21	522	616	877	3,600	1,400	1,870	2,530	2,910	1,990	766	455	465
22	495	622	842	3,240	6,060	1,760	2,600	2,910	1,870	755	450	455
23	465	1,550	814	2,910	5,080	1,700	2,530	2,600	1,820	744	455	460
24	445	1,700	821	2,680	3,510	1,600	2,530	2,460	1,700	724	539	445
25	420	1,360	972	2,460	2,830	1,550	2,760	2,390	1,600	706	480	445
26	405	1,140	1,140	2,250	3,540	1,760	2,530	2,390	1,500	682	450	440
27	395	1,060	1,400	2,120	7,510	3,780	2,320	2,460	1,450	664	440	440
28	508	964	1,600	1,990	6,060	3,420	2,180	2,320	1,500	658	435	440
29	598	870	1,400	1,820	4,670	2,600	2,120	2,320	1,320	646	425	440
30	500	814	1,760	1,700	-	2,250	1,990	2,120	1,270	628	415	445
31	450	-	3,240	1,600	-	1,990	-	1,950	-	616	400	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	14,428	828	342	465	0.985	1.14	28,620
November.....	23,589	1,700	359	766	1.67	1.86	46,790
December.....	37,598	3,240	640	1,223	2.59	2.99	75,170
Calendar year 1935.....	561,163	10,400	342	1,537	3.26	44.24	1,113,000
January.....	145,940	12,000	1,600	4,708	9.97	11.49	289,500
February.....	85,380	7,510	1,060	2,288	4.55	5.23	131,600
March.....	52,960	4,480	1,550	2,676	5.67	6.54	164,600
April.....	65,190	3,080	1,450	2,175	4.60	5.13	123,300
May.....	81,860	4,090	1,870	2,641	5.60	6.46	162,400
June.....	76,770	7,570	1,270	2,559	5.42	6.05	152,300
July.....	29,283	1,450	616	945	2.00	2.31	58,080
August.....	15,323	610	400	494	1.05	1.21	30,390
September.....	13,920	621	354	464	.983	1.10	27,610
Water year 1935-36.....	653,521	12,000	342	1,786	3.78	51.51	1,296,000

Youngs River near Astoria, Oreg.

Location.- Water-stage recorder, lat. $46^{\circ}4'$, long. $123^{\circ}47'$, in NW $\frac{1}{4}$ sec. 27, T. 7 N., R. 9 W., 50 feet above crest of Youngs River Falls, $2\frac{1}{2}$ miles southwest of Olney, and 9 miles southeast of Astoria. Zero of gage is 62.64 feet above mean sea level (general adjustment of 1929).

Drainage area.- 32 square miles.

Records available.- January 1934 to September 1936; August 1927 to December 1933 at site 1 mile upstream; March 1916 to September 1917 (stage only) at site 3 miles upstream.

Extremes.- Maximum discharge during year, 3,270 second-feet Jan. 12 (gage height, 11.4 feet; minimum, 7.3 second-feet Sept. 27 (gage height, 0.83 foot).
1927-36: Maximum discharge, about 6,300 second-feet Nov. 24, 1927 (gage height, 6.52 feet, former site and datum); minimum, 4 second-feet Aug. 31 to Sept. 2, 1931.

Remarks.- Records good except those for Nov. 18-29, which were computed on basis of records of Wilson River near Tillamook and Trask River near Tillamook and are fair. No diversions or regulation above station. Water-stage recorder inspected by city engineer of Astoria.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.8	6.9	2.0	35	5.0	450
1.0	9.8	2.5	59	6.0	720
1.2	13.1	3.0	97	7.0	1,050
1.4	17	3.5	150	8.0	1,450
1.6	22	4.0	230	10.0	2,450
1.8	28	4.5	330		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.6	26	60	744	78	462	193	35	58	36	15	23
2	8.6	24	54	1,140	71	341	172	37	59	35	15	20
3	8.3	21	49	809	76	267	150	41	70	50	14	14
4	8.6	20	46	2,240	104	210	132	49	69	74	14	12
5	6.9	19	43	955	102	174	125	122	61	74	14	11
6	8.8	18	123	690	170	149	116	97	55	63	13	10
7	8.4	18	222	600	139	131	116	77	140	50	13	10
8	8.2	26	198	562	120	113	113	66	319	45	13	9.4
9	8.0	78	158	588	113	341	101	60	204	41	12	8.9
10	7.9	48	184	862	102	239	95	55	151	46	12	8.8
11	8.0	63	341	1,390	95	200	89	50	127	61	12	8.6
12	14	173	400	2,400	195	287	83	46	104	46	12	10
13	29	103	287	1,110	143	375	77	44	90	42	11	19
14	44	80	195	590	120	525	71	61	85	40	12	27
15	35	238	154	512	109	500	68	57	68	36	11	16
16	24	181	127	412	99	352	64	80	113	32	11	13
17	20	128	107	400	91	258	61	59	130	30	11	11
18	18	100	92	375	86	200	58	51	102	29	11	10
19	17	85	31	450	82	183	55	192	87	27	11	10
20	21	75	72	375	79	139	52	352	77	26	10	9.6
21	39	68	66	298	145	131	51	258	66	24	10	9.5
22	32	80	60	239	1,170	127	50	189	61	23	10	9.6
23	25	250	55	195	600	128	47	145	55	22	11	9.6
24	20	220	54	163	364	116	46	118	51	21	16	9.0
25	18	170	57	138	319	105	46	99	47	20	12	8.6
26	17	135	67	124	618	193	44	85	44	19	11	8.3
27	16	110	426	116	2,400	951	42	76	52	18	10	7.9
28	36	90	319	105	1,010	615	42	69	58	17	9.8	7.5
29	53	75	267	93	615	412	40	71	46	17	9.4	7.5
30	37	66	811	87	-	308	37	70	40	16	8.9	7.9
31	30	-	862	63	-	230	-	63	-	16	9.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	637.3	53	7.9	20.6	0.644	0.74	1,260
November.....	2,798	250	18	92.9	2.90	3.24	5,530
December.....	6,017	862	43	194	6.06	6.99	11,930
Calendar year 1935.....	46,203.4	2,610	5.9	127	3.97	53.65	91,630
January.....	18,945	2,400	98	611	19.1	22.02	37,580
February.....	9,415	2,400	71	325	10.2	11.00	18,670
March.....	8,941	951	105	288	9.00	10.38	17,730
April.....	2,436	193	37	81.2	2.54	2.83	4,830
May.....	2,874	352	35	92.7	2.90	3.34	5,700
June.....	2,709	319	40	90.3	2.82	3.15	5,370
July.....	1,098	74	16	35.4	1.11	1.28	2,170
August.....	563.1	15	8.9	11.7	.366	.42	720
September.....	346.7	27	7.5	11.6	.362	.40	688
Water year 1935-36.....	56,568.1	2,400	7.5	155	4.84	65.79	112,200

WILSON RIVER BASIN

Wilson River near Tillamook, Oreg.

Location.- Staff gage, lat. 45°29', long. 123°43', in NW¼ sec. 18, T. 1 S., R. 8 W., 1 mile above North Fork and 7 miles east of Tillamook.

Drainage area.- 182 square miles.

Records available.- July 1931 to September 1936. December 1914 to November 1916 (incomplete) at station three-quarters of a mile downstream.

Extremes.- Maximum discharge during year, 19,500 second-feet Jan. 12 (gage height, 14.6 feet, from graph based on gage readings); minimum daily discharge, 90 second-feet (estimated) Sept. 28.

1914-16, 1931-36: Maximum discharge, 30,000 second-feet Dec. 21, 1933 (gage height, 19.28 feet); minimum, 62 second-feet Oct. 6, 9, 10, 1932 (gage height, 0.38 foot).

Remarks.- Records good except those for Feb. 8, 14, Mar. 4-6, 11, 25, 26, Apr. 2-5, 11, June 7, 9-14, 17-27, July 2, 4, 5, 7-11, Aug. 23-26, Sept. 1-18, 28, 29, which are fair. No diversions or regulation above gage.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 11

Jan. 12 to Sept. 30

0.7	108	4.0	2,450	0.5	78	3.0	1,480
1.0	188	5.0	3,550	.7	120	15.0	20,500
1.3	295	6.0	4,750	1.0	201		
1.6	435	8.0	7,510	1.3	312		
2.0	665	10.0	10,700	1.6	460		
2.5	1,030	12.0	14,300	2.0	705		
3.0	1,480	15.0	20,300	2.5	1,060		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	204	545	5,530	672	2,780	1,140	334	545	312	177	*200
2	99	204	545	10,400	575	2,050	*1,050	312	489	*290	171	*190
3	103	188	490	5,790	515	1,750	*950	334	488	312	171	*150
4	143	188	462	14,900	640	*1,500	*850	770	468	*350	171	*155
5	123	182	435	9,050	840	*1,250	*800	980	460	*330	166	*125
6	108	182	900	5,400	1,060	*1,100	770	1,220	405	312	155	*120
7	103	176	1,570	4,270	945	980	705	875	*470	*290	155	*116
8	103	182	1,750	5,010	*750	1,950	770	705	640	*280	155	*112
9	99	295	1,390	5,530	672	1,570	840	672	*560	*280	149	*109
10	99	275	1,660	6,910	640	1,590	805	608	*500	*300	149	*106
11	99	435	1,660	7,810	875	*1,250	*780	515	*450	*350	144	*105
12	143	1,950	2,670	14,700	1,570	1,480	770	488	*410	334	144	*110
13	255	1,080	2,450	9,530	945	1,660	705	460	*370	312	139	*140
14	462	800	1,850	5,270	*860	2,250	672	575	*410	312	139	*140
15	385	1,080	1,570	4,270	805	2,780	640	575	432	292	134	*150
16	318	1,300	1,210	2,560	770	2,050	608	875	640	272	134	*130
17	275	1,300	1,080	2,670	770	1,750	515	705	*790	272	134	120
18	255	1,120	910	2,450	805	1,570	515	910	*620	272	130	116
19	238	990	910	2,350	705	1,220	515	1,660	*550	254	130	107
20	238	698	730	2,560	840	1,140	488	3,330	*500	235	130	107
21	340	605	635	2,150	1,660	1,060	460	2,780	*470	235	130	107
22	340	665	605	1,850	6,350	945	432	1,660	*440	235	125	98
23	295	1,950	545	1,570	4,030	840	432	1,390	*410	218	*140	94
24	275	1,850	518	1,480	2,560	805	432	1,220	*390	218	*150	94
25	255	1,570	575	1,220	2,350	*760	432	945	*370	218	*140	94
26	220	1,210	605	1,020	3,110	*1,500	432	640	*360	201	*130	94
27	220	950	1,390	980	9,850	3,330	405	758	*350	195	120	94
28	275	835	2,050	875	8,110	3,220	380	672	405	195	120	*90
29	255	730	1,660	770	5,010	2,560	355	608	380	201	120	*92
30	238	635	4,510	738	-	1,750	344	575	334	195	120	94
31	220	-	7,060	738	-	1,480	-	575	-	189	125	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-foot
October.....	6,682	462	99	216	1.33	1.63	13,250
November.....	23,829	1,950	176	794	4.90	5.47	47,200
December.....	44,840	7,060	435	1,446	8.93	10.30	88,940
Calendar year 1935.....	342,991	11,500	73	940	5.80	78.71	680,400
January.....	140,351	14,900	738	4,527	27.9	32.17	278,400
February.....	59,284	9,850	515	2,044	12.6	13.59	117,600
March.....	51,720	3,330	760	1,668	10.3	11.87	102,600
April.....	18,982	1,140	334	633	3.91	4.36	37,650
May.....	28,906	3,330	312	932	5.75	6.63	57,350
June.....	14,105	780	354	470	2.90	3.24	27,980
July.....	8,261	350	189	266	1.64	1.89	16,390
August.....	4,397	177	120	142	.877	1.01	8,720
September.....	3,589	200	90	120	.741	.83	7,120
Water year 1935-36.....	404,946	14,900	90	1,106	6.83	92.89	803,200

*Computed on basis of comparable hydrographs of Youngs River near Astoria and Trask River near Tillamook.

Trask River near Tillamook, Oreg.

Location.- Water-stage recorder, lat. 45°27', long. 123°44', in NW¼ sec. 31 (revised), T. 1 S., R. 8 W., half a mile above Gold Creek and 6 miles east of Tillamook.

Drainage area.- 152 square miles.

Records available.- July 1931 to September 1936.

Extremes.- Maximum discharge during year, 13,500 second-feet Jan. 4 (gage height, 10.1 feet, from floodmarks); minimum, 84 second-feet Sept. 28 (gage height, 0.56 foot).
1931-36: Maximum, 20,000 second-feet Dec. 22, 1933 (gage height, 13.00 feet); minimum, 64 second-feet Oct. 3-9, 1932 (gage height, 0.50 foot).
Maximum stage known, about 17 feet, probably occurred during floods of November 1921 or Mar. 31, 1931 (discharge about 30,000 second-feet).

Remarks.- Records excellent except those for Jan. 3, 4, which are good and were based on records of Wilson River near Tillamook. No diversions or regulation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.5	75	3.5	1,920
.7	110	4.0	2,560
1.0	190	4.5	3,260
1.3	295	5.0	4,030
1.6	425	6.0	5,700
2.0	630	7.0	7,480
2.5	940	8.0	9,350
3.0	1,380	9.0	11,300

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	160	430	4,030	580	2,290	1,140	331	475	275	152	172
2	88	150	402	7,480	545	1,810	988	331	455	259	150	163
3	90	145	376	4,200	540	1,540	895	340	450	299	148	125
4	110	145	353	11,000	614	1,240	811	394	425	323	145	115
5	108	145	335	7,840	646	1,100	763	799	407	315	142	110
6	96	145	485	5,190	1,190	940	721	895	394	287	140	108
7	90	142	646	4,510	968	841	739	727	420	263	138	106
8	90	178	763	4,030	811	1,240	745	630	505	255	138	102
9	88	303	680	4,350	745	1,430	709	550	455	255	135	100
10	68	241	841	5,360	685	1,190	665	505	416	279	135	98
11	96	315	1,190	6,760	674	1,060	685	465	402	315	132	96
12	152	936	2,280	10,400	1,240	1,240	658	430	371	279	130	98
13	208	697	1,760	7,840	1,280	1,330	624	415	348	259	128	120
14	267	540	1,280	4,680	1,060	1,810	580	480	380	252	125	166
15	244	668	1,060	3,320	895	2,160	545	520	407	241	125	128
16	193	721	865	2,620	805	1,760	520	739	515	227	122	110
17	187	674	763	2,220	733	1,380	480	592	575	220	120	102
18	163	592	690	1,920	674	1,190	465	550	505	217	118	100
19	152	525	614	2,360	636	1,020	445	890	475	211	118	98
20	178	475	555	2,360	614	895	420	2,160	435	205	115	96
21	263	425	515	1,980	964	769	407	1,810	412	196	112	94
22	244	455	480	1,640	4,610	775	398	1,380	380	190	110	90
23	211	332	450	1,360	3,320	751	360	1,100	362	187	130	90
24	193	1,010	435	1,190	2,160	697	407	918	340	184	140	90
25	184	611	450	1,060	1,760	641	398	805	327	181	125	90
26	166	703	470	910	2,220	964	366	727	319	175	115	88
27	160	619	1,100	841	6,040	3,800	358	641	307	172	110	86
28	199	555	1,330	775	5,020	3,480	362	592	327	166	108	84
29	211	510	1,190	709	3,100	2,220	335	560	295	160	106	86
30	181	470	2,640	658	-	1,640	327	540	253	160	106	86
31	166	-	6,040	619	-	1,330	-	510	-	158	104	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	4,948	267	88	160	1.05	1.21	9,810
November.....	14,447	1,010	142	462	3.17	3.54	28,660
December.....	31,468	6,040	335	1,015	6.63	7.70	62,420
Calendar year 1935.....	269,647	6,220	80	739	4.86	66.04	534,900
January.....	114,232	11,000	619	3,685	24.2	27.90	226,800
February.....	45,149	6,040	540	1,557	10.2	11.00	89,550
March.....	44,533	3,600	641	1,437	9.45	10.90	89,330
April.....	17,368	1,140	327	579	3.81	4.25	34,440
May.....	22,317	2,160	331	720	4.74	5.46	44,270
June.....	12,157	575	283	405	2.66	2.97	24,110
July.....	7,165	323	158	231	1.52	1.75	14,210
August.....	3,922	152	104	127	.836	.96	7,780
September.....	3,197	172	84	107	.704	.79	6,340
Water year 1935-36.....	320,901	11,000	84	877	5.77	78.43	636,500

Nestucca River near McMinnville, Oreg.

Location.- Water-stage recorder, lat. 45°19', long. 123°28', in SW¼ sec. 8, T. 3 S., R. 8 W., half a mile below dam at outlet of Meadow Lake and 13 miles northwest of McMinnville.

Drainage area.- 12 square miles.

Records available.- October 1928 to September 1936.

Extremes.- Maximum discharge during year, about 1,390 second-feet Jan. 12 (gage height, 5.3 feet); minimum, 1.8 second-foot Oct. 1-3.
1928-36: Maximum discharge, about 1,480 second-feet (revised) Dec. 22, 1933 (gage height, 5.10 feet); minimum, 1.0 second-foot Oct. 11, 1929.

Remarks.- Records poor. Discharge for Nov. 1-14 estimated by comparison with flow of HASKINS Creek near McMinnville. No diversions above gage. Flow regulated to a small extent by dam at outlet of Meadow Lake.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 4-13, Sept. 18-30)

Oct. 1-31

Nov. 15 to Sept. 30

0.3	1.0	0.4	2.0	1.8	60	3.5	545
.5	2.4	.7	5.3	2.2	103	4.0	820
.7	4.8	1.0	12.4	2.6	176	4.5	1,120
		1.4	30	3.0	295		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	3.9	9.8	227	32	120	59	18	19	8.5	4.0	2.9
2	1.8	3.8	9.2	395	30	97	52	18	18	8.0	3.9	3.0
3	1.8	3.7	8.5	242	29	83	48	18	18	8.0	3.8	3.1
4	2.1	3.5	7.8	669	31	72	42	20	18	8.2	3.8	3.1
5	2.3	3.2	7.0	434	31	62	40	31	17	8.2	3.7	3.0
6	2.4	3.1	9.5	239	45	55	38	36	17	8.0	3.4	3.0
7	2.5	3.0	18	221	46	49	37	31	17	7.5	3.4	3.0
8	2.4	4.5	31	188	38	68	37	27	19	7.3	3.3	2.9
9	2.3	8.0	30	224	34	87	35	24	19	7.0	3.3	2.8
10	2.2	6.0	32	278	32	75	34	22	18	7.3	3.2	2.7
11	2.2	8.0	38	340	32	66	33	20	17	7.5	3.3	2.7
12	2.4	13	66	954	45	67	31	19	16	7.5	3.2	2.6
13	3.0	10	56	732	50	67	29	18	15	7.0	3.2	2.8
14	3.5	8.5	43	299	45	78	28	20	15	6.6	3.2	3.0
15	4.2	15	35	215	41	89	26	22	16	6.5	3.2	3.2
16	4.4	26	29	162	37	80	25	26	18	6.2	3.1	3.3
17	4.3	26	25	127	35	71	24	25	19	5.9	3.1	3.2
18	4.0	20	22	106	32	61	23	22	18	5.8	3.0	3.1
19	3.9	16	19	110	30	54	22	27	17	5.8	3.0	3.0
20	4.0	13	17	113	30	47	22	74	15	5.4	3.0	2.9
21	4.4	11	15	102	52	43	20	68	14	5.2	3.0	2.8
22	4.7	11	14	90	247	40	20	54	13	5.1	2.9	2.7
23	4.5	17	13	79	233	39	20	43	12	5.1	2.9	2.7
24	4.3	22	13	70	134	36	20	35	11	4.8	3.0	2.6
25	4.0	20	13	60	98	33	20	31	10	4.7	3.0	2.5
26	4.0	18	16	53	104	42	20	26	9.8	4.7	3.1	2.4
27	3.9	16	58	48	271	148	19	24	9.8	4.6	3.0	2.3
28	3.9	14	81	45	288	162	19	22	10	4.5	2.9	2.1
29	4.0	12	82	40	175	106	19	21	9.8	4.3	2.9	2.1
30	4.0	11	168	37	-	83	19	21	9.0	4.1	2.8	2.1
31	4.0	-	406	35	-	69	-	20	-	4.0	2.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	105.1	4.7	1.8	3.33	0.278	0.32	204
November.....	350.2	26	3.0	11.7	.975	1.09	695
December.....	1,391.8	406	7.0	44.9	3.74	4.31	2,760
Calendar year 1935.....	13,010.9	449	1.5	35.6	2.97	40.31	25,810
January.....	6,934	954	35	224	18.7	21.56	13,750
February.....	2,327	288	29	80.2	6.68	7.20	4,620
March.....	2,249	162	33	72.5	6.04	6.96	4,460
April.....	881	59	19	29.4	2.45	2.73	1,750
May.....	883	74	18	28.5	2.38	2.74	1,750
June.....	454.4	19	9.0	15.1	1.26	1.41	901
July.....	193.3	8.5	4.0	6.24	.520	.60	383
August.....	99.3	4.0	2.7	3.20	.267	.31	197
September.....	63.6	3.3	2.1	2.79	.232	.26	166
Water year 1935-36.....	15,949.7	954	1.8	43.6	3.63	49.49	31,640

Siletz River at Siletz, Oreg.

Location.- Wire-weight gage, lat. 44°43', long. 123°56', in SW¼ sec. 9, T. 10 S., R. 10 W., at highway bridge three-quarters of a mile southwest of Siletz.

Drainage area.- 204 square miles.

Records available.- November 1905 to May 1912, January 1924 to September 1936.

Average discharge.- 16 years (1906-11, 1925-36), 1,707 second-feet.

Extremes.- Maximum discharge observed during water year 1934-35, 15,000 second-feet Nov. 7 (gage height, 14.71 feet); minimum (regulated), 52 second-feet Aug. 28 (gage height, 0.68 foot).
Maximum discharge observed during water year 1935-36, 19,600 second-feet Jan. 4 (gage height, 17.74 feet); minimum, 76 second-feet Oct. 1, 10 (gage height, 0.87 foot).
1906-12, 1924-36: Maximum discharge, 34,600 second-feet Nov. 22, 1909; minimum, 51 second-feet Dec. 6, 7, 1929.
Maximum discharge known, 40,800 second-feet Nov. 20, 1921 (gage height, 31.6 feet at present gage).

Remarks.- Records fair. No diversions for irrigation above station. Flow regulated occasionally at low and medium stages by operation of logging pond at Valsetz.

Rating tables, water years 1934-36 (gage height, in feet, and discharge, in second-feet)				Nov. 7, 1934 to Sept. 30, 1936			
Oct. 1 to Nov. 6, 1934							
0.6	62	6.0	3,160	0.6	44	3.0	880
1.0	110	8.0	5,560	1.0	100	4.0	1,470
1.5	215	10.0	8,300	1.5	230	8.0	5,560
2.0	390	12.0	11,100	2.0	410	18.0	20,000
3.0	850	15.0	15,500				
4.0	1,470	18.0	20,000				
5.0	2,230						

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	3,480	3,260	3,280	1,540	1,150	1,540	960	295	312	149	69
2	94	4,050	2,860	2,490	1,470	1,090	1,400	930	295	250	132	68
3	102	7,040	2,490	2,230	1,470	980	1,530	830	278	245	122	69
4	92	8,020	2,070	2,400	1,330	1,210	1,990	790	245	201	120	65
5	83	9,420	1,750	2,310	1,150	1,210	1,830	680	230	193	115	65
6	80	9,560	1,610	4,910	1,090	1,330	1,610	635	216	181	107	66
7	79	12,300	1,330	4,530	930	1,680	1,470	512	216	245	104	65
8	55	8,300	1,090	3,590	880	1,400	1,330	590	230	230	100	64
9	87	6,080	1,030	2,860	730	1,330	1,210	568	230	187	98	64
10	80	3,160	980	2,230	680	1,270	1,030	545	245	176	94	62
11	82	2,580	1,030	2,310	1,030	1,270	980	500	245	165	89	62
12	81	2,070	1,030	1,990	1,090	5,820	980	478	230	165	87	64
13	78	1,630	980	1,680	1,750	8,580	980	432	230	161	89	59
14	78	2,070	930	1,400	1,750	5,170	980	410	216	146	85	455
15	79	2,070	930	1,470	1,640	3,700	980	410	230	136	83	260
16	78	1,750	1,030	1,470	1,470	3,160	930	410	216	127	85	455
17	75	1,610	1,210	1,470	1,400	2,490	880	635	216	120	92	190
18	75	1,610	1,270	1,270	1,270	1,990	880	545	201	122	134	149
19	74	4,530	5,050	1,210	1,210	1,750	780	500	193	124	113	159
20	992	5,040	11,100	980	880	1,680	780	478	181	129	102	132
21	1,260	4,780	8,860	1,090	1,610	1,640	980	410	179	129	94	120
22	1,080	5,430	8,300	3,370	2,960	1,610	1,400	390	168	127	78	113
23	8,600	5,690	9,000	7,040	2,870	1,640	2,230	350	168	129	70	102
24	8,580	4,780	8,020	7,600	2,150	1,680	1,750	330	162	132	69	96
25	10,100	4,910	5,430	5,300	1,680	7,460	1,400	312	157	127	68	94
26	6,080	5,560	5,950	4,170	1,540	4,910	1,270	312	154	127	66	90
27	5,160	4,780	4,530	3,160	1,470	4,410	1,210	295	160	124	66	89
28	2,070	3,810	3,370	2,670	1,270	2,960	1,150	295	168	162	52	87
29	1,470	3,160	7,320	2,230	-	2,580	1,090	295	260	136	68	81
30	1,330	3,480	5,300	2,070	-	2,150	1,030	312	350	129	69	78
31	1,830	-	4,050	1,750	-	1,910	-	295	-	132	70	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	46,101	10,100	75	1,437	7.29	8.40	91,440
November.....	143,100	12,600	1,610	4,770	23.4	26.11	263,000
December.....	113,160	11,100	930	3,650	17.9	20.64	224,400
Calendar year 1934.....	583,084	12,600	56	1,597	7.83	106.28	1,156,000
January.....	86,510	7,600	980	2,791	13.7	15.79	171,600
February.....	40,010	2,960	680	1,439	7.00	7.23	79,560
March.....	81,280	8,860	980	2,622	12.9	14.87	161,200
April.....	37,400	2,230	790	1,247	6.11	6.82	74,180
May.....	15,544	980	295	501	2.46	2.64	30,830
June.....	6,564	350	154	219	1.07	1.19	13,020
July.....	5,069	312	120	164	.804	.93	10,050
August.....	2,870	149	52	92.6	.454	.52	5,690
September.....	3,582	455	62	118	.583	.65	7,100
Water year 1934-35.....	581,200	12,600	52	1,585	7.76	106.05	1,153,000

Note.- The above records supersede those published in Water-Supply Paper 794.

Siletz River at Siletz, Oreg.

(Continued)

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	168	612	5,480	880	3,310	1,750	390	680	350	179	124
2	80	149	545	11,900	780	3,260	1,610	410	635	380	176	216
3	90	144	432	5,820	730	2,490	1,470	432	590	390	170	149
4	107	136	410	19,600	830	1,830	1,400	455	568	390	188	129
5	96	146	432	11,700	830	1,470	1,270	980	545	432	168	124
6	90	149	432	7,460	1,030	1,210	1,090	1,030	522	410	165	122
7	83	144	780	6,620	1,210	1,090	980	830	522	350	168	120
8	80	146	1,910	5,820	980	1,270	980	780	612	350	165	118
9	78	370	1,400	6,080	930	1,470	880	680	680	370	162	113
10	76	350	1,750	7,600	880	1,270	880	612	568	350	160	109
11	78	330	2,070	11,100	880	1,210	880	568	500	455	154	104
12	94	1,750	4,410	15,000	1,030	1,330	830	500	478	390	149	100
13	151	1,210	2,960	12,500	1,210	1,150	930	500	455	350	144	127
14	295	880	2,070	6,900	1,090	1,210	830	680	455	330	141	280
15	330	1,210	1,830	5,040	1,030	1,990	780	635	680	312	139	201
16	260	1,330	1,330	4,410	980	1,910	780	980	830	295	136	165
17	216	1,150	1,210	3,700	880	1,540	730	880	830	278	134	132
18	190	880	1,030	3,060	880	1,400	680	680	880	260	134	118
19	181	880	930	3,930	780	1,270	635	730	780	260	132	109
20	187	830	830	3,590	780	1,210	568	4,290	730	245	129	107
21	216	568	780	2,960	2,760	980	545	2,960	730	230	124	104
22	230	590	730	2,490	6,080	980	522	2,230	680	230	122	100
23	198	1,830	680	2,070	5,170	980	545	1,680	590	216	124	102
24	179	1,750	680	1,750	3,370	930	545	1,400	500	198	129	100
25	168	1,400	680	1,470	2,760	880	522	1,210	455	195	136	102
26	154	1,090	635	1,400	2,760	930	478	1,090	432	190	132	100
27	149	930	1,150	1,270	4,780	2,760	432	880	410	187	127	96
28	195	780	1,400	1,090	5,300	6,210	478	830	410	187	122	92
29	187	730	2,070	930	4,290	4,410	455	780	390	184	120	90
30	198	635	3,370	880	-	2,860	410	730	370	181	120	92
31	184	-	5,170	880	-	2,150	-	680	-	181	122	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				4,896	530	76	168	0.775	0.89	9,710		
November.....				22,655	1,830	136	755	3.70	4.15	49,440		
December.....				44,718	5,170	410	1,445	7.07	8.15	88,700		
Calendar year 1935.....				351,108	8,860	52	962	4.72	64.07	696,400		
January.....				172,500	19,600	880	5,565	27.3	31.47	342,100		
February.....				55,890	6,080	730	1,927	9.45	10.19	110,900		
March.....				57,460	6,210	880	1,854	9.09	10.48	114,000		
April.....				24,785	1,750	410	826	4.05	4.52	49,160		
May.....				31,512	4,290	390	1,017	4.99	5.76	62,500		
June.....				17,507	880	370	584	2.86	5.19	34,720		
July.....				9,076	455	181	293	1.44	1.66	18,000		
August.....				4,451	179	120	144	.706	.81	8,830		
September.....				3,725	260	90	124	.608	.68	7,390		
Water year 1935-36.....				449,175	19,600	76	1,227	6.01	81.92	891,000		

Siuslaw River above Wildcat Creek, at Austa, Oreg.

Location.- Staff gage, 44°0', long. 123°39', in SW $\frac{1}{4}$ sec. 16, T. 18 S., R. 8 W., a quarter of a mile above Wildcat Creek and Austa.

Drainage area.- 267 square miles.

Records available.- September 1931 to September 1936.

Extremes.- Maximum discharge observed during year, 12,900 second-feet Jan. 12 (gage height, 15.5 feet); minimum, 31 second-feet Sept. 28, 29 (gage height, 1.20 feet). 1931-36: Maximum discharge observed, that of Jan. 12, 1936; minimum, 22 second-feet Sept. 4, 5, 1931, Sept. 22, 1934.

Remarks.- Records good. Discharge interpolated for Mar. 12, Sept. 30. No diversions or regulation above gage.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.0	19	4.5	1,550
1.2	31	5.0	1,920
1.4	49	6.0	2,720
1.6	80	7.0	3,550
1.8	121	8.0	4,450
2.0	177	10.0	6,390
2.5	375	12.0	8,540
3.0	610	14.0	10,900
3.5	890	16.0	13,500
4.0	1,200		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	70	117	1,410	535	1,760	890	270	227	117	60	37
2	32	63	108	4,270	510	1,410	775	270	220	117	60	37
3	35	70	103	2,800	438	1,270	720	250	212	112	57	41
4	36	70	91	4,990	535	1,070	775	290	205	112	57	43
5	37	73	84	4,630	610	950	630	420	198	117	55	44
6	37	73	121	3,280	720	890	720	610	191	112	52	44
7	37	65	205	2,830	1,340	775	639	360	191	103	52	43
8	37	60	510	2,800	1,270	720	585	465	212	103	52	41
9	36	52	498	2,800	950	665	535	398	205	108	49	39
10	35	60	442	4,000	830	610	510	352	191	103	49	39
11	34	60	830	8,890	720	560	488	330	177	108	49	37
12	43	330	2,160	10,700	775	548	465	290	165	103	49	36
13	156	535	1,340	11,000	775	535	442	270	212	103	49	37
14	242	375	950	7,120	720	610	420	375	184	99	49	43
15	250	290	665	4,720	665	510	375	420	212	95	47	52
16	177	352	510	4,360	610	510	375	465	212	91	47	45
17	117	352	398	3,910	585	510	352	375	290	88	45	45
18	95	330	330	3,040	535	465	330	330	310	84	45	43
19	66	242	290	2,400	510	420	330	330	270	84	45	41
20	55	198	250	2,000	585	420	310	692	227	80	45	39
21	55	171	242	1,620	2,240	398	290	720	198	77	45	36
22	55	184	198	1,340	4,630	420	310	560	177	77	43	36
23	52	375	184	1,200	4,180	375	290	465	159	73	43	34
24	52	398	171	1,070	2,880	420	310	420	153	70	43	34
25	49	330	171	950	2,400	420	290	352	147	66	41	34
26	49	250	165	890	3,280	420	290	330	142	66	41	33
27	49	205	398	775	3,040	1,010	270	290	131	63	41	33
28	47	171	610	720	2,480	1,920	290	310	126	63	39	31
29	49	142	775	638	2,160	1,550	310	290	126	63	39	31
30	49	126	1,200	610	-	1,270	510	250	121	66	39	31
31	57	-	1,320	585	-	1,070	-	250	-	63	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,153	250	32	69.5	0.260	0.30	4,270
November.....	6,073	535	52	202	.757	.85	12,080
December.....	15,728	2,160	64	507	1.90	2.19	31,190
Calendar year 1935.....	195,391	4,040	28	535	2.00	27.23	367,600
January.....	102,398	11,000	585	3,303	12.4	14.30	203,100
February.....	41,588	4,630	488	1,433	5.37	5.79	82,460
March.....	24,351	1,920	375	786	2.94	3.39	48,360
April.....	15,526	890	270	461	1.73	1.93	27,420
May.....	11,999	720	250	387	1.45	1.67	23,800
June.....	5,791	310	121	193	.723	.81	11,490
July.....	2,791	117	63	90.0	.337	.39	5,540
August.....	1,466	60	39	47.3	.177	.20	2,910
September.....	1,159	52	31	38.6	.145	.16	2,300
Water year 1935-36.....	229,320	11,000	31	627	2.35	31.93	454,900

Lake Creek at Triangle Lake, Oreg.

Location.- Water-stage recorder, lat. 44°10', long. 123°34', in NW¼ sec. 29, T. 16 S., R. 7 W., 500 feet below outlet of Triangle Lake. Zero of gage is 672.3 feet above mean sea level.

Drainage area.- 50 square miles.

Records available.- August 1931 to September 1936.

Extremes.- Maximum discharge during year, 3,960 second-feet Jan. 13 (gage height, 8.1 feet); minimum, 9 second-feet Sept. 27-30 (gage height, 0.54 foot).

1931-36: Maximum discharge, 3,960 second-feet Dec. 22, 1934, and Jan. 13, 1936 (gage height, 8.14 feet); minimum, 7 second-feet Sept. 12, 13, 1935 (gage height, 0.47 foot).

Remarks.- Records above 50 second-feet good, others fair. Discharge for Apr. 24-28 computed on basis of records of Siuslaw River above Wildcat Creek, at Asta. No diversions above gage. Flow regulated by natural storage in Triangle Lake.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.4	6	3.0	475
.6	10.5	3.5	695
.8	18	4.0	950
1.0	29	4.5	1,230
1.2	44	5.0	1,530
1.4	66	6.0	2,210
1.7	113	7.0	2,990
2.0	172	8.2	4,050
2.5	304		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	21	44	473	135	578	272	73	70	31	17	10
2	10	20	41	600	155	495	242	87	30	30	16	10
3	12	19	36	770	151	412	239	69	85	30	16	10
4	12	16	36	1,000	168	357	264	74	62	30	16	10
5	13	18	35	1,380	181	316	261	90	60	30	16	10
6	12	17	39	1,260	206	281	242	103	58	30	16	10
7	12	17	54	975	297	255	215	101	56	29	15	10
8	12	17	66	845	313	236	202	93	58	29	15	10
9	11	16	113	820	249	228	190	85	55	29	14	10
10	11	22	122	950	234	206	179	76	53	29	14	10
11	10	25	147	1,790	212	190	164	70	51	29	14	10
12	12	41	261	2,830	212	186	155	64	50	29	14	10
13	14	85	248	3,510	210	161	147	62	52	28	14	10
14	21	96	269	2,070	205	179	141	74	53	27	13	10
15	27	90	196	1,350	195	179	135	63	56	27	13	10
16	30	68	153	1,110	164	177	126	65	58	25	13	11
17	28	94	126	1,000	172	172	120	63	60	25	13	11
18	25	93	108	845	166	166	115	77	60	24	12	11
19	22	79	93	720	162	155	110	60	58	24	12	11
20	22	67	62	600	164	145	104	127	54	23	12	12
21	21	59	73	535	255	141	101	195	50	22	12	13
22	20	55	67	464	600	139	99	193	46	22	12	13
23	20	56	62	405	645	137	94	166	42	22	11	12
24	19	66	59	357	770	137	90	141	41	21	11	11
25	18	74	59	320	622	133	87	120	38	20	11	10
26	17	73	60	261	578	131	84	106	37	20	11	10
27	16	66	74	255	600	181	81	96	35	20	11	9
28	16	59	127	234	622	401	80	91	34	19	11	9
29	17	53	172	206	622	456	80	83	33	16	11	9
30	18	48	275	190	-	361	76	77	32	18	10	9
31	21	-	351	179	-	316	-	74	-	18	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	529	30	10	17.1	0.542	0.39	1,050
November.....	1,554	96	17	51.6	1.04	1.16	3,080
December.....	3,792	351	35	122	2.44	2.61	7,520
Calendar year 1935.....	54,049	1,140	7	146	2.96	40.22	107,200
January.....	26,275	3,510	179	912	16.2	20.98	56,080
February.....	9,530	845	151	329	6.58	7.10	18,900
March.....	7,649	578	131	247	4.94	5.70	15,170
April.....	4,433	272	76	150	3.00	3.35	8,910
May.....	2,981	185	62	96.2	1.92	2.21	6,910
June.....	1,544	70	32	51.5	1.03	1.15	3,060
July.....	778	31	18	25.1	.502	.58	1,540
August.....	406	17	10	13.1	.262	.30	805
September.....	311	13	9	10.4	.208	.23	617
Water year 1935-36.....	61,643	3,510	9	169	3.38	45.96	122,600

Umpqua River near Elkton, Oreg.

Location.- Staff gage, lat. 43°35', long. 123°33', in sec. 8, T. 23 S., R. 7 W., 4 miles south of Elkton. Zero of gage is approximately 95 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 3,680 square miles.

Records available.- October 1905 to September 1936; incomplete prior to November 1908.

Average discharge.- 31 years, 7,070 second-feet.

Extremes.- Maximum discharge during year, 111,000 second-feet Jan. 13 (gage height, about 30 feet, from floodmarks); minimum, 895 second-feet Sept. 29, 30 (gage height, 1.15 feet).
1905-36: Maximum discharge, 172,000 second-feet Feb. 21, 1927 (gage height, 41.0 feet); minimum, 640 second-feet July 18, 1926 (gage height, 0.71 foot).
A flood in 1861 reached a stage of about 45.5 feet.

Remarks.- Records good. Discharge for July 1 interpolated. Some diversions for irrigation in South Umpqua River Basin, but low-water flow probably only slightly affected No regulation.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.0	770	5.0	6,130	15.0	39,700
1.5	1,220	6.0	8,300	17.0	45,400
2.0	1,730	7.0	10,800	19.0	57,300
2.5	2,300	9.0	17,000	21.0	66,600
3.0	2,930	11.0	23,800	23.0	76,100
4.0	4,340	13.0	31,500	26.0	91,000

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	904	1,200	1,420	13,300	5,930	19,300	7,600	5,740	3,740	1,810	1,150	940
2	904	1,160	1,320	19,000	8,550	18,000	6,550	5,150	3,460	1,780	1,140	940
3	904	1,140	1,320	36,300	5,010	16,700	6,130	5,010	3,320	1,750	1,150	958
4	922	1,120	1,320	29,900	4,670	14,800	7,380	5,550	3,190	1,680	1,120	994
5	922	1,100	1,270	71,800	4,670	12,400	10,100	7,380	3,060	1,620	1,100	1,010
6	994	1,080	1,270	40,100	4,670	10,100	8,790	13,300	3,190	1,620	1,090	1,010
7	976	1,080	1,270	22,000	5,010	9,300	7,600	11,800	3,460	1,570	1,080	994
8	949	1,160	2,000	18,600	6,530	8,300	9,040	9,660	4,180	1,570	1,080	976
9	931	1,220	4,670	20,300	5,930	7,830	9,820	8,300	4,940	1,520	1,070	958
10	922	1,370	3,880	38,400	5,370	7,600	9,300	7,380	4,340	1,520	1,070	958
11	922	1,900	4,670	57,300	5,190	6,950	10,100	6,950	3,880	1,570	1,060	958
12	958	1,950	17,700	64,700	5,740	6,530	12,700	6,740	3,600	1,680	1,060	958
13	1,080	2,060	23,100	87,000	7,830	6,130	11,200	6,330	3,460	1,620	1,060	967
14	1,270	2,670	11,200	86,000	10,100	5,930	10,600	6,530	3,600	1,620	1,060	976
15	1,730	3,520	7,580	56,000	9,300	8,740	9,820	7,160	3,880	1,470	1,040	1,010
16	2,000	2,640	5,190	50,200	8,060	5,370	9,300	6,530	3,740	1,420	1,030	1,120
17	1,680	3,320	4,600	53,700	7,380	5,190	9,040	5,740	3,740	1,420	1,020	1,080
18	1,420	3,060	3,980	32,300	7,160	5,010	8,300	5,190	3,460	1,420	1,010	1,030
19	1,270	2,480	3,460	21,000	7,160	4,840	7,600	5,010	3,190	1,370	994	1,010
20	1,140	2,360	2,930	19,000	7,830	4,670	6,950	5,930	2,930	1,370	994	976
21	1,130	2,640	2,670	17,000	19,000	4,500	6,530	7,160	2,800	1,320	985	958
22	1,120	2,930	2,360	13,900	45,900	4,840	6,330	6,530	2,600	1,270	985	940
23	1,120	2,800	2,180	12,100	40,100	4,840	6,530	6,130	2,480	1,270	976	922
24	1,100	2,670	2,060	11,800	31,900	4,670	6,950	5,560	2,360	1,270	976	922
25	1,100	2,640	1,950	11,600	26,300	4,940	7,600	5,010	2,240	1,220	967	922
26	1,080	2,420	2,000	10,400	24,200	4,670	7,160	4,670	2,180	1,220	958	913
27	1,070	2,120	2,180	9,560	22,800	4,670	6,330	4,600	2,060	1,200	949	913
28	1,050	1,780	3,520	8,790	21,700	11,200	5,930	4,670	1,950	1,160	949	904
29	1,030	1,620	5,550	8,300	20,600	14,500	6,330	4,340	1,900	1,180	940	895
30	1,060	1,620	6,950	7,380	-	10,900	6,130	4,030	1,840	1,170	940	895
31	1,190	-	11,800	6,530	-	8,790	-	3,880	-	1,160	940	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-foot
October.....	34,848	2,000	904	1,124	0.305	0.35	69,120
November.....	60,230	3,520	1,080	2,008	0.546	0.61	119,500
December.....	146,770	25,100	1,270	4,736	1.29	1.49	291,100
Calendar year 1935.....	2,030,926	33,100	904	5,564	1.61	20.52	4,028,000
January.....	955,160	87,000	6,530	30,760	8.36	9.64	1,891,000
February.....	380,490	45,800	4,670	13,120	3.57	3.85	764,700
March.....	259,110	19,300	4,500	8,268	2.27	2.62	513,900
April.....	243,720	12,700	5,930	8,124	2.21	2.47	483,400
May.....	197,790	15,500	3,880	6,380	1.73	1.99	392,300
June.....	94,670	4,840	1,840	3,156	0.958	0.96	167,800
July.....	44,740	1,810	1,160	1,443	0.392	0.45	88,740
August.....	31,903	1,150	940	1,029	0.280	0.32	63,280
September.....	29,007	1,120	895	967	0.263	0.29	57,530
Water year 1935-36.....	2,476,458	87,000	895	6,766	1.84	25.04	4,912,000

Cow Creek near Azalea, Oreg.

Location.- Staff gage, lat. 42°50', long. 123°11', in sec. 33, T. 31 S., R. 4 W., 4 miles northeast of Azalea.

Drainage area.- 76 square miles.

Records available.- April 1926 to September 1936 (incomplete prior to 1932).

Extremes.- Maximum discharge observed during year, 2,440 second-feet Jan. 13 (gage height, 7.73 feet), from rating curve extended above 1,200 second-feet; minimum, 7 second-feet Oct. 1.

1926-36: Maximum discharge (estimated), 4,000 second-feet Jan. 2, 1933 (gage height, 7.8 feet); minimum, 4 second-feet Sept. 9-19, 1929, Aug. 26-28, 1931, Aug. 21 to Sept. 6, 1934.

Remarks.- Records poor. Minor diversions for irrigation above station.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 12		Jan. 13 to Sept. 30	
1.7	6.5	1.7	6.5
2.0	24	2.0	24
2.4	72	2.4	72
2.8	157	2.8	155
3.2	281	3.2	262
3.6	445	3.6	380
4.0	645	4.0	520
4.5	920	4.5	720
5.0	1,240	5.1	990
5.5	1,610	5.8	1,340

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	17	15	112	92	252	76	47	31	15	9	9
2	9	16	15	755	85	262	70	50	29	15	9	11
3	9	14	15	247	76	234	83	54	29	14	9	10
4	9	14	14	1,100	76	207	150	94	30	14	9	10
5	9	15	15	672	74	180	114	90	32	14	9	9
6	9	15	22	281	72	168	106	85	34	14	9	9
7	9	15	33	215	72	153	119	79	34	14	9	8
8	9	16	83	174	70	137	139	64	32	17	9	9
9	8	18	42	865	68	121	141	56	31	24	9	8
10	9	22	52	810	66	106	139	50	30	19	9	8
11	9	22	336	1,530	66	102	139	47	28	17	9	8
12	21	22	490	920	69	98	130	45	28	16	9	8
13	21	21	36	2,440	85	90	121	48	31	15	9	10
14	21	25	72	850	86	86	117	47	34	15	9	11
15	21	33	54	640	86	85	98	44	36	14	9	10
16	16	47	42	850	85	83	85	43	32	12	9	10
17	14	28	38	501	90	79	81	40	28	11	8	9
18	12	24	53	364	94	70	70	38	27	11	8	9
19	12	26	29	304	125	68	64	38	25	12	8	9
20	11	27	28	262	114	66	62	41	23	12	8	9
21	13	28	27	220	720	62	58	38	22	11	8	8
22	14	29	26	194	720	63	57	35	21	11	8	8
23	13	28	26	180	520	64	57	32	21	11	8	8
24	12	24	24	180	396	64	54	30	19	10	8	8
25	11	22	23	155	519	63	53	30	17	10	8	8
26	11	20	24	153	319	62	53	29	18	10	8	8
27	11	19	58	146	319	79	52	30	18	10	8	8
28	12	18	76	137	304	155	50	31	18	10	8	8
29	18	18	185	130	290	106	52	32	17	10	8	8
30	16	18	168	112	-	98	49	32	-	10	8	8
31	16	-	179	102	-	83	-	33	16	10	8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	399	37	7	12.9	0.170	0.20	791
November.....	675	47	14	22.5	.296	.53	1,540
December.....	2,346	490	14	75.7	.996	1.15	4,650
Calendar year 1935.....	27,443	755	7	75.2	.999	15.43	54,440
January.....	15,601	2,440	102	503	6.62	7.63	30,940
February.....	5,560	720	66	192	2.55	2.73	11,030
March.....	3,656	262	62	115	1.51	1.74	7,050
April.....	2,639	150	49	88.0	1.16	1.29	5,230
May.....	1,462	94	29	46.8	.615	.71	2,880
June.....	791	36	16	26.4	.347	.39	1,570
July.....	408	24	10	13.2	.174	.20	809
August.....	264	9	8	8.5	.112	.13	524
September.....	265	11	8	8.8	.116	.13	526
Water year 1935-36.....	33,956	2,440	7	92.8	1.22	16.63	67,340

North Umpqua River below Lake Creek, Oreg.

Location.- Water-stage recorder, lat. 43°19', long. 122°11', in NW¼ sec. 13, T. 26 S., R. 5 E., 200 yards below mouth of Lake Creek and 30 miles southwest of Crescent. Zero of gage is about 4,090 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 175 square miles.

Records available.- October 1927 to September 1936.

Extremes.- Maximum discharge during year, 697 second-feet May 14 (gage height, 1.61 feet); minimum, 267 second-feet Nov. 3, Feb. 1 (gage height, 0.77 foot).
1927-36: Maximum discharge, 1,190 second-feet June 9, 1933 (gage height, 2.34 feet); minimum, 206 second-feet Dec. 9, 1931.

Remarks.- Records good. No diversions or regulation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.8	279
1.0	363
1.2	459
1.5	626
1.8	835

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	308	295	300	308	287	324	359	538	529	400	337	320
2	304	291	300	377	291	324	359	528	516	400	337	320
3	308	287	300	333	300	329	359	533	501	400	337	320
4	312	295	295	350	316	329	354	544	495	400	337	320
5	308	300	295	329	316	324	354	566	495	395	333	324
6	295	304	300	320	316	324	354	555	506	395	329	320
7	295	300	304	316	312	324	359	544	516	391	329	324
8	300	300	300	316	300	329	359	578	511	391	329	324
9	300	304	300	324	304	333	359	566	495	391	329	324
10	300	304	304	329	308	329	363	590	485	391	329	324
11	304	304	312	350	324	324	372	632	485	391	329	324
12	312	304	308	342	320	324	386	652	490	386	329	324
13	312	304	300	342	320	324	400	645	490	386	329	329
14	320	300	291	359	316	320	414	690	480	386	329	329
15	316	304	291	359	312	320	424	671	480	386	329	329
16	312	304	295	363	312	320	449	645	469	361	329	329
17	308	300	291	363	308	324	444	626	459	377	329	324
18	304	295	291	359	308	320	469	614	449	372	329	324
19	304	295	287	354	308	324	480	608	444	372	329	324
20	304	295	291	346	308	333	501	590	439	368	329	320
21	304	295	291	342	324	331	501	566	434	366	329	320
22	304	300	287	337	333	377	522	550	429	368	324	320
23	300	304	291	337	320	377	560	544	424	363	324	316
24	300	304	291	333	316	377	645	555	424	359	324	316
25	300	304	295	333	320	372	645	566	414	354	320	312
26	295	304	295	329	324	368	626	590	409	350	320	312
27	295	304	300	329	324	372	614	596	409	350	316	312
28	300	300	295	324	324	372	596	584	404	346	316	308
29	300	300	295	320	324	372	572	572	404	346	316	308
30	295	300	300	312	-	359	555	555	400	342	316	308
31	295	-	300	308	-	363	-	533	-	342	316	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				9,414	320	295	304	1.74	2.01	18,670		
November.....				9,000	304	287	300	1.71	1.91	17,850		
December.....				9,195	312	287	297	1.70	1.96	18,240		
Calendar year 1935.....				133,580	647	287	366	2.09	28.41	264,900		
January.....				10,443	377	308	337	1.93	2.22	20,710		
February.....				9,095	333	287	314	1.79	1.93	18,040		
March.....				10,692	361	320	342	1.95	2.25	21,010		
April.....				13,754	645	354	468	2.62	2.92	27,280		
May.....				18,126	690	528	585	3.34	3.85	35,950		
June.....				13,884	528	400	463	2.65	2.96	27,540		
July.....				11,647	400	342	376	2.15	2.48	23,100		
August.....				10,137	337	316	327	1.87	2.16	20,110		
September.....				9,608	329	308	320	1.83	2.04	19,060		
Water year 1935-36.....				134,895	690	287	369	2.11	28.69	267,600		

North Umpqua River at Toketee Falls, Oreg.

Location.- Water-stage recorder, lat. 43°16', long. 122°25', in T. 26 S., R. 3 E. (unsurveyed), an eighth of a mile below mouth of Clearwater River, half a mile above Toketee Falls, and 30 miles east of Hoaglin. Zero of gage is 2,373 feet above mean sea level.

Drainage area.- 337 square miles.

Records available.- February 1908 to July 1909; December 1914 to November 1917, incomplete; July 1924 to September 1936.

Average discharge.- 11 years (1925-36), 848 second-feet.

Extremes.- Maximum discharge during year, 1,990 second-feet Apr. 24 (gage height, 2.79 feet); minimum, 530 second-feet Nov. 3 (gage height, 0.74 foot).
1908-9, 1914-17, 1924-36: Maximum discharge, 3,600 second-feet Feb. 20, 1927 (gage height, 4.65 feet); minimum recorded, 475 second-feet Nov. 27-29, Dec. 12, 14, 1931.

Remarks.- Records good except those for Oct. 1 to Nov. 11, which were computed on basis of records on North Umpqua River below Lake Creek, Clearwater River above Trap Creek, and North Umpqua River above Rock Creek and are fair. No diversions or regulation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.7	510	2.0	1,340
1.0	665	2.5	1,740
1.3	855	3.0	2,170
1.6	1,040		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	600	600	580	687	751	963	842	1,420	1,140	842	714	665
2	600	590	580	1,500	720	1,040	835	1,580	1,140	829	714	665
3	610	590	580	970	720	1,110	842	1,580	1,110	823	714	654
4	630	580	575	1,500	731	1,080	829	1,420	1,110	823	709	654
5	620	600	575	1,080	726	1,080	817	1,500	1,110	817	709	654
6	610	600	595	914	726	1,040	817	1,460	1,140	811	704	648
7	600	610	626	829	714	1,000	848	1,420	1,180	799	704	648
8	590	620	632	799	682	1,040	894	1,420	1,180	805	704	648
9	590	640	610	880	682	1,110	914	1,460	1,110	805	698	648
10	590	640	660	921	687	1,040	1,000	1,540	1,110	799	698	643
11	600	620	687	1,260	714	1,000	1,180	1,620	1,080	811	692	643
12	615	632	720	1,080	731	1,000	1,380	1,660	1,110	793	687	648
13	640	616	660	1,080	781	1,000	1,460	1,660	1,110	787	682	654
14	670	600	632	1,140	787	963	1,500	1,740	1,080	781	682	660
15	645	626	621	1,110	781	942	1,580	1,700	1,110	761	676	648
16	620	626	610	1,080	775	921	1,660	1,580	1,080	770	670	643
17	610	610	605	970	770	907	1,620	1,500	1,040	764	670	638
18	610	595	600	928	770	894	1,620	1,460	1,000	764	665	638
19	600	595	585	887	805	894	1,580	1,460	970	756	665	632
20	600	595	585	861	823	928	1,580	1,420	963	758	660	632
21	610	590	590	829	1,040	1,040	1,580	1,340	956	753	654	632
22	630	605	585	817	1,180	1,000	1,620	1,300	949	755	654	626
23	620	621	580	811	1,110	1,000	1,660	1,300	948	748	654	626
24	610	605	585	811	1,000	970	1,940	1,300	921	742	654	626
25	610	600	605	811	970	942	1,860	1,340	907	736	654	626
26	600	595	605	805	921	921	1,740	1,380	887	736	654	621
27	600	590	626	817	907	942	1,700	1,380	880	736	654	621
28	610	585	616	817	928	935	1,620	1,340	861	731	648	621
29	640	585	632	799	942	900	1,540	1,300	854	731	648	616
30	630	585	648	775	-	868	1,460	1,260	848	726	648	621
31	620	-	660	758	-	861	-	1,180	-	720	648	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	19,030	670	590	614	1.82	2.10	37,750
November.....	16,166	640	585	605	1.80	2.01	36,010
December.....	19,060	720	575	615	1.82	2.10	37,790
Calendar year 1935	310,851	1,580	575	852	2.63	34.29	616,600
January.....	28,926	1,300	687	953	2.77	3.19	57,370
February.....	23,854	1,180	682	823	2.44	2.63	47,310
March.....	30,331	1,110	861	978	2.90	3.34	60,180
April.....	40,518	1,940	817	1,351	4.01	4.47	80,370
May.....	44,620	1,740	1,180	1,439	4.27	4.92	88,500
June.....	30,885	1,180	848	1,030	3.06	3.41	61,260
July.....	24,032	842	720	775	2.30	2.65	47,670
August.....	20,997	714	648	677	2.01	2.32	41,630
September.....	19,199	665	616	640	1.90	2.12	38,080
Water year 1935-36.....	319,588	1,940	575	873	2.59	35.26	633,900

North Umpqua River above Rock Creek, near Glide, Oreg.

Location.- Water-stage recorder, lat. 43°20', long. 123°0', in NW¼ sec. 12, T. 26 S., R. 3 W., half a mile above mouth of Rock Creek and 5 miles northeast of Glide. Zero of gage is about 770 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 886 square miles.

Records available.- June 1924 to September 1936.

Average discharge.- 12 years, 2,221 second-feet.

Extremes.- Maximum discharge during year, 24,200 second-feet Jan. 4 (gage height, 13.20 feet); minimum, 664 second-feet Nov. 3 (gage height, 2.22 feet).
1924-36: Maximum discharge, 55,000 second-feet Feb. 20, 1927 (gage height, 20.18 feet); minimum, 521 second-feet Oct. 16, 1931 (gage height, 1.86 feet).

Remarks.- Records good. No irrigation diversions or regulation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

2.2	655	5.5	3,750
2.5	805	6.0	4,530
2.8	1,000	7.0	6,420
3.2	1,300	8.0	8,530
3.6	1,620	9.0	11,100
4.0	1,980	10.0	13,700
4.5	2,490	12.0	20,000
5.0	3,060		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	696	805	817	3,260	2,130	5,600	2,230	3,000	2,080	1,260	898	800
2	700	778	800	14,200	1,980	5,800	2,080	2,880	2,030	1,220	898	865
3	715	725	788	7,050	1,840	5,410	2,080	2,940	1,980	1,220	898	841
4	766	735	778	17,400	1,800	4,530	2,760	3,600	1,940	1,180	898	817
5	745	766	772	13,100	1,710	4,050	2,600	4,530	1,890	1,180	898	811
6	720	783	829	6,210	1,760	3,680	2,330	5,600	2,080	1,140	865	800
7	700	865	1,100	4,370	2,030	3,190	3,000	4,530	2,330	1,140	865	794
8	696	965	2,080	3,900	1,800	3,000	3,900	4,050	2,600	1,140	865	788
9	700	1,180	1,460	7,500	1,710	3,390	3,680	3,750	2,380	1,180	859	783
10	696	1,140	1,940	8,170	1,620	3,120	4,050	3,750	2,180	1,140	853	778
11	725	930	2,600	15,600	1,760	2,820	4,870	3,900	2,080	1,180	853	772
12	811	1,560	6,050	8,870	2,600	2,660	5,410	3,900	2,030	1,140	847	778
13	898	2,130	3,120	11,300	4,050	2,660	5,410	3,750	2,080	1,100	841	800
14	1,380	1,300	2,080	12,100	3,750	2,490	5,040	4,210	1,940	1,100	835	865
15	1,140	1,180	1,620	10,600	3,120	2,440	4,870	3,900	2,280	1,070	829	853
16	898	1,800	1,420	9,110	2,820	2,280	4,870	3,530	2,130	1,070	829	800
17	823	1,420	1,300	6,630	2,600	2,230	4,530	3,190	1,980	1,040	823	778
18	778	1,140	1,220	4,870	2,660	2,130	4,370	3,000	1,890	1,040	817	766
19	756	1,040	1,140	4,210	2,660	2,030	3,900	2,940	1,760	1,040	811	756
20	745	1,000	1,070	4,370	3,390	2,130	3,750	3,190	1,710	1,000	805	750
21	788	965	1,040	3,900	7,050	2,380	3,750	3,600	1,620	1,000	800	745
22	835	1,000	1,000	3,460	8,870	2,350	3,750	3,390	1,580	1,000	800	740
23	805	1,300	930	3,530	6,530	2,190	3,750	3,060	1,540	1,000	794	735
24	766	1,220	930	3,750	5,040	2,180	4,530	2,880	1,500	965	794	730
25	750	1,070	1,000	3,680	4,210	2,030	4,530	2,880	1,460	965	794	725
26	740	1,000	1,070	3,390	3,900	1,940	3,900	2,880	1,420	965	794	725
27	735	930	1,420	3,320	4,050	2,720	3,530	2,940	1,380	930	794	720
28	745	898	2,030	3,320	5,410	5,680	3,600	2,710	1,340	930	788	715
29	805	853	2,030	2,940	5,600	3,600	3,460	2,440	1,300	930	783	710
30	794	835	2,760	2,540	-	2,820	3,260	2,380	1,500	930	783	705
31	800	-	3,900	2,330	-	2,540	-	2,230	-	930	788	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				24,651	1,380	696	795	0.897	1.03	48,890		
November.....				32,313	2,130	725	1,077	1.22	1.36	64,090		
December.....				51,094	6,050	772	1,648	1.86	2.14	101,300		
Calendar year 1935.....				752,323	8,170	696	2,061	2.33	31.55	1,492,000		
January.....				208,990	17,400	2,330	6,742	7.61	8.77	414,500		
February.....				96,580	8,870	1,620	3,398	3.84	4.14	195,500		
March.....				96,040	5,800	1,940	3,098	3.50	4.04	190,500		
April.....				113,790	5,410	2,080	3,793	4.28	4.78	225,700		
May.....				105,530	5,600	2,230	3,404	3.84	4.43	209,300		
June.....				55,810	2,600	1,300	1,860	2.10	2.34	110,700		
July.....				33,125	1,260	930	1,089	1.21	1.40	65,700		
August.....				25,799	898	763	832	.939	1.08	51,170		
September.....				23,245	865	705	775	.875	.98	46,110		
Water year 1935-36.....				868,937	17,400	696	2,374	2.68	36.49	1,723,000		

North Umpqua River near Glide, Oreg.

Location.- Staff gage, lat. 43°18', long. 123°7', in SW $\frac{1}{4}$ sec. 13, T. 26 S., R. 4 W., 1 mile west of Glide. Zero of gage is about 645 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 1,210 square miles.

Records available.- September 1915 to May 1920, October 1921 to October 1922, October 1927 to September 1936.

Average discharge.- 25 years (1905-8, 1909-18, 1923-36), 3,200 second-feet (partly estimated from records near Oak Creek and at Winchester).

Extremes.- Maximum discharge during year, 40,000 second-feet Jan. 4 (gage height, 13.4 feet, from graph based on gage readings and record above Rock Creek); minimum, 720 second-feet Oct. 1, 2, 7-9 (gage height, 1.00 foot).
1915-20, 1921-22, 1927-36: Maximum recorded discharge, 59,500 second-feet Mar. 19, 1932; minimum, 552 second-feet Aug. 27-30, Sept. 27, 1931.
Maximum stage known, 22.6 feet Nov. 22, 1909 (estimated discharge, 90,000 second-feet).

Remarks.- Records fair. No diversions or regulation above gage.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.0	720	2.6	2,590	8.0	16,500
1.2	890	3.0	3,230	10.0	24,300
1.4	1,090	4.0	5,100	12.0	33,300
1.8	1,630	5.0	7,400		
2.2	2,030	6.0	10,200		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	720	*880	920	4,310	2,440	8,190	3,060	3,570	2,300	*1,370	940	845
2	728	*842	890	20,300	2,300	7,150	2,740	3,400	2,160	1,360	*930	930
3	768	*800	890	11,400	2,160	6,670	2,900	3,230	2,160	1,300	900	940
4	800	*820	681	25,600	2,160	6,430	*3,930	4,310	2,030	*1,280	930	881
5	776	881	872	21,500	2,300	5,530	*3,930	5,970	2,030	*1,270	910	863
6	752	890	960	9,600	3,060	4,700	3,400	7,400	2,160	*1,260	930	856
7	728	960	1,240	6,430	4,120	4,310	5,750	2,440	2,160	1,360	920	818
8	720	1,090	2,590	5,970	2,590	3,750	5,100	4,900	2,900	*1,210	890	818
9	720	1,360	2,300	11,100	2,300	3,570	4,900	4,500	2,590	*1,230	890	818
10	752	*1,300	2,590	11,700	2,300	3,400	5,100	4,310	2,440	*1,220	890	809
11	827	*1,200	3,930	23,500	2,590	3,230	5,970	4,310	2,160	*1,240	881	800
12	900	*1,900	10,200	14,300	4,120	3,230	6,910	4,310	2,030	1,190	881	800
13	990	2,300	4,700	21,500	5,530	3,230	5,970	5,100	2,160	1,190	890	872
14	1,770	2,030	2,900	20,300	4,900	3,060	5,750	4,700	2,300	1,140	890	960
15	1,190	1,530	2,440	18,000	4,120	2,900	5,530	4,500	2,590	1,090	872	881
16	1,040	2,300	2,030	14,600	3,930	2,740	5,530	3,930	2,300	1,090	863	845
17	900	1,770	1,710	10,800	3,930	2,590	5,310	3,400	2,160	1,090	854	836
18	836	1,630	1,690	7,400	3,570	2,440	5,100	3,230	2,030	*1,080	854	809
19	792	1,360	1,430	6,430	3,400	2,440	4,500	3,230	1,900	*1,070	854	800
20	784	1,240	1,360	6,200	4,500	2,690	4,310	3,750	1,770	*1,050	854	800
21	863	1,190	1,240	5,530	10,800	2,740	3,930	4,310	1,770	*1,040	854	800
22	890	1,190	1,190	5,100	13,900	2,590	*3,930	3,930	1,770	*1,030	854	800
23	818	1,530	1,190	5,100	10,800	2,590	3,930	3,570	1,710	*1,020	863	784
24	800	1,470	1,240	5,100	9,020	2,590	4,900	3,230	1,590	*1,010	854	784
25	792	1,240	1,300	4,900	6,430	2,590	4,900	3,230	*1,560	990	854	784
26	784	1,190	1,410	4,500	5,970	2,740	4,310	3,230	*1,500	990	836	768
27	*780	1,090	*1,700	*4,400	7,150	3,230	3,930	3,230	*1,440	990	836	752
28	*820	960	*2,500	*4,000	8,190	9,020	4,120	3,060	*1,420	980	827	752
29	890	970	2,740	*3,500	8,740	5,970	3,930	2,900	*1,400	970	800	744
30	872	960	3,750	*3,100	-	4,500	3,750	2,590	*1,390	970	818	756
31	*860	-	5,530	*2,740	-	3,570	-	2,440	-	950	818	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	26,662	1,770	720	860	0.711	0.92	52,880
November.....	38,771	2,300	800	1,292	1.07	1.19	76,900
December.....	70,193	10,200	872	2,264	1.87	2.18	139,200
Calendar year 1935.....	961,228	12,700	720	2,634	2.18	29.56	1,907,000
January.....	318,910	25,600	2,740	10,290	8.50	9.80	632,500
February.....	146,100	13,900	2,160	5,038	4.16	4.49	289,800
March.....	124,090	9,020	2,440	4,003	3.51	3.82	246,100
April.....	136,890	6,910	2,740	4,529	3.74	4.17	269,600
May.....	123,820	7,400	2,440	3,985	3.29	3.79	245,000
June.....	60,150	2,900	1,390	2,005	1.66	1.85	119,500
July.....	34,920	1,370	950	1,126	.931	1.07	69,260
August.....	27,037	940	800	872	.721	.83	53,630
September.....	24,655	950	736	822	.679	.76	46,900
Water year 1935-36.....	1,130,888	25,600	720	3,090	2.55	34.75	2,243,000

*Computed from records of daily discharge of North Umpqua River above Rock Creek, near Glide, and Umpqua River near Elkton.

Lake Creek at Diamond Lake, near Fort Klamath, Oreg.

Location.- Water-stage recorder, lat. 43°11', long. 122°10', in SW¼ sec. 30, T. 27 S., R. 6 E., 260 feet below outlet of Diamond Lake and 35 miles north of Fort Klamath. Zero of gage is about 5,160 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 57 square miles.

Records available.- May 1922 to September 1925, October 1926 to September 1936; incomplete prior to 1927.

Extremes.- Maximum discharge during year, 95 second-feet Jan. 16, 17 (gage height, 1.56 feet); minimum, 1 second-foot Apr. 18 (gage height, 0.18 foot); minimum daily discharge, 16 second-feet Oct. 6, Sept. 26, 29, 1922-25, 1928-36: Maximum discharge, 146 second-feet June 1, 1925 (gage height, 2.13 feet, former site and datum); no flow Aug. 25-27, 1931.

Remarks.- Records good except those for October to December, August and September, which are fair. Discharge estimated for Dec. 14-26, Aug. 24, 25. Flow regulated by operation of gates and fish racks at lake outlet and at times by collection of moss on racks. No diversions for irrigation above station.

Rating table, water year, 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 20, Aug. 1 to Sept. 30)

0.7	11.6
.9	22
1.1	39
1.3	62
1.6	101

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	30	28	39	57	58	84	36	62	49	32	20
2	32	28	28	42	56	56	85	36	62	48	32	20
3	32	28	28	44	56	55	82	37	62	48	32	20
4	31	26	28	50	56	54	82	37	60	47	32	20
5	25	26	28	51	55	54	80	39	61	46	32	23
6	16	27	28	50	54	54	78	41	62	46	31	23
7	20	27	30	51	54	52	75	57	64	43	31	23
8	20	27	30	54	54	52	74	54	63	43	31	27
9	20	27	31	60	52	52	73	66	62	44	31	26
10	20	27	32	61	52	51	70	67	62	43	31	24
11	21	27	34	63	52	50	69	66	63	43	30	24
12	23	27	34	64	52	50	67	43	64	46	30	24
13	26	27	34	77	52	49	65	30	70	46	30	25
14	29	28		82	51	48	61	42	46	46	30	22
15	30	29		84	50	48	54	41	60	46	30	22
16	30	29		94	49	48	51	46	60	44	29	21
17	31	29		95	49	47	34	47	56	43	28	20
18	32	29		90	49	47	31	47	55	43	28	20
19	32	28		65	50	46	39	43	52	42	27	20
20	31	28		78	50	64	34	47	52	42	27	20
21	32	28	35	74	55	93	27	47	52	41	26	20
22	32	28		70	56	90	27	47	51	41	25	19
23	32	28		69	57	88	28	52	50	40	25	19
24	31	28		67	60	88	31	54	50	39	24	19
25	29	28		66	62	88	32	52	49	37	23	19
26	29	28		63	62	87	33	57	52	35	23	18
27	28	28		63	61	86	34	52	54	34	22	17
28	29	28		61	61	88	34	56	51	34	21	16
29	28	28	36	61	58	88	35	62	50	34	21	16
30	29	28	36	60	-	87	35	62	49	33	21	23
31	30	-	38	58	-	86	-	61	-	33	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	662	32	16	27.8	0.488	0.56	1,710
November.....	634	30	26	27.8	.486	.54	1,650
December.....	1,050	36	28	33.2	.582	.67	2,040
Calendar year 1935.....	15,840	93	16	43.4	.761	10.32	31,420
January.....	2,022	94	39	65.2	1.14	1.31	4,010
February.....	1,582	62	49	54.6	.958	1.03	3,140
March.....	2,004	93	46	64.6	1.13	1.30	3,970
April.....	1,603	64	27	53.4	.837	1.06	3,180
May.....	1,654	84	30	50.1	.879	1.01	3,030
June.....	1,721	70	49	57.4	1.01	1.13	3,410
July.....	1,299	49	33	41.9	.735	.85	2,580
August.....	655	32	20	27.6	.484	.56	1,700
September.....	633	28	16	21.1	.370	.41	1,260
Water year 1935-36.....	15,999	94	16	43.7	.767	10.42	31,730

Clearwater River above Trap Creek, Oreg.

Location.- Water-stage recorder, lat. 43°15', long. 122°17', in SE¼ sec. 1, T. 27 S., R. 4 E., 150 yards above mouth of Trap Creek and 40 miles east of Glide. Zero of gage is about 3,760 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 40 square miles.

Records available.- October 1927 to September 1936.

Extremes.- Maximum discharge during year, 250 second-feet Apr. 24 (gage height, 1.22 feet); minimum, 121 second-feet Nov. 2, 3, and during period while recorder was not functioning, Nov. 18 to Feb. 4 (gage height, 0.48 foot).
1927-36: Maximum discharge, 380 second-feet June 9, 1933 (gage height, 2.02 feet); minimum, 91 second-feet Nov. 4-6, 27, Dec. 12, 29, 1931, Jan. 3, 1932.

Remarks.- Records good except those for Nov. 18 to Feb. 4, which were computed on basis of records on North Umpqua River and are fair. No diversions or regulation above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.4	111
.6	138
.8	170
1.0	207
1.2	246

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	124	124	124	125	126	131	134	194	179	153	136	131
2	124	123	124	140	123	131	134	194	177	153	136	131
3	125	123	124	130	125	131	134	196	177	152	136	131
4	127	124	124	135	125	132	134	199	175	150	135	130
5	125	124	124	130	125	134	132	207	175	150	135	130
6	124	124	124	128	125	134	131	198	161	148	135	130
7	124	124	124	127	125	134	132	194	188	148	134	130
8	124	124	124	126	125	135	134	192	190	148	134	130
9	124	127	124	125	125	136	134	196	181	148	132	130
10	124	124	124	126	125	135	135	207	177	147	132	128
11	127	124	128	127	127	135	141	218	177	147	132	128
12	128	125	127	130	127	136	150	224	179	146	132	130
13	130	125	125	134	127	136	160	228	177	146	132	130
14	132	124	124	136	127	135	167	238	175	146	132	130
15	127	125	123	138	127	135	175	226	177	146	132	130
16	127	124	123	139	127	135	188	216	174	144	132	130
17	125	124	123	140	127	136	192	209	172	144	131	128
18	125	124	123	140	127	136	199	207	168	142	131	128
19	124	124	123	139	127	136	205	203	165	142	131	128
20	124	124	123	138	127	138	207	198	167	142	131	128
21	124	124	123	137	135	140	209	192	167	142	131	128
22	124	124	123	136	136	140	211	186	170	142	131	128
23	124	124	123	135	135	140	218	188	170	141	131	128
24	124	124	123	134	134	140	246	194	167	141	131	128
25	124	124	124	133	132	138	234	199	165	141	131	128
26	124	124	124	132	131	138	222	205	162	141	131	128
27	124	124	124	131	131	136	216	203	158	141	130	128
28	124	124	124	131	131	136	211	198	155	140	130	128
29	124	124	124	130	131	135	205	186	156	140	130	128
30	124	124	124	129	-	135	198	185	155	138	130	128
31	124	-	124	128	-	134	-	183	-	136	130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	3,878	132	124	125	3.12	3.60	7,690
November.....	3,724	127	123	124	3.10	3.46	7,390
December.....	3,842	128	123	124	3.10	3.57	7,620
Calendar year 1935.....	52,014	212	123	142	3.55	48.38	103,200
January.....	4,109	140	125	133	3.32	3.83	8,150
February.....	3,715	136	123	128	3.20	3.45	7,370
March.....	4,203	140	131	136	3.40	3.92	8,340
April.....	5,288	246	131	176	4.40	4.91	10,490
May.....	6,264	238	133	202	5.05	5.82	12,420
June.....	5,187	190	155	172	4.30	4.80	10,230
July.....	4,485	153	136	145	3.62	4.17	8,900
August.....	4,097	136	130	132	3.30	3.80	8,130
September.....	3,871	131	128	129	3.22	3.59	7,680
Water year 1935-36.....	52,633	246	123	144	3.60	48.92	104,400

South Fork of Coquille River at Powers, Oreg.

Location.- Wire-weight gage, lat. 42°53', long. 124°4', in NW¼ sec. 13, T. 31 S., R. 12 W., at highway bridge at Powers.

Drainage area.- 169 square miles.

Records available.- October 1928 to September 1936. September 1916 to September 1926 at site half a mile upstream.

Average discharge.- 17 years (1916-26, 1929-36), 685 second-feet.

Extremes.- Maximum discharge observed during year, 23,600 second-feet Jan. 12 (gage height, 17.50 feet); minimum, 18 second-feet Oct. 1.
1916-26, 1928-36: Maximum discharge, 25,300 second-feet Oct. 31, 1924 (gage height, 17.5 feet, former site and datum); minimum, 13 second-feet Nov. 30 to Dec. 3, 1929, Oct. 4-13, 1932.

Remarks.- Records poor. Record for May 3 to Sept. 30 based on temporary gage 500 feet downstream. Discharge estimated for Oct. 14, 15. No diversions or regulation above gage.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	116	230	1,830	542	1,480	1,000	218	192	83	42	25
2	20	108	205	6,210	480	1,350	1,750	205	184	81	42	26
3	26	101	192	2,490	460	1,170	1,170	192	178	83	42	26
4	24	90	145	12,800	460	1,050	1,830	222	170	85	40	26
5	24	78	138	6,510	542	1,000	1,410	470	164	81	39	25
6	23	69	180	3,460	542	800	1,290	410	170	76	38	25
7	22	99	800	2,070	655	700	1,350	392	207	70	38	25
8	20	105	700	1,910	565	655	1,290	322	207	83	36	25
9	20	180	700	6,210	565	610	1,290	288	204	92	36	24
10	19	205	700	5,360	610	565	1,230	254	195	88	36	23
11	20	325	750	10,400	610	610	1,230	222	175	61	35	22
12	21	900	3,060	18,500	655	520	1,110	207	164	74	35	22
13	30	1,000	2,150	13,200	700	500	900	222	156	70	34	22
14	400	655	1,410	7,300	800	520	700	254	150	66	34	22
15	300	400	950	4,480	700	460	700	222	147	60	33	22
16	192	750	800	6,820	655	420	565	207	238	60	33	22
17	130	542	700	4,560	565	400	520	201	207	60	33	22
18	420	450	2,490	610	360	460	135	124	60	33	22	22
19	73	308	420	1,990	610	380	440	840	164	56	32	22
20	64	380	400	1,620	655	360	380	990	156	54	32	22
21	58	360	380	1,480	8,080	360	380	700	147	53	30	22
22	52	1,110	325	1,290	6,510	360	325	570	129	48	30	21
23	49	1,280	308	1,170	3,280	380	275	470	124	48	30	21
24	49	800	290	1,000	3,260	360	290	392	119	49	30	20
25	44	700	308	950	3,560	500	275	322	112	46	29	19
26	40	460	290	950	2,490	440	218	305	109	46	28	19
27	38	360	610	800	2,150	750	218	270	99	46	26	19
28	58	230	850	700	1,910	2,510	245	254	94	45	24	19
29	64	250	2,150	655	1,620	1,230	275	222	92	43	25	19
30	55	230	3,260	655	-	1,050	245	222	88	43	25	19
31	168	-	3,260	565	-	1,050	-	207	-	42	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,249	400	18	72.5	0.429	0.49	4,460
November.....	12,603	1,290	69	420	2.49	2.78	25,000
December.....	27,121	3,260	138	875	5.18	5.97	53,790
Calendar year 1935.....	220,979	5,780	15	605	3.58	48.66	438,300
January.....	130,225	18,500	565	4,201	24.9	28.71	259,300
February.....	44,621	8,080	460	1,539	9.11	9.82	86,500
March.....	22,740	2,310	360	734	4.34	5.00	45,100
April.....	22,361	1,830	218	745	4.41	4.92	44,350
May.....	10,467	990	192	338	2.00	2.31	20,760
June.....	4,725	238	88	158	.935	1.04	9,370
July.....	1,971	92	42	65.6	.376	.43	3,910
August.....	1,025	42	24	35.1	.196	.25	2,030
September.....	668	26	19	22.3	.132	.15	1,320
Water year 1935-36.....	280,776	18,500	18	767	4.54	61.85	556,900

Middle Fork of Coquille River near Myrtle Point, Oreg.

Location.- Water-stage recorder, lat. 43°2', long. 124°5', in S½ sec. 26, T. 29 S., R. 12 W., a third of a mile below mouth of Indian Creek and 3½ miles southeast of Myrtle Point. Zero of gage is 41.20 feet above mean sea level (general adjustment of 1929).

Drainage area.- 305 square miles.

Records available.- October 1930 to September 1936.

Extremes.- Maximum discharge during year, 21,500 second-feet Jan. 13 (gage height, 22.0 feet); minimum recorded, 7 second-feet Sept. 29.
1930-36: Maximum discharge, 22,600 second-feet (revised) Jan. 2, 1933 (gage height, 22.5 feet); minimum daily discharge, 1 second-foot July 16, 17, 1931.
Maximum stage known, 25.8 feet, probably Oct. 31, 1924.

Remarks.- Records fair except those for Oct. 1-12, August, September, which are poor because of unsatisfactory operation of inlet to recorder well. Flow regulated completely during low-water periods and to some extent at all times by logging ponds above gage. No diversion above gage.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 10

1.7	S	4.0	189
2.1	15	5.0	379
2.5	32	6.0	655
3.0	61	7.0	1,060

Dec. 11 to Sept. 30

1.7	8	9.0	2,110
2.1	15	11.0	3,660
2.5	35	13.0	5,800
3.0	68	16.0	9,970
4.0	189	19.0	15,200
5.0	379	22.0	21,500
7.0	1,060		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	315	73	1,440	870	1,540	1,080	146	158	54	28	23
2	10	163	75	3,040	200	1,160	1,805	142	357	66	29	21
3	11	100	310	2,880	73	1,100	1,150	269	143	58	30	18
4	17	61	54	8,500	718	780	2,230	161	127	53	36	22
5	23	40	82	12,000	288	712	1,870	232	127	54	26	19
6	22	42	55	4,360	799	516	1,290	502	159	57	26	16
7	19	54	85	2,650	1,590	590	1,000	258	279	52	25	15
8	18	40	327	2,230	1,380	458	1,390	379	317	68	25	16
9	15	115	778	2,960	1,100	446	865	133	259	52	25	17
10	15	214	421	4,290	728	390	826	142	214	56	25	17
11	16	142	1,960	12,200	362	368	750	366	194	62	30	16
12	17	296	6,160	10,600	544	368	680	78	155	65	32	14
13	38	765	2,350	16,900	909	358	523	97	160	59	24	13
14	156	368	1,540	8,570	602	358	379	124	149	70	24	13
15	128	297	995	5,340	525	368	501	393	125	49	23	14
16	152	364	655	3,250	586	368	307	70	64	39	22	16
17	90	152	289	7,420	495	297	406	55	92	60	21	17
18	55	133	664	4,160	415	325	250	94	127	44	20	29
19	56	121	273	3,550	394	318	430	99	84	38	20	20
20	44	165	416	1,990	538	259	254	288	94	36	19	14
21	39	448	133	1,540	4,710	133	204	348	100	38	21	14
22	36	317	60	1,240	6,520	191	258	418	102	37	22	13
23	32	1,060	554	1,020	5,230	486	60	176	82	34	18	12
24	32	401	205	706	3,660	130	76	184	87	31	18	14
25	27	429	100	890	3,630	869	586	394	82	44	18	14
26	20	241	164	494	4,570	458	176	190	76	40	18	12
27	22	189	354	686	3,040	955	92	58	67	36	18	11
28	23	167	432	306	2,370	3,480	68	346	60	30	19	11
29	49	86	715	616	1,870	2,800	422	100	68	26	19	9
30	154	87	1,990	308	-	1,990	175	67	59	28	20	9
31	88	-	1,990	123	-	1,440	-	142	-	28	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	1,392	152	10	44.9	0.147	0.17	2,760
November.....	7,362	1,060	40	245	0.303	0.30	14,600
December.....	24,855	6,160	60	802	2.65	3.03	49,300
Calendar year 1935.....	224,397	6,160	9	615	2.02	27.35	445,000
January.....	130,749	16,900	123	4,218	13.8	15.91	259,300
February.....	49,266	6,520	75	1,700	5.97	6.01	97,760
March.....	24,977	3,480	130	777	2.55	2.94	47,760
April.....	18,993	2,230	60	633	2.08	2.32	37,670
May.....	6,842	502	58	221	.725	.84	13,570
June.....	4,163	357	59	139	.456	.51	8,260
July.....	1,464	70	26	47.2	.155	.18	2,900
August.....	719	36	18	23.2	.076	.09	1,430
September.....	466	29	9	15.5	.051	.06	924
Water year 1935-36.....	270,365	16,900	9	739	2.42	32.96	536,200

North Fork of Coquille River near Myrtle Point, Oreg.

Location.-- Water-stage recorder, lat. 43°8', long. 124°4', in NE¼ sec. 36, T. 28 S., R. 12 W., a quarter of a mile below junction with East Fork and 4½ miles northeast of Myrtle Point. Zero of gage is 12.22 feet above mean sea level.

Drainage area.-- 276 square miles.

Records available.-- October 1928 to September 1936. Prior to October 1930 at site 3½ miles downstream.

Extremes.-- Maximum discharge during year, 9,760 second-feet Jan. 11 (gage height, 34.2 feet); minimum, 20 second-feet Oct. 1, 2.
1928-36: Maximum discharge, 10,400 second-feet Jan. 3, 1933 (gage height, 35.7 second-feet); minimum, 17 second-feet Sept. 5, 1930.
Maximum stage known, 41.2 feet, during winter 1909-10.

Remarks.-- Records fair. Inlet from river to recorder well sluggish at times. No diversions above gage. Flow partly regulated by operation of logging ponds above station.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 1 to Sept. 30)

1.6	18	4.0	217	14.0	2,320
1.8	26	5.0	357	18.0	3,500
2.2	47	6.0	515	23.0	5,250
2.6	73	8.0	892	29.0	7,600
3.0	107	10.0	1,340	36.0	10,600
3.5	187	12.0	1,810		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	637	186	1,290	585	2,260	1,640	380	270	121	62	38
2	21	291	198	3,180	649	1,810	1,350	342	256	116	62	44
3	22	168	210	4,200	515	1,480	1,380	320	236	86	61	48
4	36	141	168	5,200	601	1,270	2,060	342	230	112	60	46
5	32	91	187	8,990	770	1,110	1,980	538	217	122	58	43
6	36	100	146	6,800	1,020	978	1,620	750	230	113	57	38
7	37	71	250	4,420	1,960	850	1,360	601	350	102	56	30
8	24	77	566	3,500	770	1,150	492	492	102	57	28	
9	22	131	450	4,100	1,310	770	1,020	413	334	106	53	25
10	21	186	583	5,560	1,090	693	913	372	291	123	53	37
11	21	157	1,150	9,160	978	637	810	334	250	152	53	36
12	24	453	4,510	8,620	1,000	637	750	305	230	141	52	30
13	72	1,540	3,830	9,500	956	619	674	291	210	116	51	23
14	552	810	2,030	8,740	892	583	619	334	204	104	43	23
15	402	498	1,200	7,400	810	619	563	305	192	89	38	31
16	192	482	871	7,360	790	601	549	277	198	90	40	36
17	117	498	731	7,800	731	549	515	256	230	91	44	38
18	87	587	601	6,140	712	515	492	243	312	89	45	34
19	69	357	515	4,560	693	482	450	270	236	87	46	32
20	60	418	450	3,500	1,040	450	418	810	198	86	44	30
21	57	466	402	2,530	3,120	434	402	1,020	180	83	40	28
22	53	810	364	1,910	6,800	434	402	770	168	80	41	28
23	62	1,040	342	1,570	6,640	434	387	619	157	76	36	29
24	50	731	312	1,310	5,400	601	380	515	157	74	48	28
25	45	549	298	1,150	4,700	830	402	450	141	71	43	25
26	66	434	284	1,020	5,790	770	350	402	141	71	38	24
27	56	364	372	913	4,660	1,500	334	364	136	70	36	23
28	40	312	619	810	3,600	5,250	342	342	136	67	40	22
29	58	270	583	731	2,880	4,240	357	320	124	65	38	22
30	228	243	1,450	674	-	2,970	418	312	120	65	34	22
31	216	-	1,660	619	-	2,160	-	291	-	63	32	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,789	552	20	90.0	0.326	0.38	5,550
November.....	12,712	1,540	71	424	1.54	1.72	25,210
December.....	25,438	4,510	146	822	2.98	3.44	50,560
Calendar year 1935.....	263,514	6,180	20	722	2.62	35.53	522,600
January.....	133,247	9,500	619	4,298	15.6	17.99	264,300
February.....	62,350	6,800	515	2,160	7.79	8.40	123,700
March.....	37,306	5,250	434	1,203	4.36	5.03	74,000
April.....	24,107	2,060	334	804	2.81	3.25	47,820
May.....	15,375	1,020	243	431	1.56	1.80	26,530
June.....	6,536	402	120	218	.790	.88	12,960
July.....	2,933	152	63	94.6	.343	.40	5,820
August.....	1,459	62	32	47.1	.171	.20	2,890
September.....	953	48	22	31.8	.115	.13	1,890
Water year 1935-36.....	323,255	9,500	20	383	3.20	43.62	641,200

Rogue River above Bybee Creek, Oreg.

Location.- Water-stage recorder, lat. 42°56', long. 122°26', in NE¼ sec. 26, T. 30 S., R. 3 E., 700 feet above Bybee Creek and 2 miles northeast of Union Creek. Zero of gage is about 3,465 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 118 square miles.

Records available.- January 1930 to September 1936.

Extremes.- Maximum discharge during year, 1,850 second-feet Apr. 24 (gage height, 4.47 feet); minimum, 215 second-feet Nov. 3 (gage height, 0.93 foot).
1930-36: Maximum discharge, 4,480 second-feet June 9, 1933 (gage height, 7.68 feet); minimum, 186 second-feet Nov. 16, 1931 (gage height, 0.23 foot).

Remarks.- Records good except those for Dec. 20 to Jan. 27, Feb. 2-5, which are fair and were computed on basis of records of Rogue River above Prospect. No diversions or regulation above station. Water-stage recorder inspected by employee of The California Oregon Power Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.9	210	2.5	780
1.2	270	2.8	880
1.4	315	3.0	980
1.6	370	3.3	1,140
1.8	440	3.5	1,310
2.0	520	4.0	1,550
2.2	600	4.5	1,850
2.4	690		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	270	288	274	360	355	426	377	905	690	360	310	288
2	274	278	274	620	330	476	370	380	668	377	308	292
3	276	260	274	560	320	540	377	930	668	370	305	290
4	282	308	274	600	325	560	364	1,040	845	367	305	288
5	276	320	274	560	330	560	355	1,090	622	364	302	286
6	274	290	288	500	325	540	358	930	668	358	300	284
7	274	284	310	470	320	520	384	980	735	352	300	282
8	272	286	332	460	315	520	416	905	735	355	298	280
9	270	310	300	450	312	580	444	980	668	364	298	280
10	270	288	349	470	310	560	516	1,140	645	358	298	280
11	284	282	419	550	328	520	668	1,260	622	355	298	278
12	310	295	433	500	340	520	880	1,280	645	346	298	280
13	318	290	338	480	364	520	1,040	1,280	622	340	298	292
14	380	284	318	490	394	504	1,120	1,400	600	335	298	306
15	322	310	310	500	380	484	1,170	1,260	622	335	295	292
16	305	305	302	460	374	472	1,260	1,120	560	332	295	286
17	286	290	295	420	370	476	1,260	1,040	540	330	292	282
18	282	284	290	390	370	480	1,230	1,010	520	328	292	280
19	280	282	280	370	377	500	1,170	1,010	500	325	292	280
20	280	280	270	360	367	520	1,140	905	488	322	292	276
21	284	280	260	350	540	580	1,200	855	476	322	290	278
22	282	286	260	345	712	560	1,230	830	472	322	288	278
23	276	310	260	340	600	520	1,310	855	464	320	298	278
24	276	295	270	340	540	504	1,730	905	448	318	288	278
25	276	286	300	340	488	472	1,520	955	433	318	288	276
26	276	282	300	340	452	452	1,260	980	419	318	286	276
27	276	280	350	350	433	452	1,140	930	412	312	286	276
28	282	278	330	361	430	444	1,090	890	398	312	284	276
29	288	276	340	352	426	419	1,040	780	394	310	284	276
30	282	276	360	346	-	398	955	805	384	310	282	276
31	284	-	380	343	-	391	-	735	-	310	280	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	8,869	380	270	286	2.42	2.79	17,590
November.....	8,663	320	280	289	2.45	2.73	17,180
December.....	9,804	433	250	310	2.63	3.03	19,060
Calendar year 1935.....	162,974	1,230	250	447	3.79	51.36	323,200
January.....	13,367	820	340	431	3.65	4.21	26,510
February.....	11,527	712	310	397	3.36	3.62	22,660
March.....	15,470	580	391	499	4.23	4.88	30,680
April.....	27,374	1,730	355	912	7.73	8.62	54,300
May.....	30,755	1,400	735	992	8.41	9.70	61,000
June.....	18,783	735	384	559	4.74	5.29	33,280
July.....	10,465	390	310	338	2.85	3.30	20,760
August.....	9,118	310	280	294	2.49	2.87	18,090
September.....	8,472	308	276	282	2.39	2.67	16,800
Water year 1935-36.....	170,467	1,730	250	466	3.95	53.71	338,100

Rogue River above Prospect, Oreg.

Location.- Water-stage recorder, lat. 42°47', long. 122°30', in NE¼ sec. 19, T. 32 S., R. 3 E., 1½ miles above intake of diversion of The California Oregon Power Co., 3 miles above Mill Creek, and 2 miles northwest of Prospect. Zero of gage is about 2,620 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.- 332 square miles.

Records available.- July 1907 to February 1912 (incomplete), October 1923 to September 1936).

Average discharge.- 14 years (1910-11, 1923-36), 681 second-feet.

Extremes.- Maximum discharge during year, about 2,920 second-feet Apr. 24 (gage height, 4.07 feet); minimum, 228 second-feet Nov. 3 (gage height, 1.15 feet).
1907-12, 1923-36: Maximum discharge, about 9,300 second-feet Nov. 22, 1909 (gage height, about 7.0 feet); minimum, 200 second-feet Nov. 20, 1931 (gage height, 1.07 feet).

Remarks.- Records good. Discharge for period of ice effect, Dec. 21-23, and period of no gage height record, May 23-25, computed on basis of records below South Fork and on Middle Fork. No diversions or regulation above station. Water-stage recorder graph furnished by The California Oregon Power Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

1.1	210	2.0	630	3.0	1,530
1.3	285	2.2	765	3.3	1,890
1.4	325	2.4	920	3.6	2,280
1.6	415	2.6	1,100	4.0	2,850
1.8	515	2.8	1,310		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	338	361	348	532	576	818	594	1,380	992	542	406	374
2	343	352	349	1,780	548	965	582	1,340	929	532	406	358
3	352	277	348	1,260	553	1,140	582	1,400	938	526	406	384
4	361	379	343	1,670	564	1,170	588	1,530	904	515	402	379
5	343	402	343	1,380	542	1,120	554	1,650	880	510	402	379
6	338	374	366	956	520	1,100	554	1,480	938	505	397	374
7	358	366	420	795	505	1,040	606	1,360	1,060	500	397	370
8	338	366	500	716	475	922	676	1,360	1,070	500	397	366
9	338	410	425	695	475	1,050	737	1,480	956	510	397	366
10	334	384	495	744	470	1,010	904	1,710	904	505	392	366
11	348	370	592	1,530	495	938	1,210	1,890	888	500	392	361
12	406	388	772	1,220	532	912	1,650	1,890	880	490	392	361
13	397	402	537	1,080	624	920	1,860	1,890	920	485	392	374
14	505	374	470	1,160	688	880	2,080	2,150	840	470	392	406
15	435	402	435	1,170	709	840	2,150	1,890	904	460	388	392
16	402	430	430	1,050	723	810	2,280	1,650	632	460	388	379
17	370	392	415	864	716	810	2,150	1,530	788	450	384	370
18	356	370	397	772	730	818	2,150	1,480	744	450	384	366
19	356	370	379	730	744	810	2,020	1,480	709	445	379	366
20	352	370	370	682	772	888	1,890	1,320	695	440	374	361
21	361	370	360	643	1,210	1,030	1,960	1,220	682	435	374	361
22	361	374	350	630	1,650	965	2,020	1,170	676	430	374	361
23	352	420	360	618	1,380	896	2,080	1,200	662	425	374	361
24	348	406	370	618	1,140	840	2,780	1,280	643	425	374	356
25	348	384	410	618	983	772	2,490	1,360	618	420	374	356
26	348	366	410	618	888	723	2,020	1,400	600	420	370	356
27	348	361	470	650	810	723	1,830	1,330	588	415	370	356
28	343	356	475	676	795	744	1,710	1,240	570	410	366	356
29	361	356	475	662	788	688	1,650	1,090	559	410	366	352
30	361	348	564	630	-	636	1,480	1,140	554	410	366	352
31	352	-	576	606	-	630	-	1,060	-	406	366	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	11,233	505	334	362	1.09	1.26	22,280
November.....	11,280	430	277	376	1.13	1.26	22,670
December.....	13,553	772	343	437	1.32	1.52	26,880
Calendar year 1935	247,428	2,080	277	678	2.04	27.70	490,600
January.....	27,755	1,780	532	895	2.70	3.11	55,050
February.....	21,606	1,650	470	745	2.24	2.42	42,850
March.....	27,696	1,170	630	893	2.69	3.10	54,930
April.....	45,937	2,780	554	1,531	4.61	5.14	91,110
May.....	45,350	2,150	1,080	1,463	4.41	5.08	89,950
June.....	23,923	1,070	554	797	2.40	2.68	47,450
July.....	14,401	542	406	465	1.40	1.61	28,560
August.....	11,941	406	366	385	1.16	1.34	23,680
September.....	11,049	406	352	368	1.11	1.24	21,920
Water year 1935-36	265,723	2,780	277	726	2.19	29.76	527,000

Rogue River below South Fork of Rogue River, near Prospect, Oreg.

Location.— Water-stage recorder, lat. 42°42', long. 122°36', in NW¼ sec. 16, T. 33 S., R. 2 E., at bridge 6 miles southwest of Prospect. Zero of gage is about 1,708 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.— 643 square miles.

Records available.— April 1929 to September 1936.

Extremes.— Maximum discharge during year, 5,820 second-feet Dec. 25, Apr. 24 (gage height, 4.73 feet); minimum, 530 second-feet Sept. 29 (gage height, 0.02 foot). Minimum daily discharge, 782 second-feet Nov. 3.

1929-36: Maximum discharge, about 12,600 second-feet Mar. 19, 1932 (gage height, 8.7 feet); minimum stage and minimum daily discharge not determined, as stage falls too low to be recorded at times.

Remarks.— Records good except those for Nov. 21, Dec. 10-12, 26, Jan. 1, 2, 9, Feb. 4-6, 15-20, 22-27, Mar. 5, 9, 10, which are fair. Minor irrigation diversions above station. Considerable diurnal fluctuation, owing to operation of power plant 4 miles upstream. Water-stage recorder graph furnished by The California Oregon Power Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

		0.2	890	2.5	2,560
		.5	800	3.0	3,180
		1.0	1,140	3.5	3,860
		1.5	1,550	4.0	4,570
		2.0	2,020	5.0	6,070

Discharge, in second-feet, water year October 1935 to September 1936												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July*	Aug.	Sept.
1	836	902	854	*1,200	1,420	1,920	1,460	2,800	2,230	1,420	1,050	944
2	842	895	854	*1,200	1,380	2,120	1,420	2,800	2,120	1,380	1,050	951
3	842	782	854	2,620	1,340	2,340	1,460	2,800	2,120	1,380	1,050	979
4	985	860	848	3,310	*1,320	2,340	1,500	3,050	2,070	1,300	1,020	979
5	888	902	842	2,940	*1,280	*2,300	1,420	3,240	2,070	1,300	1,040	993
6	887	937	888	2,070	*1,260	2,280	1,420	2,920	2,120	1,340	1,040	972
7	881	902	972	1,750	1,260	2,180	1,460	2,740	2,340	1,300	1,030	951
8	867	902	1,100	1,750	1,220	2,070	1,550	2,740	2,500	1,300	1,010	944
9	854	944	972	*2,000	1,220	*2,200	1,840	2,860	2,280	1,340	1,000	944
10	860	958	*1,000	1,870	1,220	*2,150	1,820	3,240	2,180	1,300	1,020	937
11	874	895	*1,200	3,180	1,260	2,020	2,230	3,580	2,120	1,280	1,010	916
12	979	958	*1,500	2,740	1,340	1,920	2,800	3,720	2,120	1,220	1,000	951
13	965	956	1,180	3,310	1,500	1,970	3,310	3,720	2,180	1,220	1,010	958
14	1,100	937	1,070	3,720	1,600	1,870	3,580	4,140	2,020	1,220	1,010	1,010
15	1,040	965	1,010	3,440	*1,700	1,820	3,720	3,860	2,180	1,220	1,000	979
16	993	1,040	972	3,120	*1,800	1,780	4,000	3,310	2,020	1,220	1,000	953
17	937	937	951	2,560	*1,700	1,780	4,000	3,120	1,920	1,240	972	944
18	902	937	930	2,120	*1,700	1,730	3,860	3,050	1,820	1,140	979	937
19	888	816	895	1,970	*1,800	1,750	3,720	2,980	1,780	1,140	966	930
20	881	944	874	1,870	*1,900	1,870	3,580	2,740	1,730	1,140	979	916
21	902	*940	909	1,730	2,280	2,020	3,580	2,560	1,730	1,140	979	930
22	902	930	874	1,640	*3,100	1,970	3,720	2,500	1,730	1,100	972	916
23	881	965	874	1,640	*2,800	1,870	3,860	2,500	1,680	1,100	979	909
24	881	951	888	1,600	*2,500	1,820	5,020	2,630	1,640	1,100	958	909
25	874	916	950	1,550	*2,300	1,730	4,570	2,860	1,600	1,100	965	902
26	860	909	*930	1,550	*2,150	1,640	3,860	2,980	1,550	1,100	965	909
27	867	888	1,060	1,600	*2,000	1,680	3,580	2,860	1,500	1,070	965	931
28	854	874	1,030	1,600	1,920	1,780	3,310	2,680	1,500	1,060	965	909
29	902	874	1,100	1,600	1,730	1,640	3,180	2,450	1,460	1,070	951	860
30	902	867	1,180	1,500	-	1,550	2,920	2,450	1,420	1,070	944	902
31	888	-	1,300	1,460	-	1,550	-	2,340	-	1,060	951	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	27,974	1,100	836	902	1.40	1.61	55,490
November.....	27,613	1,040	782	920	1.43	1.60	54,770
December.....	30,841	1,500	842	995	1.55	1.79	61,170
Calendar year 1935.....	558,378	4,140	782	1,530	2.38	32.29	1,108,000
January.....	68,470	3,720	1,200	2,209	3.44	3.97	135,800
February.....	50,000	3,100	1,220	1,724	2.68	2.89	99,170
March.....	59,640	2,340	1,550	1,924	2.99	3.45	118,300
April.....	87,550	5,020	1,420	2,918	4.54	5.06	173,700
May.....	92,210	4,140	2,340	2,975	4.63	5.34	182,900
June.....	57,730	2,500	1,420	1,924	2.99	3.54	114,500
July.....	37,250	1,420	1,060	1,202	1.87	2.16	73,880
August.....	30,520	1,050	944	994	1.55	1.79	61,150
September.....	28,155	1,010	860	938	1.46	1.53	55,840
Water year 1935-36.....	598,253	5,020	782	1,635	2.54	34.63	1,197,000

*Based on comparison with discharge records of Rogue River at Raygold and Rogue River tributaries.

Rogue River at Raygold, near Central Point, Oreg.

Location.— Water-stage recorder, lat. 42°28', long. 122°59', in sec. 18, T. 36 S., R. 2 W., at Raygold, just below dam and power house of The California Oregon Power Co., half a mile below Bear Creek, and 6 miles northwest of Central Point. Zero of gage is 1,124 feet above mean sea level (U. S. Geological Survey river profile).

Drainage area.— 2,020 square miles.

Records available.— August 1905 to September 1936.

Average discharge.— 31 years, 2,713 second-feet.

Extremes.— Maximum discharge during year, 24,200 second-feet Jan. 15 (gage height, 10.24 feet); minimum, 580 second-feet Oct. 28 (gage height, 0.00 foot); minimum mean daily discharge, 980 second-feet Oct. 2.
1905-36: Maximum discharge, 91,500 second-feet Feb. 21, 1927 (gage height, 24.8 feet); minimum discharge not recorded; minimum daily discharge, 616 second-feet Sept. 6, 1931.

Remarks.— Records good. Numerous diversions for irrigation above station. Diurnal fluctuation, owing to operation of power plant immediately above station. Water-stage recorder graph furnished by The California Oregon Power Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.5	690	2.5	3,190	5.0	7,970
1.0	1,320	3.0	3,960	6.0	10,400
1.5	1,870	3.5	4,850	7.0	13,300
2.0	2,500	4.0	5,840	8.0	16,500
				9.0	19,900

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	984	1,180	1,080	2,370	2,650	5,040	2,700	4,040	2,960	1,640	1,120	1,060
2	960	1,130	1,140	9,550	2,500	5,040	2,630	3,880	2,840	1,580	1,220	1,130
3	1,030	1,180	1,080	6,570	2,440	5,040	2,630	3,880	2,770	1,580	1,130	1,130
4	1,120	992	1,080	7,740	2,370	4,850	4,130	4,300	2,770	1,530	1,180	1,180
5	1,130	1,130	1,080	8,730	2,300	4,480	3,260	4,390	2,630	1,530	1,130	1,220
6	1,070	1,130	1,130	5,240	2,240	4,220	2,910	4,390	2,700	1,530	1,130	1,130
7	1,120	1,110	1,270	3,960	2,240	3,960	2,960	3,960	2,980	1,530	1,130	1,110
8	1,020	1,120	1,580	3,880	2,110	3,640	3,260	3,800	3,340	1,420	1,130	1,080
9	1,010	1,180	1,580	10,700	1,990	3,640	3,420	3,800	3,050	1,530	1,180	1,080
10	1,020	1,270	1,370	6,260	1,990	3,490	3,560	4,040	2,770	1,580	1,180	1,080
11	1,020	1,190	1,640	9,920	2,050	3,340	3,960	4,390	2,700	1,530	1,180	1,060
12	1,180	1,130	3,960	4,100	2,370	3,260	4,480	4,480	2,630	1,490	1,180	1,080
13	1,180	1,370	2,500	17,500	2,560	3,190	5,040	4,660	2,700	1,480	1,180	1,120
14	1,300	1,220	1,810	16,500	2,840	3,050	5,440	4,850	2,560	1,480	1,180	1,180
15	1,420	1,220	1,620	17,900	3,050	3,050	5,440	4,850	2,840	1,370	1,130	1,220
16	1,320	1,370	1,480	17,100	3,340	2,910	5,840	4,130	2,700	1,370	1,180	1,180
17	1,220	1,270	1,420	8,890	3,190	2,840	5,640	3,880	2,500	1,320	1,100	1,130
18	1,080	1,280	1,520	6,680	3,120	2,840	5,440	3,640	2,370	1,320	1,130	1,120
19	1,100	1,220	1,270	5,640	3,340	2,770	5,240	3,640	2,240	1,320	1,110	1,090
20	1,100	1,250	1,220	5,040	3,490	2,770	5,040	3,340	2,110	1,320	1,110	1,110
21	1,090	1,220	1,180	4,390	5,360	2,910	5,040	3,190	2,050	1,270	1,080	1,020
22	1,100	1,180	1,170	3,960	7,530	2,980	5,040	3,050	2,050	1,270	1,080	1,040
23	1,090	1,220	1,200	3,720	7,100	2,910	5,240	2,980	1,990	1,270	1,110	1,010
24	1,080	1,220	1,130	5,640	6,260	2,840	6,160	3,050	1,930	1,220	1,080	1,020
25	1,060	1,200	1,270	3,490	6,050	2,700	6,260	3,190	1,870	1,220	1,060	1,030
26	1,070	1,130	1,270	3,340	5,840	2,560	5,240	3,420	1,810	1,220	1,050	1,040
27	1,070	1,130	1,420	3,490	5,240	2,500	4,850	3,340	1,750	1,180	1,060	1,030
28	1,050	1,130	1,580	3,490	5,440	3,260	4,660	3,260	1,750	1,180	1,080	976
29	1,120	1,090	2,050	3,120	5,240	3,120	4,480	2,980	1,700	1,180	1,030	1,010
30	1,150	1,110	2,440	2,980	-	2,770	4,390	3,190	1,640	1,180	1,030	992
31	1,120	-	2,980	2,770	-	2,700	-	3,260	-	1,180	1,020	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	34,384					1,420	960	1,109	68,200			
November.....	35,562					1,370	992	1,195	70,540			
December.....	47,320					3,260	1,080	1,526	93,560			
Calendar year 1935.....	871,992					8,890	936	2,389	1,730,000			
January.....	215,490					17,800	2,370	6,951	427,400			
February.....	106,220					7,530	1,990	3,663	210,700			
March.....	104,670					5,040	2,500	3,376	207,600			
April.....	134,400					6,260	2,630	4,480	266,600			
May.....	117,330					4,850	2,980	3,785	232,700			
June.....	72,720					3,340	1,640	2,424	144,200			
July.....	42,810					1,640	1,180	1,381	84,910			
August.....	34,730					1,220	1,020	1,120	89,890			
September.....	32,658					1,220	976	1,089	64,780			
Water year 1935-36.....	978,294					17,800	960	2,673	1,940,000			

South Fork of Rogue River above Imnaha Creek, near Prospect, Oreg.

Location.- Water-stage recorder, lat. 42°42', long. 122°27', in NE¼ sec. 18, T. 33 S., R. 4 E., 300 yards above Imnaha Creek, 400 yards above South Fork diversion dam, and 6 miles southeast of Prospect.

Drainage area.- 52 square miles.

Records available.- October 1931 to September 1936.

Extremes.- Maximum discharge during year, about 628 second-feet Apr. 24 (gage height, about 3.66 feet); minimum recorded, 44 second-feet Oct. 28, Dec. 23 (gage height, 1.02 feet). Minimum discharge during period of ice effect, Nov. 3, 4, may have been less than 44 second-feet.
1931-36: Maximum discharge, 1,100 second-feet Mar. 19, 1932 (gage height, 4.47 feet); minimum, 27 second-feet Oct. 1-21, 1931.

Remarks.- Records good except those for period Apr. 15-29 and those estimated for period of ice effect, Nov. 3, 4, which are fair. No diversions or regulation above station. Water-stage recorder graph furnished by The California Oregon Power Co.

Rating table, water year 1935-36 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.0	42	2.5	270
1.2	61	3.0	390
1.4	87	3.5	560
1.7	131	4.0	810
2.0	178		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	48	46	59	98	131	119	280	231	128	86	69
2	46	47	45	297	98	134	119	290	222	126	86	71
3	48	45	45	231	95	138	118	302	213	125	86	71
4	54	46	45	240	94	142	113	340	222	122	84	73
5	49	47	45	185	94	142	108	340	222	120	84	71
6	48	47	46	151	93	143	107	290	222	116	83	68
7	47	48	52	131	91	143	114	270	250	114	83	67
8	46	48	57	119	88	143	122	280	302	114	83	67
9	46	57	51	125	87	148	130	302	250	118	83	65
10	46	54	58	128	86	149	142	365	231	116	83	63
11	49	50	65	211	91	146	165	420	231	114	83	63
12	57	54	73	181	98	149	204	435	222	110	81	62
13	54	53	61	183	113	151	250	468	231	107	80	66
14	68	51	57	268	122	148	290	465	222	106	79	67
15	59	54	53	302	122	143	340	405	240	104	79	65
16	58	55	51	240	120	140	378	365	213	101	77	62
17	54	52	50	200	118	142	390	340	202	100	77	61
18	52	50	49	176	116	143	390	340	199	100	77	60
19	50	49	47	160	118	144	378	328	186	98	76	59
20	49	49	48	148	118	151	378	290	180	97	74	59
21	49	49	47	137	149	160	378	290	176	97	73	58
22	48	49	46	131	172	156	390	270	175	94	73	58
23	47	50	45	126	162	151	435	280	172	94	73	58
24	47	49	46	122	152	149	562	302	165	93	72	57
25	46	48	56	119	146	142	468	328	157	93	72	56
26	46	47	58	114	138	137	390	340	152	91	71	56
27	45	47	65	113	136	136	365	315	146	91	69	55
28	46	47	59	112	134	138	365	290	142	90	69	55
29	50	46	60	108	134	132	340	250	137	88	68	55
30	48	46	63	106	-	125	302	260	132	87	68	55
31	48	-	60	104	-	124	-	240	-	87	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,643	65	45	49.3	0.958	1.10	3,060
November.....	1,432	57	45	49.4	0.950	1.06	2,940
December.....	1,649	73	45	53.2	1.02	1.18	3,270
Calendar year 1935.....	43,275	378	45	119	2.29	30.94	85,440
January.....	5,025	302	59	162	3.12	3.60	9,970
February.....	3,353	172	86	117	2.25	2.43	6,710
March.....	4,420	180	124	143	2.75	3.17	8,770
April.....	6,370	582	107	279	5.37	5.99	16,600
May.....	10,100	485	240	226	6.27	7.23	20,030
June.....	6,047	302	132	202	3.88	4.33	11,990
July.....	3,243	128	87	105	2.02	2.33	6,430
August.....	2,400	86	68	77.4	1.49	1.72	4,780
September.....	1,873	73	55	62.4	1.20	1.34	3,720
Water year 1935-36	49,535	582	45	135	2.60	35.48	98,250

Imnaha Creek near Prospect, Oreg.

Location.- Staff gage, lat. 42°42', long. 122°27', in NE¼ sec. 18, T. 33 S., R. 4 E., 400 yards above mouth and 6 miles southeast of Prospect.

Drainage area.- 26 square miles.

Records available.- September 1931 to September 1936.

Extremes.- Maximum daily discharge during year (estimated), 150 second-feet Apr. 24; minimum, 19 second-feet, frequently October to December.
1931-36: Maximum discharge recorded, 237 second-feet Mar. 19, 1932 (gage height, 2.10 feet); minimum, 11 second-feet Dec. 14, 1931 (gage height, 0.46 foot).

Remarks.- Records for low-water periods fair; others poor. Staff gage read only once a week; discharge estimated for intervening days. No diversions or regulation above station. Gage readings furnished by The California Oregon Power Co.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

0.6	18
.8	31
1.0	48
1.3	81
1.6	127
2.0	212

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	20	19	*23	36	50	*47	84	60	*39	25	22
2	*19	19	19	70	35	51	46	85	58	38	24	*23
3	20	19	19	60	35	52	45	90	*57	37	24	23
4	21	19	*19	60	34	*53	44	95	58	36	24	24
5	20	20	19	50	*34	53	43	90	58	35	*24	23
6	19	*20	19	40	34	54	43	*81	58	34	24	23
7	19	20	19	35	35	55	45	77	60	33	24	22
8	19	20	21	*31	32	56	*46	76	70	*33	23	22
9	*19	22	20	32	31	56	50	81	60	34	23	*22
10	20	21	21	33	31	57	55	85	*54	33	23	22
11	21	20	*22	55	32	*57	60	90	54	32	23	22
12	22	21	23	50	*35	57	66	95	52	32	*23	22
13	22	*20	21	51	37	58	74	*102	54	31	23	24
14	24	20	21	64	39	56	82	105	54	31	23	25
15	22	20	21	*71	40	54	*88	95	58	*31	23	24
16	*21	21	20	64	39	53	100	90	54	30	23	*23
17	21	21	20	58	39	54	110	85	*51	30	23	23
18	21	20	*19	54	39	*55	110	85	50	29	23	23
19	20	20	19	50	*39	55	105	84	48	29	*23	22
20	20	*20	19	47	39	58	105	*81	47	28	23	22
21	20	20	19	45	50	60	105	76	46	28	23	22
22	19	20	19	*44	60	58	*110	70	45	*28	23	22
23	*19	20	19	43	56	56	120	72	44	27	23	*22
24	19	20	19	42	54	54	150	74	*43	27	23	22
25	19	19	*20	41	55	*53	130	76	42	26	23	22
26	19	19	22	41	*52	52	115	78	42	26	*23	21
27	20	*19	24	*40	51	50	110	*72	41	25	*22	21
28	21	19	23	38	50	51	105	68	41	25	22	21
29	20	19	23	*37	50	50	*102	62	40	*25	22	21
30	*20	19	24	37	-	49	90	64	40	25	22	*21
31	20	-	23	36	-	48	-	62	-	25	22	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				625	24	19	20.2	0.777	0.90	1,240		
November.....				597	22	19	19.3	.765	.85	1,130		
December.....				636	24	19	20.5	.788	.91	1,260		
Calendar year 1935.....				14,445	130	18	39.6	1.52	20.65	28,660		
January.....				1,442	71	23	46.5	1.79	2.06	2,860		
February.....				1,157	60	31	40.9	1.57	1.69	2,350		
March.....				1,875	60	49	54.0	2.09	2.40	3,320		
April.....				2,501	150	43	83.4	3.21	3.58	4,960		
May.....				2,532	105	62	81.7	3.14	3.62	5,020		
June.....				1,539	70	40	51.3	1.97	2.20	3,050		
July.....				942	39	25	30.4	1.17	1.35	1,870		
August.....				716	25	22	23.1	.888	1.02	1,420		
September.....				671	25	21	22.4	.862	.96	1,330		
Water year 1935-36.....				15,063	160	19	41.2	1.58	21.54	29,860		

*Gage read on this date.

South Fork power canal near Prospect, Oreg.

Location.- Water-stage recorder, lat. 42°43', long. 122°24', in E½ sec. 12, T. 33 S., R. 3 E., 1 mile below head gate at diversion dam and 5 miles southeast of Prospect. Zero of gage is about 3,357 feet above mean sea level.

Records available.- April 1932 to September 1936.

Extremes.- Maximum discharge during year, 170 second-feet Feb. 21-24 (maximum gage height, 3.42 feet Feb. 22); no flow at times.

1932-36: Maximum discharge, 175 second-feet May 31, June 17, 1933; no flow at times.

Remarks.- Records fair. Method of shifting-control used May 4 to Aug. 19. This canal, completed in March 1932, diverts water from South Fork of Rogue River 200 feet below mouth of Imnaha Creek for use at power plant located in W½ sec. 1, T. 33 S., R. 3 E., from which water may be wasted into Middle Fork of Rogue River or mingled with other diversions in main power canal. Water-stage recorder graph furnished by The California Oregon Power Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	60	62	84	126	1	145	0	139	145	105	77
2	56	42	62	145	126	1	140	0	155	145	105	79
3	59	54	62	140	122	107	145	0	155	145	105	78
4	63	58	62	145	122	67	140	6	150	140	105	80
5	28	59	62	140	118	1	136	0	150	140	105	77
6	19	59	65	145	113	1	136	0	150	140	105	74
7	58	59	69	145	113	1	140	29	155	136	105	72
8	56	59	74	136	109	1	145	48	155	140	101	72
9	56	67	69	140	109	1	150	160	155	145	85	71
10	54	63	76	145	105	1	155	165	155	140	90	70
11	58	61	84	165	113	67	160	165	155	136	90	69
12	61	65	90	160	122	160	160	160	155	131	94	70
13	61	66	79	160	131	160	155	160	155	131	94	74
14	72	65	75	165	145	160	150	155	150	126	90	77
15	67	68	71	165	145	155	150	150	150	126	89	74
16	65	70	70	160	145	155	150	150	150	122	88	71
17	59	67	69	160	145	156	150	150	150	122	87	69
18	58	65	68	155	145	155	150	150	150	122	86	68
19	56	65	66	155	97	155	150	150	150	122	85	68
20	56	65	66	150	145	160	150	150	150	118	82	66
21	57	65	66	145	165	160	150	150	150	118	81	66
22	58	65	65	150	170	160	150	150	155	118	80	66
23	57	66	65	155	98	155	150	150	160	118	80	65
24	56	66	67	150	103	155	155	150	160	113	79	65
25	55	65	76	145	165	155	65	155	160	113	78	64
26	55	64	77	140	160	155	0	155	160	113	78	63
27	55	64	84	140	160	155	0	155	155	113	77	63
28	58	63	90	140	160	155	0	150	155	113	75	62
29	63	63	83	136	83	150	0	160	160	109	75	62
30	60	63	86	131	-	150	0	150	150	109	75	62
31	60	-	84	131	-	150	-	150	-	109	75	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				1,752	72	19	56.5	3,430				
November.....				1,982	70	42	62.7	3,730				
December.....				2,234	90	62	72.1	4,430				
Calendar year 1935.....				32,239	165	1	88.3	65,940				
January.....				4,523	165	84	146	8,970				
February.....				3,758	170	83	130	7,450				
March.....				3,364	160	1	109	6,670				
April.....				3,627	160	0	121	7,190				
May.....				3,613	165	0	117	7,170				
June.....				4,589	160	139	153	9,100				
July.....				3,918	145	109	126	7,770				
August.....				2,749	105	75	88.7	5,450				
September.....				2,094	80	62	69.8	4,150				
Water year 1935-36.....				38,103	170	0	104	75,560				

Middle Fork of Rogue River near Prospect, Oreg.

Location.— Water-stage recorder, lat. 42°44', long. 122°24', in NE¼ sec. 1, T. 33 S., R. 3 E., 1,000 feet below diversion dam and intake of Middle Fork of Rogue River power canal and 4½ miles southeast of Prospect.

Drainage area.— 57 square miles.

Records available.— May 1925 to September 1936.

Average discharge.— 11 years, 164 second-feet.

Extremes.— Maximum combined discharge of river and canal during year, 479 second-feet May 13 (river gage height, 2.10 feet); minimum, 100 second-feet Nov. 3, 1925-36: Maximum discharge, 1,300 second-feet Mar. 19, 1932 (gage height, 3.55 feet); minimum, 72 second-feet Aug. 24 to Sept. 5, 1931.

Remarks.— Records good except those estimated, which are fair. Discharge of river estimated for Nov. 3-5, July 2-7, 11-13; discharge of canal estimated for Dec. 12, 14, 15, 24. Flow regulated since Nov. 19, 1931, by operation of head gates at diversion dam of power canal that diverts water around station; practically no storage above diversion dam. Records published include flow of canal. Water-stage recorder graph furnished by The California Oregon Power Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	112	105	121	153	197	146	268	248	199	139	129
2	110	102	105	275	148	206	144	271	240	196	139	129
3	115	105	105	215	148	219	146	282	244	193	138	129
4	115	110	105	287	146	222	146	259	261	191	135	129
5	114	116	105	218	141	222	137	303	267	187	137	125
6	110	111	109	188	141	220	141	268	277	185	137	124
7	110	111	118	167	137	215	145	261	322	182	137	124
8	110	111	118	161	132	211	180	261	325	179	136	124
9	110	127	109	191	130	206	187	293	266	177	134	124
10	110	115	119	191	130	198	186	347	281	175	138	123
11	117	110	132	262	134	198	216	383	286	172	138	123
12	122	118	162	229	141	204	258	406	295	168	137	123
13	117	113	143	265	165	195	307	428	306	165	137	128
14	134	113	130	322	168	189	332	448	296	162	137	129
15	122	118	120	313	168	183	352	379	306	157	137	128
16	118	118	113	286	170	180	375	335	272	156	132	125
17	113	114	113	247	169	177	361	327	265	155	127	125
18	114	113	109	221	168	177	352	327	251	155	127	125
19	110	113	109	207	177	177	335	311	235	150	127	125
20	110	113	109	195	178	183	331	279	243	150	127	121
21	115	114	109	187	216	191	327	265	245	150	127	120
22	111	113	110	180	235	182	343	261	253	145	127	120
23	111	113	111	179	231	179	370	279	268	145	127	120
24	110	113	112	171	224	176	447	303	251	145	127	120
25	110	109	113	169	209	171	388	345	242	145	123	120
26	110	109	113	167	200	165	339	369	230	145	124	120
27	110	109	112	174	193	173	323	346	224	145	125	120
28	115	109	117	173	193	172	312	313	214	140	124	120
29	112	109	122	164	193	160	294	269	208	139	124	120
30	111	109	122	155	-	162	280	281	202	139	124	120
31	115	-	122	153	-	151	-	267	-	139	124	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	5,521	134	110	114	2.00	2.31	6,980
November.....	5,369	127	102	112	1.96	2.19	6,680
December.....	5,607	162	105	116	2.04	2.35	7,150
Calendar year 1935.....	61,698	357	102	169	2.96	40.25	122,400
January.....	6,403	322	121	207	3.63	4.18	12,700
February.....	4,938	235	130	170	2.98	3.21	9,790
March.....	5,855	222	151	189	3.32	3.83	11,610
April.....	8,163	447	137	272	4.77	5.32	16,190
May.....	9,764	448	261	315	5.53	6.35	19,370
June.....	7,839	325	202	261	4.88	5.11	15,550
July.....	5,051	199	139	162	2.84	3.27	9,980
August.....	4,073	139	123	131	2.30	2.65	8,060
September.....	3,712	129	120	124	2.18	2.43	7,360
Water year 1935-36.....	66,274	448	102	181	3.18	43.23	131,400

Middle Fork power canal near Prospect, Oreg.

Location.- Water-stage recorder, lat 42°44', long. 122°24', in NE $\frac{1}{4}$ sec. 1, T. 33 S., R. 3 E., 1,000 feet below head gate at diversion dam and 4 $\frac{1}{2}$ miles southeast of Prospect. Zero of gage is about 2,832 feet above mean sea level.

Records available.- November 1931 to September 1936.

Extremes.- Maximum discharge during year, 174 second-feet Nov. 9 (gage height, 3.25 feet); minimum, 1.7 second-feet Aug. 9.

1932-36: Maximum discharge, 196 second-feet Feb. 3, 1935 (gage height, 3.50 feet); no flow at times.

Remarks.- Records good. Discharge estimated for Dec. 12, 14, 15, 24. This canal, completed in November 1931, diverts water from Middle Fork of Rogue River into main power canal to supplement flow of Rogue River above Prospect diversion dam. Water-stage recorder graph furnished by The California Oregon Power Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	109	105	121	3	156	134	3	134	161	138	125
2	109	87	105	138	3	156	134	3	138	161	138	125
3	113	68	105	130	3	156	134	3	138	161	138	125
4	113	109	105	59	3	156	138	3	143	161	134	125
5	113	109	105	3	3	156	134	3	143	156	134	121
6	109	109	109	79	3	156	138	3	143	156	134	121
7	109	109	117	156	3	156	143	3	143	156	134	121
8	109	109	117	152	3	156	152	3	143	156	134	121
9	109	125	109	161	3	86	156	3	138	156	126	121
10	109	113	117	161	3	4	156	3	138	156	134	121
11	113	109	130	133	3	4	156	3	138	156	134	121
12	117	117	160	113	3	4	161	96	143	156	134	121
13	113	113	143	113	3	4	96	90	148	156	134	121
14	125	113	130	113	3	4	4	4	148	156	134	125
15	121	117	120	113	3	4	3	3	148	152	134	125
16	117	117	113	113	44	4	3	3	143	152	130	119
17	113	113	113	113	161	4	3	3	143	152	125	121
18	113	113	109	113	156	4	3	3	143	152	125	121
19	109	113	109	113	156	4	3	3	143	148	125	121
20	109	113	109	113	156	4	3	3	148	148	125	117
21	113	113	109	113	161	3	3	3	148	148	125	117
22	109	113	109	130	161	3	3	3	156	143	125	117
23	109	113	109	161	161	3	3	3	166	143	125	117
24	109	113	111	156	161	3	3	3	166	143	125	117
25	109	109	113	156	156	3	3	79	166	143	121	117
26	109	109	113	156	156	3	3	148	161	143	121	117
27	109	109	117	161	156	85	3	143	161	143	121	117
28	113	109	117	60	156	134	65	143	161	138	121	117
29	109	109	121	4	156	134	78	138	161	138	121	117
30	109	109	121	3	-	134	4	138	161	138	121	117
31	113	-	121	3	-	134	-	138	-	156	121	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						3,463	125	109	112	6,870		
November.....						3,271	125	87	109	6,490		
December.....						3,591	160	105	116	7,120		
Calendar year 1935.....						36,680.6	191	0.5	100	72,760		
January.....						3,413	161	3	110	6,770		
February.....						2,142	161	3	75.9	4,285		
March.....						2,017	156	3	35.1	4,000		
April.....						2,022	161	3	67.4	4,010		
May.....						1,180	148	3	36.1	2,340		
June.....						4,453	166	134	148	8,830		
July.....						4,666	161	138	151	9,260		
August.....						3,991	138	121	129	7,920		
September.....						3,608	125	117	120	7,160		
Water year 1935-36.....						37,017	166	3	103	75,010		

Red Blanket Creek near Prospect, Oreg.

Location.- Staff gage, lat. 42°47', long. 122°26', in NE¼ sec. 23, T. 32 S., R. 3 E., 3 miles northeast of Prospect.

Drainage area.- 40 square miles.

Records available.- May 1925 to September 1936. Prior to October 1928 in NE¼ sec. 24, T. 32 S., R. 3 E.

Average discharge.- 11 years, 96.0 second-feet.

Extremes.- Maximum discharge observed during year, 335 second-feet Apr. 24; minimum, 56 second-feet Nov. 3. Maximum discharge of year probably little if any greater than observation of Apr. 24.
1925-36: Maximum discharge recorded, 1,200 second-feet Mar. 11, 1928; minimum, 34 second-feet Sept. 3, 4, 25, Oct. 9, 16, 1931.

Remarks.- Records fair. One irrigation diversion above station. Gage read only once a week, discharge estimated for intervening days. Gage readings furnished by The California Oregon Power Co.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 3

Jan. 4 to Sept. 30

0.8	55	1.6	182	0.6	50	1.6	234
1.0	78	1.8	234	1.0	73	2.0	297
1.2	107	2.0	297	1.2	102	2.2	375
1.4	141			1.4	138		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	*62	58	74	97	122	90	*166	160	107	71	65
2	60	58	58	130	95	130	90	170	150	105	70	70
3	62	56	58	*145	93	142	*68	175	150	*104	70	68
4	*62	58	58	170	90	145	87	180	160	102	69	*66
5	60	62	58	140	88	150	86	190	*164	100	69	65
6	59	60	*59	120	86	*144	58	170	170	98	68	64
7	58	60	62	105	*84	143	92	162	190	96	*68	64
8	58	*60	65	100	82	140	98	*159	190	94	68	64
9	58	66	61	115	80	135	105	170	175	*93	68	63
10	58	62	65	*119	80	130	*114	190	170	93	67	63
11	*58	60	70	160	83	130	132	220	175	91	67	*62
12	62	64	85	140	90	135	160	260	*177	89	66	62
13	64	62	*72	170	100	*127	190	290	180	87	66	64
14	74	62	66	210	*105	123	210	310	175	86	*66	68
15	64	*65	64	200	113	117	230	*264	185	85	65	66
16	60	64	62	170	120	115	250	250	190	84	64	64
17	59	64	61	*142	120	112	*234	240	175	*83	64	63
18	*59	63	60	132	120	110	220	240	170	82	63	*62
19	58	63	60	122	130	110	210	220	*166	81	63	62
20	58	63	*59	115	130	*114	205	190	163	80	62	61
21	60	63	66	109	*168	124	200	180	160	79	*61	61
22	58	*63	64	105	185	120	215	*173	180	78	61	60
23	58	64	62	102	160	114	240	150	150	77	61	60
24	58	66	58	*99	135	108	*335	200	135	*76	60	59
25	*58	62	64	99	125	103	290	230	128	75	60	*59
26	60	60	70	99	120	100	240	250	*123	74	59	59
27	62	60	*72	104	115	*102	210	230	120	73	59	58
28	64	59	74	*104	*117	100	190	200	116	73	*59	55
29	62	59	75	100	118	97	175	*152	112	72	59	57
30	62	59	75	98	-	94	170	190	109	72	59	57
31	62	-	75	*98	-	92	-	173	-	*72	59	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	1,972	74	58	60.4	1.61	1.74	3,710
November.....	1,049	66	56	61.6	1.64	1.72	3,670
December.....	2,016	85	58	65.0	1.62	1.97	4,000
Calendar year 1935.....	35,139	240	55	96.3	2.41	32.69	69,700
January.....	3,946	210	74	127	3.18	3.67	7,830
February.....	3,229	185	80	111	2.76	3.00	6,400
March.....	3,728	150	92	120	3.00	3.46	7,390
April.....	5,244	335	86	175	4.38	4.89	10,400
May.....	6,404	310	159	207	5.18	5.97	12,700
June.....	4,738	190	109	158	3.95	4.41	9,400
July.....	2,661	107	72	85.8	2.14	2.47	5,280
August.....	1,991	71	59	64.2	1.60	1.84	3,950
September.....	1,974	70	57	62.5	1.66	1.74	3,720
Water year 1935-36.....	39,552	335	56	108	2.70	36.78	78,450

*Gage read on this date.

Red Blanket power canal near Prospect, Oreg.

Location.- Water-stage recorder, lat. 42°45', long. 122°27', in SE¼ sec. 27, T. 32 S., R. 3 E., 200 yards below head gate at diversion dam and 2 miles east of Prospect. Zero of gage is 2,812 feet above mean sea level.

Records available.- November 1931 to September 1936.

Extremes.- Maximum discharge during year, 112 second-feet Apr. 4 (gage height, 3.34 feet); minimum, 4 second-feet Apr. 25-28.

1931-36: Maximum discharge, 116 second-feet Nov. 6, 1932; no flow part of Sept. 24, 25, 1932.

Remarks.- Records good. Discharge interpolated for Nov. 3. Records for most days Oct. 8 to Dec. 21 based on readings of staff gage or incomplete graph of water-stage recorder. This canal, completed in October 1932, diverts water from Red Blanket Creek into main power canal to supplement flow of Rogue River above Prospect diversion dam. Water-stage recorder graph furnished by The California Oregon Power Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	59	58	75	8	58	71	6	5	91	72	64
2	54	58	57	91	8	58	71	6	6	91	71	68
3	57	58	57	91	8	58	71	6	6	91	71	68
4	64	58	56	91	8	58	80	6	6	91	71	68
5	60	58	56	91	8	58	88	7	6	91	71	67
6	58	59	60	91	8	58	88	6	6	94	69	66
7	56	60	65	88	7	58	94	6	7	94	69	65
8	54	64	69	91	7	58	98	6	6	94	69	64
9	54	68	63	91	7	52	98	6	6	94	69	64
10	55	62	73	91	7	8	94	6	6	91	69	63
11	62	60	69	91	7	7	94	6	6	91	69	63
12	67	68	101	91	7	7	94	6	6	88	69	64
13	65	67	76	91	7	7	57	6	6	88	68	68
14	79	62	71	91	7	7	6	6	6	85	66	71
15	63	69	66	91	7	7	6	6	6	85	65	67
16	66	70	66	88	7	7	5	6	6	85	65	65
17	61	64	65	88	7	7	5	6	6	82	64	64
18	59	62	62	88	7	7	5	6	6	82	64	63
19	59	62	61	88	7	7	5	6	6	82	65	62
20	58	62	59	88	6	7	5	6	29	82	65	62
21	60	61	58	88	7	6	5	6	63	79	64	62
22	59	62	58	88	6	7	5	6	76	79	63	61
23	58	63	58	88	37	6	5	6	94	79	63	61
24	58	62	58	88	58	6	5	6	94	76	64	60
25	57	60	64	88	58	6	4	6	94	76	64	60
26	57	59	64	88	58	44	4	6	94	76	64	59
27	56	58	73	88	56	72	4	6	94	75	63	59
28	57	58	70	42	58	72	42	6	94	74	62	59
29	60	58	79	61	53	71	40	5	94	74	60	59
30	60	58	79	40	-	71	6	6	91	72	60	58
31	61	-	79	8	-	71	-	5	-	72	60	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						1,853	79	54	59.3		3,690	
November.....						1,849	70	58	61.6		3,670	
December.....						2,052	101	56	66.2		4,070	
Calendar year 1935.....						21,287	101	2	58.3		42,230	
January.....						2,553	91	8	82.4		5,060	
February.....						543	58	6	18.7		1,080	
March.....						1,006	72	6	32.5		2,000	
April.....						1,255	98	4	41.8		2,490	
May.....						1,185	7	5	6.0		367	
June.....						1,031	94	5	34.4		2,040	
July.....						2,604	94	72	84.0		5,160	
August.....						2,048	72	60	66.1		4,060	
September.....						1,904	71	58	63.5		3,780	
Water year 1935-36.....						18,893	101	4	51.6		37,460	

Main power canal below all feeders, near Prospect, Oreg.

Location.— Water-stage recorder, lat. 42°45', long. 122°28', in SW¼ sec. 28, T. 32 S., R. 3 E., 0.8 mile below outlet of Red Blanket Creek power canal, 1 mile east of Prospect, and 1.6 miles above diversion dam on Rogue River. Zero of gage is 2,599.0 feet above mean sea level (general adjustment of 1929).

Records available.— November 1931 to September 1936.

Extremes.— Maximum discharge during year, 423 second-feet June 22; maximum gage height, 4.23 feet Jan. 11, June 22; minimum, 7 second-feet Apr. 26.
1931-36: Maximum discharge, that of June 22, 1936; no flow at times.

Remarks.— Records fair. Discharge is based largely on summation of tributary canals. This canal, completed in November 1931, carries water diverted from South and Middle Forks of Rogue River and Red Blanket Creek into Rogue River above Prospect diversion dam. Water-stage recorder graph furnished by The California Oregon Power Co.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	238	231	297	24	90	351	9	297	407	327	274
2	224	181	231	383	23	90	351	9	304	407	320	282
3	231	178	231	383	21	153	351	9	304	407	320	282
4	245	231	231	234	21	140	359	9	312	399	320	282
5	201	231	231	141	20	90	367	11	312	399	312	290
6	180	231	245	323	18	90	367	10	312	399	312	274
7	224	238	267	407	82	90	383	10	312	391	312	267
8	224	238	274	399	119	90	391	18	312	399	304	267
9	224	267	252	407	116	54	391	40	312	399	282	267
10	224	245	274	407	115	11	391	40	312	399	304	267
11	238	238	304	276	123	19	391	38	312	391	297	267
12	252	260	343	197	127	37	399	188	320	383	297	267
13	238	260	297	197	143	37	244	220	320	383	297	274
14	282	245	274	197	153	37	31	33	320	375	297	290
15	267	260	267	197	153	37	31	32	320	375	290	282
16	260	267	260	176	132	113	32	30	327	375	290	264
17	238	252	252	286	320	165	31	31	327	367	290	267
18	231	245	252	367	312	165	31	31	327	359	290	260
19	231	245	245	367	265	159	30	32	254	359	290	260
20	231	245	245	367	312	165	32	32	221	359	282	260
21	231	245	245	367	312	165	32	32	327	351	282	252
22	231	245	245	383	320	165	32	32	367	351	282	252
23	224	252	238	399	192	165	32	32	423	351	282	252
24	224	252	245	399	163	165	32	32	423	343	282	252
25	224	245	267	399	122	159	20	108	423	343	282	252
26	224	245	267	399	160	198	7	228	423	335	282	245
27	224	236	290	399	184	306	8	290	423	335	274	245
28	231	236	282	187	184	359	92	304	423	335	274	245
29	238	238	304	83	144	359	132	304	407	335	267	245
30	238	238	304	59	-	359	9	304	407	327	274	245
31	238	-	304	26	-	359	-	304	-	327	274	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						7,169	282	180	232		14,260	
November.....						7,231	287	178	241		14,340	
December.....						8,197	343	231	264		16,260	
Calendar year 1936.....						86,975	399	0	238		172,500	
January.....						9,108	407	26	294		18,070	
February.....						4,380	320	18	151		8,690	
March.....						4,591	359	11	148		9,110	
April.....						5,350	399	7	178		10,610	
May.....						2,802	304	9	90.4		5,560	
June.....						10,183	423	221	339		20,200	
July.....						11,465	407	327	370		22,740	
August.....						9,088	327	267	293		18,030	
September.....						7,928	290	245	264		15,720	
Water year 1935-36.....						87,512	423	7	239		173,600	

South Fork of Big Butte Creek near Butte Falls, Oreg.

Location.- Water-stage recorder, lat. 42°32', long. 122°33', in SW $\frac{1}{4}$ sec. 11, T. 35 S., R. 2 E., just below Ginger Creek and 1 mile east of Butte Falls.

Records available.- September 1910 to October 1911, August to October 1915, October 1917 to September 1922, March 1925 to September 1936. August 1922 to March 1925 at station at Butte Falls.

Average discharge.- 20 years (1910-11, 1917-36), 158 second-feet.

Extremes.- Maximum discharge during year, 1,260 second-feet Jan. 15 (gage height, 2.79 feet); minimum, 58 second-feet Nov. 4, Dec. 1, 3-5 (gage height, 0.47 foot).
1910-11, 1915, 1917-36: Maximum discharge, 2,470 second-feet Feb. 20, 1927 (gage height, 4.05 feet); minimum, 39 second-feet Oct. 14, 1931 (gage height, 0.32 foot).

Remarks.- Records good except those estimated, Dec. 18-23, July 2-8, 8-13, Aug. 9, 10, which are fair. Diversions above station for irrigation and Medford municipal supply.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 14				Jan. 15 to Sept. 30			
0.4	46	1.4	400	0.4	46	1.4	367
.6	86	1.6	494	.6	82	1.6	465
.8	152	1.8	600	.8	132	1.8	575
1.0	230	2.0	715	1.0	198	2.0	700
1.2	313	2.2	835	1.2	279	2.4	970

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	68	60	142	184	309	191	198	132	100	76	71
2	61	68	60	441	174	331	180	198	129	95	76	71
3	65	61	60	322	160	338	184	191	132	92	76	71
4	65	63	58	465	187	396	210	214	129	92	74	71
5	65	65	60	480	154	305	194	221	124	92	74	72
6	65	63	65	347	148	283	191	221	127	91	76	72
7	63	63	70	284	144	266	210	206	141	91	76	72
8	60	65	81	283	132	250	235	198	160	81	74	71
9	80	72	74	365	129	237	258	194	144	81	73	71
10	61	72	79	343	127	221	279	194	132	92	72	71
11	63	70	86	460	141	214	296	194	132	89	71	71
12	65	74	131	409	151	210	309	191	129	91	71	71
13	65	79	105	589	163	210	313	191	127	89	71	72
14	74	74	89	835	170	196	305	198	127	87	71	74
15	72	74	79	970	180	191	305	191	129	89	71	76
16	70	81	77	778	191	180	305	177	124	87	69	72
17	70	74	74	542	194	177	296	166	116	87	69	72
18	68	70	74	445	191	174	283	163	113	87	71	69
19	68	74	73	390	198	170	271	180	108	84	71	69
20	65	77	71	349	202	166	262	180	105	82	72	67
21	65	72	69	309	229	163	250	157	105	82	72	65
22	65	70	68	288	245	166	245	151	100	82	72	67
23	68	68	65	262	275	160	250	141	100	80	71	67
24	65	68	65	245	266	160	292	135	100	80	69	67
25	65	65	70	237	258	154	266	129	100	78	69	65
26	65	63	77	229	258	144	237	129	98	84	71	63
27	63	63	92	225	250	148	229	127	94	78	72	63
28	63	61	89	229	288	245	229	132	94	78	71	63
29	68	60	120	221	300	218	229	129	94	76	71	65
30	68	60	124	206	-	194	210	154	94	76	71	69
31	68	-	145	198	-	194	-	148	-	76	69	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				2,028	74	60	65.4	4,020				
November.....				2,057	81	50	83.6	4,080				
December.....				2,510	145	58	81.0	4,890				
Calendar year 1935				54,823	413	58	150	108,800				
January.....				11,868	970	142	383	23,540				
February.....				5,659	300	127	195	11,220				
March.....				9,700	358	144	216	13,280				
April.....				7,512	313	150	250	14,900				
May.....				5,358	221	127	173	10,630				
June.....				5,539	160	94	118	7,020				
July.....				2,889	100	76	86.1	5,290				
August.....				2,232	76	69	72.0	4,430				
September.....				2,080	76	63	69.3	4,130				
Water year 1935-36				54,212	970	58	148	107,500				

South Fork of Little Butte Creek near Lakecreek, Oreg.

Location.- Water-stage recorder, lat. 42°25', long. 122°36', in SE¼ sec. 29, T. 36 S., R. 2 E., a quarter of a mile above intake of Rogue River Valley Canal and 1½ miles southeast of Lakecreek.

Records available.- April 1921 to September 1936. At station in sec. 11, T. 37 S., R. 2 E., 5 miles above Lakecreek, November 1910 to April 1913.

Average discharge.- 16 years (1911-12, 1921-36), 88.6 second-feet.

Extremes.- Maximum discharge during year, 1,320 second-feet Jan. 14 (gage height, 4.14 feet); minimum, 11 second-feet Aug. 19.

1910-13, 1921-36: Maximum discharge (estimated), 3,000 second-feet Dec. 30, 1924 (gage height, 5.25 feet); minimum, 2 second-feet Aug. 10, 1931 (gage height, 0.97 foot).

Remarks.- Records fair. Diversions for irrigation above station.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 17 to Feb. 28, Apr. 4 to May 19)

Oct. 1 to Jan. 14

Jan. 14 to Sept. 30

1.2	13.5	1.3	13
1.4	27	1.5	32
1.7	72	1.8	87
2.0	158	2.1	170
2.3	276	2.4	276
2.6	412	2.6	457
		3.2	670

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	25	19	63	76	234	167	327	97	29	17	16
2	16	24	20	446	72	237	161	314	92	25	17	19
3	18	21	19	272	67	237	167	301	85	24	18	19
4	21	22	19	329	72	230	237	327	80	26	17	19
5	19	23	19	285	69	220	186	340	74	25	16	19
6	18	23	21	188	67	209	176	318	72	24	15	18
7	18	23	23	140	63	196	223	297	83	24	15	16
8	18	23	31	134	61	192	260	260	102	28	15	15
9	18	26	27	214	60	192	268	256	80	31	15	16
10	16	26	26	176	60	183	284	253	69	30	15	15
11	16	25	33	436	74	180	327	260	63	28	15	16
12	25	24	81	259	80	189	367	260	65	24	15	15
13	22	26	52	302	87	183	404	256	67	24	15	19
14	24	24	38	588	104	173	423	268	67	22	14	21
15	24	22	32	681	146	173	452	245	83	23	15	19
16	25	23	29	534	192	170	467	212	61	21	15	19
17	23	22	26	327	180	170	492	192	56	21	15	18
18	20	21	25	241	161	167	462	183	52	19	14	16
19	19	22	23	212	158	164	438	180	49	19	13	18
20	19	22	24	173	149	170	433	164	46	19	13	17
21	20	22	24	152	199	176	414	152	44	19	14	17
22	21	22	23	137	223	170	409	137	41	19	13	16
23	20	23	24	123	249	170	462	123	40	18	15	16
24	20	22	23	120	216	167	523	118	36	17	15	16
25	20	21	27	115	216	155	472	112	35	15	16	15
26	20	21	33	107	245	152	423	110	34	15	17	14
27	20	21	40	112	220	146	414	104	32	15	17	15
28	21	20	40	112	237	202	409	107	31	15	16	15
29	24	20	81	92	237	180	390	104	31	15	15	16
30	24	19	59	67	-	155	362	134	30	15	15	15
31	24	-	67	78	-	152	-	115	-	18	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	630	25	15	20.3	1,250
November.....	678	26	19	22.6	1,340
December.....	1,028	81	19	33.2	2,040
Calendar year 1935.....	36,939	654	14	101	73,260
January.....	7,235	681	63	233	14,350
February.....	4,040	249	60	139	8,010
March.....	5,694	237	146	184	11,290
April.....	10,667	528	161	356	21,160
May.....	6,529	340	104	211	12,950
June.....	1,797	102	30	59.9	3,560
July.....	667	31	15	21.5	1,320
August.....	472	18	13	15.2	936
September.....	506	21	14	16.9	1,000
Water year 1935-36.....	39,943	681	13	109	79,210

Fish Lake Reservoir near Lakecreek, Oreg.

Location.- Staff gage, lat. $42^{\circ}23'$, long. $122^{\circ}21'$, in SW $\frac{1}{4}$ sec. 3, T. 37 S., R. 4 E., at reservoir outlet 18 miles east of Lakecreek. Gage reads elevation above sea level (irrigation district datum).

Drainage area.- 17 square miles.

Records available.- December 1915 to September 1936.

Extremes.- Maximum contents observed during year, 7,842 acre-feet June 19 (elevation, 4,826.28 feet); minimum, 730 acre-feet Oct. 2, 3 (elevation, 4,805.15 feet).
1915-36: Maximum contents, that of June 19, 1936; minimum contents, practically zero.

Remarks.- Records good. Water is diverted during summer from Fourmile Lake in Klamath River Basin through Cascade Canal into Fish Lake. Permanent dam at outlet of Fish Lake completed in fall of 1915; storage began in November 1915.

Stage and contents, water year October 1935 to September 1936

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	4,805.20	742	-
Oct. 31	4,809.78	1,920	+1,178
Nov. 30	4,812.78	2,809	+889
Dec. 31	4,814.70	3,414	+605
Jan. 31	4,816.42	3,978	+564
Feb. 29	4,817.25	4,260	+282
Mar. 31	4,818.20	4,588	+328
Apr. 30	4,820.90	5,550	+962
May 31	4,824.90	7,084	+1,534
June 30	4,823.40	6,494	-590
July 31	4,816.55	4,022	-2,472
Aug. 31	4,811.50	2,422	-1,600
Sept. 30	4,811.95	2,557	+135
The year			+1,815

North Fork of Little Butte Creek at Fish Lake, near Lakecreek, Oreg.

Location.- Water-stage recorder, lat. 42°23', long. 122°21', in S⁴ sec. 4, T. 37 S., R. 4 E., half a mile below outlet of Fish Lake and 18 miles east of Lakecreek.

Drainage area.- 18 square miles.

Records available.- October 1914 to September 1936; incomplete prior to 1917.

Extremes.- Maximum discharge during year, 125 second-feet July 23 (gage height, 1.57 feet); practically no flow Oct. 17, 18.

1914-36: Maximum discharge, 158 second-feet July 10, 1930; practically no flow at times.

Remarks.- Records good above and fair below 8 second-feet. Flow regulated by storage in Fish Lake Reservoir. Beginning in October 1923 Cascade Canal has diverted water from Fourmile Lake in Flamath River Basin into Fish Lake Basin; no diversions from creek at this station.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)

Oct. 1-16		Oct. 17 to Sept. 30			
0.2	0.4	0.2	0.4	1.2	65
.4	4.6	.4	4.0	1.4	94
.6	13	.6	10	1.6	131
.8	26	.8	21		
1.0	43	1.0	39		

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	3	8	12	15	16	17	34	38	106	114	55
2	43	4	8	14	15	16	17	35	37	107	114	47
3	34	4	6	13	15	16	17	35	37	105	114	45
4	17	4	8	13	15	16	17	36	37	105	108	40
5	10	4	8	13	15	16	17	36	37	105	107	35
6	10	4	8	13	15	16	17	37	37	105	108	34
7	11	4	9	13	15	16	18	37	37	110	112	34
8	11	4	9	13	15	16	18	37	36	107	101	33
9	11	5	9	13	15	16	19	37	36	98	94	33
10	11	5	9	14	15	17	19	37	36	91	94	34
11	10	5	9	14	16	17	19	37	36	90	94	34
12	3	6	10	14	15	17	19	37	36	91	91	34
13	3	6	10	14	15	17	19	38	36	88	85	34
14	4	6	10	14	15	17	20	38	36	84	80	34
15	4	6	10	14	15	17	21	38	36	80	86	34
16	1	6	10	14	15	17	22	38	36	76	86	34
17	0	6	10	14	15	17	23	38	36	80	90	32
18	0	6	10	14	14	17	23	38	36	80	91	18
19	1	6	10	14	14	17	25	38	54	90	91	12
20	1	6	10	14	14	17	26	38	66	94	91	8
21	1	6	10	14	15	17	27	38	75	94	82	12
22	1	7	10	14	15	17	28	38	90	101	76	24
23	1	7	10	14	16	17	29	38	98	114	76	26
24	2	7	10	14	16	17	31	38	103	122	76	26
25	2	7	11	14	16	17	31	38	105	114	75	31
26	2	8	11	14	16	17	32	38	105	107	65	39
27	2	8	11	14	16	17	32	38	105	105	61	39
28	3	8	11	14	16	17	32	38	108	103	59	39
29	3	8	12	14	16	17	33	38	112	108	59	39
30	3	8	12	15	-	17	33	38	110	118	59	38
31	3	-	12	15	-	17	-	38	-	118	58	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						251	43	0	3.1	498		
November.....						174	8	3	5.3	345		
December.....						303	12	8	9.3	601		
Calendar year 1935.....						12,259	111	0	35.6	24,350		
January.....						427	15	12	13.8	847		
February.....						440	16	14	15.2	873		
March.....						513	16	16	15.7	1,030		
April.....						701	33	17	23.4	1,390		
May.....						1,157	38	34	37.3	2,290		
June.....						1,787	112	36	59.6	3,540		
July.....						3,098	122	76	99.9	6,140		
August.....						2,699	114	58	87.1	5,350		
September.....						977	55	8	32.6	1,940		
Water year 1935-36.....						12,532	122	0	34.2	24,840		

North Fork of Little Butte Creek above Medford intake, near Lakecreek, Oreg.

Location.- Water-stage recorder, lat. 42°24', long. 122°32', in SW $\frac{1}{4}$ sec. 25, T. 36 S., R. 2 E., 300 yards above diversion to pipe line formerly used for water supply for Medford and since 1927 for irrigation and $\frac{1}{4}$ miles east of Lakecreek.

Records available.- September 1911 to March 1913, May 1922 to September 1928, October 1931 to September 1936; incomplete prior to 1931.

Extremes.- Maximum discharge during year, 224 second-feet Jan. 14 (gage height, 2.55 feet); minimum, 22 second-feet Oct. 13, 17-20.

1911-13, 1922-28, 1931-36: Maximum discharge (estimated), 680 second-feet Dec. 30, 1924 (gage height, 3.30 feet); minimum (estimated), 11 second-feet Oct. 29 to Nov. 8, 1931.

Remarks.- Records good. Flow regulated by storage in Fish Lake Reservoir. Small irrigation diversions above station.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Jan. 2 to Mar. 5, Apr. 21 to June 19)

Oct. 1 to Jan. 1		Jan. 2 to Sept. 30	
1.4	15	1.6	24
1.6	29	1.8	47
1.8	53	2.0	83
2.0	88	2.2	129
		2.4	182

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	27	31	49	49	77	69	63	65	139	124	75
2	56	26	31	110	47	79	71	83	55	137	124	69
3	53	25	31	60	46	83	81	83	55	132	124	65
4	37	25	32	83	46	77	90	90	97	132	119	61
5	29	26	32	81	46	73	79	92	65	129	117	55
6	28	26	35	57	46	71	81	90	65	127	119	53
7	28	26	38	50	44	69	90	90	71	132	127	53
8	28	26	39	50	44	67	98	85	77	134	124	53
9	27	28	36	63	44	67	101	85	71	124	119	53
10	27	27	37	53	43	65	103	87	71	122	117	53
11	30	27	42	83	49	63	105	83	69	119	115	53
12	26	29	59	58	47	63	103	87	71	119	117	55
13	23	30	42	75	52	63	92	83	71	115	112	55
14	27	28	38	122	57	61	87	85	71	112	101	57
15	27	30	37	129	63	61	85	61	77	110	110	57
16	24	30	36	115	69	60	83	61	73	103	110	57
17	23	29	35	92	61	60	81	75	69	112	110	57
18	22	28	35	77	58	58	83	75	67	112	110	44
19	22	29	35	75	61	58	83	73	79	119	110	37
20	22	29	35	67	60	57	83	73	110	127	112	32
21	22	29	35	61	61	57	83	71	117	124	103	32
22	22	30	35	60	60	57	87	71	122	127	96	46
23	23	30	35	58	71	58	87	71	132	134	94	50
24	23	30	36	57	69	58	105	69	137	147	94	49
25	24	30	40	57	69	57	96	69	137	137	94	50
26	24	30	39	57	73	57	94	69	132	124	87	60
27	24	31	42	58	71	58	90	67	137	127	79	60
28	27	31	42	58	81	94	90	69	137	119	79	60
29	27	31	49	53	77	75	90	69	139	118	79	58
30	26	31	45	52	-	69	87	75	137	129	79	58
31	27	-	49	50	-	69	-	67	-	124	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	983	56	22	28.5	1,750
November.....	953	31	25	28.4	1,690
December.....	1,184	59	31	38.2	2,350
Calendar year 1935.....	25,454	144	22	69.7	50,480
January.....	2,170	129	49	70.0	4,300
February.....	1,864	81	43	57.4	3,300
March.....	2,041	94	57	65.8	4,050
April.....	2,657	105	69	88.5	5,270
May.....	2,431	92	67	78.4	4,820
June.....	2,766	139	65	92.2	5,490
July.....	3,867	147	103	125	7,670
August.....	3,282	127	77	106	6,510
September.....	1,617	75	32	53.9	3,210
Water year 1935-36.....	25,415	147	22	69.4	50,410

Diversions from Little Butte Creek near Lakecreek, Oreg.

Hanley South and Hanley North Canals divert from North Fork of Little Butte Creek in SE $\frac{1}{4}$ sec. 28, T. 36 S., R. 2 E.; water used to irrigate land on both sides of Little Butte Creek near Lakecreek. Rogue River Valley Canal diverts from South Fork of Little Butte Creek in SE $\frac{1}{4}$ sec. 29, T. 36 S., R. 2 E., and from North Fork of Little Butte Creek in NE $\frac{1}{4}$ sec. 20, T. 36 S., R. 2 E.; water used for irrigation of about 15,000 acres of land, chiefly in Bear Creek Basin, on both sides of creek below Phoenix. Eagle Point Canal diverts from Little Butte Creek in SE $\frac{1}{4}$ sec. 31, T. 35 S., R. 1 E.; water used for irrigation of lands near Eagle Point. There are many other smaller diversions from Little Butte Creek and tributaries.

Records available from April 1929 to September 1936; records of some of the canals published separately prior to 1929.

Diversions, in acre-feet, water year October 1935 to September 1936

Month	Hanley South Canal	Hanley North Canal	Rogue River Valley Canal below junction of intakes	Eagle Point Canal
October	-	-	*781	-
April	180	438	†1,890	419
May	193	859	4,390	956
June	185	804	5,270	1,040
July	401	590	7,410	1,080
August	490	590	5,760	1,020
September	371	565	2,600	912
The period	1,730	3,350		5,430

*Oct. 1-14 only; probably no flow Oct. 15-31.

†Apr. 17-30 only; no record Apr. 1-16.

Note.- Probably some flow in canals for months for which no record is given

Emigrant Gap Reservoir near Ashland, Oreg.

Location.- Staff gage, lat. 42°10', long. 122°36', in SE $\frac{1}{4}$ sec. 20, T. 39 S., R. 2 E., at Emigrant Gap Dam of Talent Irrigation District, 6 miles southeast of Ashland. Gage reads sea-level elevation.

Records available.- December 1924 to September 1936.

Extremes.- Maximum contents observed during year, 8,463 acre-feet Feb. 21 (elevation, 2,174.1 feet); minimum (estimated), 300 acre-feet Oct. 1.
1924-36: Maximum contents, 8,748 acre-feet Feb. 20, 1927 (elevation, 2,175.2 feet); no storage at times.

Remarks.- Records good. Emigrant Gap Reservoir was completed in 1924 by Talent Irrigation District to provide water for lands under East and Talent laterals in vicinity of Talent. Natural flow into reservoir may be augmented by water stored in Hyatt Prairie Reservoir and released through Keene Creek Canal in Klamath River Basin, records of which are published in Water-Supply Paper 811.

Gage heights and contents, water year October 1935 to September 1936

Date	Gage height (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	-	*300	-
Nov. 30	-	*511	+211
Dec. 31	-	*1,235	+722
Jan. 31	2,168.1	7,136	+5,903
Feb. 28	2,171.9	7,971	+835
Mar. 31	2,172.9	8,201	+230
Apr. 30	2,173.3	8,294	+93
May 31	-	*8,031	-263
June 30	2,167.9	7,094	-937
July 31	-	*8,213	+3,881
Aug. 31	-	*1,508	-1,705
Sept. 30	-	*1,692	+184
The year			+1,392

*Estimated.

ROGUE RIVER BASIN

Emigrant Creek near Ashland, Oreg.

Location.- Water-stage recorder, lat. 42°10', long. 122°36', in SE¼ sec. 20, T. 39 S., R. 2 E., 500 feet below Emigrant Gap Reservoir Dam and 6 miles southeast of Ashland.

Records available.- January 1920 to May 1924 (incomplete), October 1924 to September 1936.

Extremes.— Maximum discharge observed during period, 22 second-feet July 31 (gage height, 1.24 feet); no flow for several months during fall and winter.
1920-36: Maximum discharge, 5,260 second-feet Feb. 20, 1927; no flow at times.

Remarks.- Records fair except those estimated for Apr. 22, May 29 to June 7, July 14-16, which are fair. Practically all flow October to January stored at Emigrant Gap Reservoir; some flow but no record February to Apr. 20. Diversions for irrigation above station; principal canals are Ashland lateral and East lateral. Keene Creek Canal diverts water into Emigrant Creek from Klamath River Basin. Flow regulated since December 1924 by storage in Emigrant Gap Reservoir.

Rating table, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 21-29, June 24 to July 27)

0.2	0.2
.4	1.2
.6	3.3
.8	6.8
1.0	12
1.2	19
1.3	26

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	11	0.6	15	21	4.6
2							-	11	.6	15	20	4.4
3							-	9.8	.6	14	20	4.4
4							-	15	.6	15	20	4.3
5							-	13	.5	14	20	4.1
6							-	13	.5	15	19	4.1
7							-	14	.5	16	19	4.1
8							-	12	.5	17	19	4.3
9							-	8.8	.5	17	19	5.3
10							-	6.2	.5	15	17	6.0
11							-	4.1	.5	14	15	6.6
12							-	2.7	.5	11	15	7.7
13							-	1.8	.5	11	15	5.2
14							-	1.1	.5	10	15	2.4
15							-	.8	.5	9.0	15	.8
16							-	.9	.4	8.0	15	.2
17							-	1.0	.4	8.6	15	.1
18							-	.8	.4	9.0	13	.1
19							-	.7	.4	11	12	0
20							-	.7	.5	12	9.8	0
21							7.5	.7	.5	13	9.3	0
22							7.2	.6	2.3	15	7.9	0
23							8.1	.6	6.7	17	7.5	0
24							10	.7	10	19	7.2	0
25							11	.7	12	19	6.8	0
26							6.6	.7	14	19	6.8	0
27							3.6	.7	14	19	6.2	0
28							2.8	.7	15	20	4.9	0
29							2.7	.7	15	20	4.9	0
30							7.9	.7	15	21	4.7	0
31							-	.7	-	21	4.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	-	-	-	-	-
November.....	-	-	-	-	-
December.....	-	-	-	-	-
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April 21-30.....	67.4	11	2.7	6.74	134
May.....	135.9	14	.6	4.32	266
June.....	114.5	15	.4	3.82	227
July.....	457.6	21	8.0	14.8	908
August.....	404.7	21	4.7	13.1	803
September.....	68.7	7.7	0	2.29	136
The period.....					2,470

Bear Creek at Medford, Oreg.

Location.- Water-stage recorder, lat. 42°19', long. 122°52', in NW¼ sec. 30, T. 37 S., R. 1 W., just above Main Street Bridge, in Medford.

Records available.- March 1915 to September 1936; incomplete prior to April 1927.

Average discharge.- 15 years (1920-26, 1927-36), 59.9 second-feet.

Extremes.- Maximum discharge during year, 1,730 second-feet Jan. 15 (gage height, 3.52 feet); minimum, 5.8 second-feet Oct. 1, 2 (gage height, 0.27 foot).
1915-36: Maximum discharge, 10,200 second-feet Feb. 20, 1927 (gage height, 10.15 feet); practically no flow at times.

Remarks.- Records fair except those estimated for Dec. 8, 23, Jan. 3, Feb. 4-9, 22, 23, which are poor. Diversions for irrigation above station. Flow partly regulated since December 1924 by storage in Emigrant Gap Reservoir.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.9	15	11	30	82	318	110	167	94	14	8.8	9.8
2	6.3	17	11	90	79	324	106	171	84	12	10	11
3	9.2	17	11	250	75	330	97	160	72	13	11	11
4	18	16	11	803	78	294	187	210	56	13	11	12
5	16	17	11	794	75	266	171	191	46	14	11	13
6	13	17	12	200	73	233	205	178	46	12	12	13
7	11	17	34	140	72	219	239	164	69	14	12	12
8	11	18	40	131	64	156	239	160	75	16	13	11
9	10	18	22	339	54	178	271	142	59	21	15	8.5
10	9.2	18	19	290	56	149	277	127	49	24	16	8.2
11	10	18	19	616	59	142	233	127	34	30	24	8.5
12	11	18	27	328	69	142	228	97	28	26	17	9.5
13	12	17	33	493	70	136	233	77	23	23	15	9.8
14	15	17	34	704	75	97	239	58	22	21	13	11
15	27	17	27	1,140	130	149	239	56	38	17	12	11
16	29	16	22	1,080	139	136	210	47	47	16	11	11
17	26	17	19	462	136	115	191	40	37	14	9.8	11
18	19	16	17	294	101	110	196	37	32	13	10	11
19	16	15	15	244	99	108	156	32	26	12	10	9.0
20	15	14	14	205	110	104	142	32	22	12	10	8.5
21	16	14	13	175	448	108	124	30	22	9.8	8.5	8.2
22	15	14	13	160	510	113	115	21	16	8.8	7.2	8.2
23	13	14	13	149	560	130	118	18	13	8.8	7.8	8.2
24	13	14	13	139	525	101	152	16	14	8.8	7.8	8.2
25	13	14	13	133	493	97	156	17	12	8.5	8.2	7.8
26	13	14	14	127	501	92	149	17	13	8.5	8.8	7.5
27	12	12	17	133	396	90	160	19	12	8.5	9.8	7.0
28	13	12	17	133	383	101	175	39	13	9.0	9.0	7.8
29	14	12	26	110	369	110	182	47	16	8.8	8.5	8.2
30	14	12	29	101	-	113	175	84	16	8.5	8.5	8.5
31	12	-	32	94	-	127	-	118	-	9.0	8.5	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						437.6	29	5.9	14.1	868		
November.....						467	18	12	15.6	926		
December.....						609	40	11	19.6	1,210		
Calendar year 1935.....						18,244.4	408	5.8	50.0	36,200		
January.....						10,087	1,140	30	32.5	20,010		
February.....						5,879	560	54	203	11,660		
March.....						4,888	330	90	158	9,700		
April.....						5,475	277	97	182	10,860		
May.....						2,699	210	18	87.1	5,350		
June.....						1,106	94	12	36.9	2,190		
July.....						434.0	30	8.5	14.0	861		
August.....						344.2	24	7.2	11.1	683		
September.....						289.4	13	7.0	9.65	574		
Water year 1935-36.....						32,715.2	1,140	5.9	89.4	64,890		

Diversions in Bear Creek Basin, Oreg.

Ashland lateral of Talent Irrigation District diverts from Sampson Creek in SW $\frac{1}{4}$ sec. 26, T. 39 S., R. 2 E., for irrigation of lands near Ashland; most of flow is contributed by Keene Creek Canal, which diverts from Keene Creek in Klamath River Basin. East lateral of Talent Irrigation District diverts from Emigrant Gap Reservoir in SE $\frac{1}{4}$ sec. 20, T. 39 S., R. 2 E., for irrigation of lands chiefly on the east side of Bear Creek Valley above Medford. Talent lateral of Talent Irrigation District diverts from Bear Creek in SW $\frac{1}{4}$ sec. 33, T. 38 S., R. 1 E., for irrigation of lands near Talent. Phoenix Canal diverts from Bear Creek in NW $\frac{1}{4}$ sec. 23, T. 38 S., R. 1 W., to supplement flow of Medford Irrigation District Canal for irrigation of lands west of Bear Creek. Bear Creek Canal diverts from Bear Creek at Medford for irrigation of lands west of Bear Creek near Central Point. Numerous smaller diversions from Bear Creek and tributaries.

Records available from April 1929 to September 1936; records for some of the canals published separately prior to 1929.

Records for Ashland and East laterals good; those for Talent lateral and Phoenix Canal fair except those estimated, which are poor; those for Bear Creek Canal poor. Discharge partly estimated for all canals.

Diversions, in acre-feet, water year October 1935 to September 1936

Month	Ashland lateral	East lateral	Talent lateral	Phoenix Canal	Bear Creek Canal
October	20	0	-	177	-
April	136	1,330	635	159	*346
May	149	1,090	1,320	516	833
June	590	888	1,430	550	445
July	1,050	2,790	1,650	454	675
August	834	2,380	1,460	371	677
September	353	489	458	312	520
The year or period	3,132	8,967	6,953	2,549	3,496

*Apr. 19-30 only; probably some flow Apr. 1-18.

Note.- No flow in Ashland lateral, East lateral, and Phoenix Canal; probably some flow in the other canals during months omitted.

Applegate River near Ruch, Oreg.

Location.- Water-stage recorder, lat. 42°11', long. 123°3', in sec. 15, T. 39 S., R. 3 W., at Cameron bridge, 1½ miles above mouth of Little Applegate River and 4½ miles south of Ruch.

Records available.- June 1911 to September 1914, September 1925 to September 1936.

Average discharge.- 13 years (1911-14, 1925-26, 1927-36), 291 second-feet.

Extremes.- Maximum discharge during year, about 3,650 second-feet Jan. 14 or 15 (gage height, about 5.1 feet); minimum, 18 second-feet Sept. 27, 28 (gage height, 0.47 foot).
1911-14, 1925-36: Maximum discharge (estimated), 20,000 second-feet Feb. 20, 1927 (gage height, 16.0 feet); minimum, 7 second-feet Sept. 2, 1929 (gage height, 0.26 foot).

Remarks.- Records good except those for Jan. 15-23, which are fair and are based on records of Illinois River at Kerby. Diversions for irrigation above station.

Rating tables, water year 1935-36 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 15 to Dec. 10)

Oct. 1 to Feb. 21				Feb. 22 to Sept. 30			
0.5	20	2.2	690	0.4	13	2.2	655
0.6	62	2.6	1,030	0.5	7	2.7	1,020
1.1	135	3.1	1,610	1.0	108	3.2	1,450
1.4	231	3.6	2,010	1.4	231	3.7	1,950
1.8	420	4.1	2,550	1.8	412	4.3	2,590

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	45	48	200	370	741	336	629	317	106	35	30
2	24	47	49	1,940	350	733	322	662	303	100	32	34
3	30	42	47	949	330	828	341	762	317	96	32	34
4	30	38	47	1,160	315	812	370	835	290	96	32	29
5	28	41	45	914	302	790	331	762	290	93	34	28
6	21	44	57	594	284	762	331	636	326	96	34	27
7	27	47	100	438	266	707	370	679	402	90	34	26
8	23	48	187	332	238	674	402	576	412	88	34	24
9	22	48	116	994	243	668	423	655	350	111	34	24
10	20	52	103	955	239	629	498	798	312	103	34	26
11	23	50	592	2,500	243	596	694	812	303	100	34	26
12	30	54	597	1,610	274	584	925	793	299	90	34	24
13	34	70	302	2,010	238	578	1,050	812	290	83	34	24
14	62	55	184	2,010	297	547	1,140	888	265	79	32	26
15	106	55	150	2,600	330	522	1,270	734	261	77	32	24
16	81	79	130	1,700	350	510	1,270	642	246	70	31	24
17	59	62	116	1,200	355	516	1,220	590	224	70	29	23
18	48	54	106	850	365	510	1,140	571	214	70	28	21
19	48	52	98	700	355	510	1,060	540	194	70	28	20
20	45	55	90	650	350	553	1,020	462	187	66	28	21
21	42	54	90	600	1,490	622	1,060	429	175	62	28	22
22	41	60	90	550	2,590	571	1,100	423	165	60	29	23
23	36	90	83	500	1,950	528	1,100	429	150	60	30	21
24	37	81	79	493	1,560	498	1,220	434	144	59	30	22
25	35	70	83	480	1,060	457	1,000	451	135	57	31	22
26	35	62	90	462	918	423	865	468	130	55	31	21
27	35	57	144	468	835	418	820	423	127	52	31	19
28	35	54	130	474	783	446	769	462	124	48	30	19
29	38	50	243	450	755	396	700	391	113	44	29	20
30	39	48	260	414	-	370	655	370	113	39	29	19
31	39	-	247	392	-	365	-	350	-	39	30	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				1,196	106	20	38.6	2,370				
November.....				1,684	90	28	55.5	3,300				
December.....				4,682	592	45	151	9,290				
Calendar year 1935				105,840	1,560	16	290	209,900				
January.....				29,569	2,600	200	954	58,550				
February.....				17,905	2,590	239	617	35,510				
March.....				17,914	828	365	578	35,530				
April.....				23,812	1,270	322	794	47,250				
May.....				15,365	889	350	562	36,430				
June.....				7,178	412	113	239	14,240				
July.....				2,329	111	39	75.1	4,620				
August.....				973	35	28	31.4	1,930				
September.....				723	34	19	24.1	1,430				
Water year 1935-36				126,310	2,600	19	345	250,500				

Illinois River at Kerby, Oreg.

Location.- Water-stage recorder, lat. 42°12'40", long. 123°39'20", 1. NW¼ sec. 4, T. 39 S., R. 8 W., 1 mile northwest of Kerby. Zero of gage is about 1,218 feet above mean sea level, from U. S. Geological Survey river profile.

Drainage area.- 367 square miles.

Records available.- March 1926 to September 1936.

Extremes.- Maximum discharge during year, 22,600 second-feet Jan. 15 (gage height, 18.50 feet), from rating curve extended above 18,000 second-feet; minimum, 14 second-feet Oct. 1; minimum gage height, 0.66 foot July 28, 29.
1926-36: Maximum discharge (estimated), 50,000 second-feet Feb. 20, 1927 (gage height, 19.6 feet, former site and datum); minimum, 13 second-feet Sept. 10-15, 1934.

Remarks.- Records fair. Discharge interpolated for July 18-28, July 30 to Aug. 6, Aug. 10, 11, 19, 20.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	191	213	2,810	845	2,520	835	780	466	141	62	30
2	28	194	202	12,700	790	2,520	790	454	124	60	30	
3	36	164	188	4,770	740	2,360	980	780	413	124	59	39
4	46	142	177	8,920	718	2,120	1,440	835	389	120	57	38
5	48	136	170	5,700	672	1,830	1,300	1,200	371	120	55	35
6	44	132	215	3,200	650	1,690	1,160	1,200	409	117	53	36
7	42	132	558	2,360	650	1,520	1,130	1,040	535	103	51	36
8	40	144	1,870	2,990	630	1,380	1,160	820	862	101	50	36
9	40	187	845	11,200	590	1,300	1,100	890	808	107	40	37
10	40	170	905	6,740	570	1,200	1,070	890	681	105	40	33
11	42	162	4,190	12,100	590	1,100	1,130	862	590	105	40	37
12	56	325	6,190	8,780	672	1,070	1,200	808	535	103	40	31
13	66	590	2,360	15,400	818	1,010	1,200	835	498	99	37	32
14	297	428	1,450	15,200	845	950	1,160	1,380	438	99	37	32
15	512	390	1,000	15,800	1,110	890	1,200	1,240	430	101	36	36
16	394	590	765	11,800	1,110	862	1,200	1,040	409	105	35	36
17	250	478	650	5,940	1,110	835	1,130	890	382	101	34	36
18	194	390	570	3,900	1,110	808	1,040	835	368	98	35	36
19	182	364	495	3,200	1,280	780	950	835	346	96	34	36
20	144	459	460	2,650	1,830	780	890	820	322	93	34	36
21	129	414	432	2,190	5,420	808	890	835	276	90	33	36
22	122	418	374	1,910	7,900	780	890	752	241	87	33	36
23	115	495	367	1,710	5,460	725	890	698	217	84	32	35
24	110	478	344	1,550	3,810	725	1,040	842	204	82	32	35
25	107	408	328	1,430	3,450	681	950	805	194	79	31	36
26	105	351	325	1,280	3,450	637	835	615	181	76	31	34
27	105	303	550	1,220	3,090	703	780	545	178	74	31	32
28	101	270	740	1,140	2,920	1,620	808	565	176	71	30	32
29	103	252	3,500	1,080	2,760	1,270	835	515	164	68	30	32
30	103	232	4,770	970	-	1,070	862	515	152	65	30	32
31	107	-	4,110	905	-	950	-	502	-	64	30	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				3,708	512	20	120	7,350				
November.....				9,339	590	132	311	18,520				
December.....				39,093	6,190	170	1,261	77,540				
Calendar year 1935.....				341,212	7,370	20	935	676,800				
January.....				171,525	15,800	905	5,533	340,200				
February.....				55,590	7,900	570	1,917	110,300				
March.....				37,494	2,520	637	1,209	74,370				
April.....				30,835	1,440	780	1,028	61,160				
May.....				25,549	1,380	502	824	50,680				
June.....				11,859	862	152	369	23,130				
July.....				3,003	141	64	96.9	5,960				
August.....				1,232	62	30	39.7	2,440				
September.....				1,038	39	30	34.6	2,080				
Water year 1935-36.....				390,065	15,800	20	1,066	773,700				

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow are made at a number of other points, as shown by the following table:

Miscellaneous discharge measurements in Pacific slope basins in Oregon and in lower Columbia River Basin during the water year October 1935 to September 1936

Walla Walla River Basin, Oreg.

Date	Stream	Tributary to or diverting from—	Locality	Discharge
July 30	Dry Creek.....	Walla Walla River.	Sec. 35, T. 5 N., R. 35 E., above springs 4 miles south of Milton.	Sec.-ft. 1.6
30	....do.....	....do.....	Sec. 35, T. 5 N., R. 35 E., below springs 4 miles south of Milton.	3.6
Aug. 6	....do.....	....do.....	....do.....	4.2
13	....do.....	....do.....	....do.....	4.1
29	....do.....	....do.....	....do.....	3.4
Sept. 5	....do.....	....do.....	....do.....	4.3
18	....do.....	....do.....	....do.....	2.7
Aug. 1	....do.....	....do.....	Sec. 9, T. 5 N., R. 35 E., 3 miles west of Milton.	2.8
6	....do.....	....do.....	....do.....	3.4
8	....do.....	....do.....	....do.....	3.9
29	....do.....	....do.....	....do.....	3.4
13	....do.....	....do.....	Sec. 31, T. 6 N., R. 35 E., 5½ miles northwest of Milton.	2.5
21	....do.....	....do.....	....do.....	2.4
29	....do.....	....do.....	....do.....	2.4
Sept. 5	....do.....	....do.....	....do.....	3.1
18	....do.....	....do.....	....do.....	2.0

Umatilla River Basin, Oreg.

Aug. 18	Umatilla River.	Columbia River....	Sec. 3, T. 2 N., R. 34 E., at Cayuse....	43.7
June 22	....do.....	....do.....	Sec. 36, T. 3 N., R. 29 E., below Furnish ditch head gate.	166
Feb. 23	Butter Creek...	Umatilla River....	NE¼ sec. 25, T. 3 N., R. 27 E., at Pole's bridge, 9 miles southwest of Echo.	115
Mar. 3	....do.....	....do.....	....do.....	10.9
Apr. 4	....do.....	....do.....	....do.....	5.5
13	....do.....	....do.....	....do.....	97.0
16	....do.....	....do.....	....do.....	93.6
22	....do.....	....do.....	....do.....	29.0
Mar. 18	South Fork of Butter Creek.	Butter Creek.....	NE¼ sec. 11, T. 2 S., R. 28 E., 2 miles northwest of Lena.	3.4

John Day River Basin, Oreg.

July 30	Bridge Creek...	John Day River....	SE¼ sec. 36, T. 11 S., R. 21 E., at Mitchell.	1.2
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Willamette River Basin, Oreg.

July 7	Willamette River.	Columbia River....	Sec. 11, T. 16 S., R. 4 W., at Marshall Island.	4,310
8	....do.....	....do.....	....do.....	4,190
Sept. 9	....do.....	....do.....	....do.....	2,390
July 8	....do.....	....do.....	Sec. 16, T. 15 S., R. 4 W., at Harrisburg.	4,190
Sept. 10	....do.....	....do.....	....do.....	2,380
July 9	....do.....	....do.....	Sec. 7, T. 14 S., R. 4 W., at Irish Bend.	4,380
Sept. 10	....do.....	....do.....	....do.....	2,450
July 10	....do.....	....do.....	Sec. 7, T. 13 S., R. 4 W., at Peoria....	4,590
Sept. 11	....do.....	....do.....	....do.....	2,460
July 11	....do.....	....do.....	Sec. 35, T. 11 S., R. 5 W., at Corvallis.	4,680
Sept. 12	....do.....	....do.....	....do.....	2,580
July 13	....do.....	....do.....	Sec. 23, T. 9 S., R. 4 W., at Buena Vista.	6,990
15	....do.....	....do.....	....do.....	6,210
Sept. 14	....do.....	....do.....	....do.....	3,490
July 14	....do.....	....do.....	Sec. 28, T. 8 S., R. 4 W., at Independence.	6,530
Sept. 15	....do.....	....do.....	....do.....	3,930
July 15	....do.....	....do.....	Sec. 34, T. 5 S., R. 3 W., at Wheatland Ferry.	6,560
Sept. 16	....do.....	....do.....	....do.....	5,010
July 16	....do.....	....do.....	Sec. 27, T. 4 S., R. 3 W., at Weston Landing.	6,550
Sept. 17	....do.....	....do.....	....do.....	5,010
July 17	....do.....	....do.....	Center sec. 29, T. 35 S., R. 2 W., near Newberg.	7,030
Aug. 19	North Fork of Willamette River.	Middle Fork of Willamette River.	Outlet of Waldo Lake.....	17.5
Sept. 3	....do.....	....do.....	....do.....	16.3
June 24	Long Tom River.	Willamette River..	Highway bridge at Cheshire.....	93
Sept. 22	....do.....	....do.....	....do.....	16.3
12	Marys River.	....do.....	Highway crossing at Blodgett.....	2.5
Jan. 31	....do.....	....do.....	County bridge 1½ miles southeast of Philomath.	328
June 22	....do.....	....do.....	....do.....	81.1
Sept. 19	....do.....	....do.....	....do.....	15.4

MISCELLANEOUS DISCHARGE MEASUREMENTS

Miscellaneous discharge measurements in Pacific slope basins in Oregon and in lower Columbia River Basin during the water year October 1935 to September 1936--Continued

Willamette River Basin, Oreg.

Date	Stream	Tributary to or diverting from-	Locality	Discharge Sec.-ft.
Jan. 23	Marys River....	Willamette River..	Railroad bridge at Corvallis, below Oak Creek.	1,130
Sept. 19	....do.....	....do.....	....do.....	*41.1
22	....do.....	....do.....	....do.....	*59.0
14	Wells Creek....	Mary River.....	NE $\frac{1}{4}$ sec. 29, T. 12 S., R. 6 W., 4 miles southwest of Philomath.	1.2
Jan. 22	Muddy Creek....	....do.....	County bridge $\frac{3}{4}$ mile below Oliver Creek	180
Sept. 22	....do.....	....do.....	....do.....	4.8
Jan. 31	....do.....	....do.....	County bridge $\frac{1}{4}$ mile above Starr Creek.	118
June 24	....do.....	....do.....	....do.....	21.1
Sept. 19	....do.....	....do.....	....do.....	4.6
Jan. 23	Calapooya River	Willamette River..	Bridge 1 mile above Courtney Creek.	510
June 24	....do.....	....do.....	....do.....	123
Sept. 22	....do.....	....do.....	....do.....	28.2
Jan. 23	....do.....	....do.....	Bridge on Corvallis road 2 miles southwest of Albany.	1,460
June 23	....do.....	....do.....	....do.....	233
Sept. 23	....do.....	....do.....	....do.....	24.1
14	....do.....	....do.....	Mouth, below Albany power canal.	61
Jan. 24	North Santiam River.	Santiam River....	Highway bridge at Stayton.....	4,140
June 26	....do.....	....do.....	....do.....	1,300
Sept. 24	....do.....	....do.....	....do.....	274
Jan. 24	....do.....	....do.....	Greens Bridge, 6 miles west of Scio...	4,210
June 26	....do.....	....do.....	....do.....	1,550
Sept. 23	....do.....	....do.....	....do.....	395
Feb. 4	Santiam River..	Willamette River..	Highway bridge at Jefferson.....	4,050
June 19	....do.....	....do.....	....do.....	5,000
Sept. 23	....do.....	....do.....	....do.....	528
Feb. 4	South Santiam River.	Santiam River....	Bridge $1\frac{1}{2}$ miles west of Crabtree.....	1,680
June 26	....do.....	....do.....	....do.....	744
Sept. 23	....do.....	....do.....	....do.....	56.8
Jan. 29	Lucklamute River.	Willamette River..	Highway bridge at Helmick Park $4\frac{1}{2}$ miles south of Monmouth.	894
June 19	....do.....	....do.....	....do.....	296
Sept. 18	....do.....	....do.....	....do.....	41.7
Jan. 29	....do.....	....do.....	Bridge $2\frac{1}{2}$ miles south of Buena Vista...	934
June 19	....do.....	....do.....	Highway bridge at Rickreall.....	284
Jan. 28	Rickreall Creek	Willamette River..	....do.....	170
June 19	....do.....	....do.....	....do.....	59.5
Sept. 18	....do.....	....do.....	....do.....	4.8
Jan. 25	....do.....	....do.....	Bridge $1\frac{1}{2}$ miles above mouth.....	296
June 18	....do.....	....do.....	....do.....	65.6
Sept. 18	....do.....	....do.....	....do.....	4.8
Jan. 13	Mill Creek.....	....do.....	Above bifurcation works near penitentiary annex, at Salem.	**3,420
Sept. 1	South Yamhill River.	Yamhill River....	NW $\frac{1}{4}$ sec. 30, T. 6 S., R. 8 W.	1.0
1	....do.....	....do.....	Highway bridge 3 miles west of Grande Ronde Agency.	2.0
Jan. 28	Yamhill River..	Willamette River..	Highway bridge south of McMinnville....	1,320
June 18	....do.....	....do.....	....do.....	565
Sept. 18	....do.....	....do.....	....do.....	74.7
Jan. 28	....do.....	....do.....	Bridge at Dayton.....	1,926
June 16	....do.....	....do.....	....do.....	532
Sept. 1	Agency Creek..	South Yamhill River.	Grande Ronde Agency, near mouth.....	3.2
11	Rock Creek....	....do.....	Mouth, at Grande Ronde.....	1.5
1	Mill Creek.....	Yamhill River....	Highway crossing at Buell.....	2.2
Jan. 27	North Yamhill River.	....do.....	Highway bridge 2 miles northeast of McMinnville.	511
June 16	....do.....	....do.....	....do.....	140
Feb. 10	Molalla River..	Willamette River..	Highway bridge 1 mile south of Canby...	605
June 17	....do.....	....do.....	....do.....	1,200
Sept. 25	....do.....	....do.....	....do.....	77.9
Feb. 8	Pudding River..	Molalla River....	Below Silver Creek, 3 miles west of Silverton.	322
June 18	....do.....	....do.....	....do.....	186
Sept. 25	....do.....	....do.....	....do.....	10.7
25	....do.....	....do.....	Bridge 2 miles southeast of Woodburn...	25.0
Feb. 25	....do.....	....do.....	Bridge 2 miles west of Canby.....	4,300
June 17	....do.....	....do.....	....do.....	853
Sept. 25	....do.....	....do.....	....do.....	62.2
Feb. 3	Butte Creek....	Pudding River....	SW $\frac{1}{4}$ sec. 11, T. 6 S., R. 1 W., 1 mile above mouth.	120
June 17	....do.....	....do.....	....do.....	210
Sept. 25	....do.....	....do.....	....do.....	12.9
2	Mill Creek.....	....do.....	At Aurora.....	9.0
Aug. 8	Crater Creek...	Oak Grove Fork...	Outlet of Little Crater Lake.....	3.4

Columbia River Basin below Willamette River

Aug. 25	Gnat Creek....	Columbia River....	NE $\frac{1}{4}$ sec. 24, T. 8 N., R. 7 W., at highway bridge, Oreg.	4.0
25	Rock Creek....	Gnat Creek.....	SW $\frac{1}{4}$ sec. 14, T. 8 N., R. 7 W., at highway bridge, Oreg.	1.9
25	Big Noise Creek	....do.....	SW $\frac{1}{4}$ sec. 14, T. 8 N., R. 7 W., at highway bridge, Oreg.	1.5

*Including millrace.

**Includes diversion from North Santiam River through Salem Ditch.

Miscellaneous discharge measurements in Pacific slope basins in Oregon and in lower Columbia River Basin during the water year October 1935 to September 1936--Continued

Columbia River Basin below Willamette River

Date	Stream	Tributary to or diverting from	Locality	Discharge Sec.-ft.
Aug. 25	Big Creek.....	Columbia River	SE $\frac{1}{4}$ sec. 18, T. 6 N., R. 7 W., at highway bridge, Oreg.	24.6
25	Bear Creek.....	.....do.....	SW $\frac{1}{4}$ sec. 22, T. 8 N., R. 8 W., at highway bridge, Oreg.	2.4
Aug. 26	Klaskanine River.	Youngs River.....	NW $\frac{1}{4}$ sec. 12, T. 6 N., R. 8 W., at bridge $\frac{7}{8}$ miles southeast of Olney, Oreg.	1.4
27	.....do.....	.....do.....	NW $\frac{1}{4}$ sec. 14, T. 7 N., R. 9 W., above North Fork of Klaskanine River at Olney, Oreg.	5.0
26	North Fork of Klaskanine River.	Klaskanine River..	SE $\frac{1}{4}$ sec. 34, T. 7 N., R. 8 W., at highway crossing, Oreg.	2.0
26	.....do.....	.....do.....	NW $\frac{1}{4}$ sec. 28, T. 7 N., R. 8 W., above North Falls, Oreg.	4.0
26	.....do.....	.....do.....	NE $\frac{1}{4}$ sec. 13, T. 7 N., R. 9 W., at rock quarry near Olney, Oreg.	7.3

Coastal streams between Columbia River and Umpqua River, Oreg.

Aug. 28	Necanicum River.	Pacific Ocean	NW $\frac{1}{4}$ sec. 24, T. 5 N., R. 9 W., highway crossing near Necanicum.	1.5
28	.....do.....	.....do.....	NE $\frac{1}{4}$ sec. 4, T. 5 N., R. 10 W., near Seaside.	20.5
28	North Fork of Necanicum River.	Necanicum River..	Mouth, near Necanicum.....	2.4
28	Mail Creek....	.....do.....	NW $\frac{1}{4}$ sec. 24, T. 5 N., R. 10 W., at highway crossing at mouth.	1.2
27	Nehalem River.	Pacific Ocean....	Vernonia, below Pebble Creek.....	34.0
27	East Fork of Nehalem River.	Nehalem River....	SW $\frac{1}{4}$ sec. 25, T. 5 N., R. 4 W., at highway crossing.	4.3
27	Oak Ranch Creek.	.....do.....	NE $\frac{1}{4}$ sec. 3, T. 5 N., R. 4 W., at mouth..	2.2
27	Ford Creek....	.....do.....	SE $\frac{1}{4}$ sec. 14, T. 6 N., R. 5 W., at mouth.	1.3
27	Deep Creek....	.....do.....	SE $\frac{1}{4}$ sec. 30, T. 6 N., R. 5 W., at mouth.	1.8
26	Little Fishhawk Creek.	.....do.....	NE $\frac{1}{4}$ sec. 11, T. 5 N., R. 7 W., above Beneke Creek.	3.4
26	Hamilton Creek	North Fishhawk Creek.	SE $\frac{1}{4}$ sec. 32, T. 6 N., R. 7 W., at mouth.	1.2
26	Beneke Creek..	.....do.....	NE $\frac{1}{4}$ sec. 11, T. 5 N., R. 7 W., at mouth.	2.9
28	Humbug Creek..	Nehalem River....	SW $\frac{1}{4}$ sec. 30, T. 5 N., R. 7 W., $2\frac{1}{2}$ miles northwest of Elsie.	6.8
28	West Humbug Creek.	Humbug Creek.....	NW $\frac{1}{4}$ sec. 25, T. 5 N., R. 8 W., at highway crossing near Elsie.	1.5
28	Beaver Creek..	West Humbug Creek.	NW $\frac{1}{4}$ sec. 25, T. 5 N., R. 8 W., at mouth.	1.0
28	East Humbug Creek.	Humbug Creek.....	NW $\frac{1}{4}$ sec. 25, T. 5 N., R. 8 W., at mouth.	1.0
29	North Fork of Nehalem River.	Nehalem River....	SW $\frac{1}{4}$ sec. 22, T. 4 N., R. 9 W., above Soapstone Creek.	20.0
29	Soapstone Creek.	North Fork of Nehalem River.	SW $\frac{1}{4}$ sec. 15, T. 4 N., R. 9 W., above Buchanan Creek.	2.5
29	Jetty Creek...	Pacific Ocean....	SE $\frac{1}{4}$ sec. 17, T. 2 N., R. 10 W., near mouth.	2.9
31	Miami River...	.....do.....	NW $\frac{1}{4}$ sec. 14, T. 1 N., R. 10 W., 2 miles northeast of Garabaldi.	23.2
31	Kilchis River.	.....do.....	SW $\frac{1}{4}$ sec. 7, T. 1 S., R. 9 W., 3 miles north of Tillamook.	42.8
31	Tillamook River.	.....do.....	SE $\frac{1}{4}$ sec. 7, T. 2 S., R. 9 W., 4 miles southeast of Tillamook.	9.6
31	Simmons Creek.	Tillameok River...	Highway crossing at mouth.....	1.2
31	Fawcett Creek.	.....do.....	.....do.....	1.8
31	Killiam Creek.	.....do.....	SE $\frac{1}{4}$ sec. 15, T. 2 S., R. 9 W., at mouth.	1.0
Sept. 1	Nestucca River	Pacific Ocean....	SE $\frac{1}{4}$ sec. 35, T. 3 S., R. 10 W., $1\frac{1}{2}$ miles below Beaver.	108
1	Beaver Creek..	Nestucca River....	NW $\frac{1}{4}$ sec. 18, T. 3 S., R. 9 W., below East and West Forks of Beaver Creek.	18.7
1	East Fork of Beaver Creek.	Beaver Creek.....	Mouth, 2 miles north of Beaver.....	16.0
1	West Fork of Beaver Creek.	.....do.....	.....do.....	3.1
1	West Creek....	Nestucca River....	Mouth, at Beaver.....	2.2
1	Sailing Creek.	.....do.....	.....do.....	1.4
1	Farmer Creek..	.....do.....	Highway crossing at mouth.....	2.2
1	Three Rivers..	.....do.....	NW $\frac{1}{4}$ sec. 13, T. 4 S., R. 9 W., at Hebo.	56.0
1	Alder Creek...	Three Rivers.....	NW $\frac{1}{4}$ sec. 4, T. 5 S., R. 9 W., at highway crossing.	1.7
1	Cedar Creek...	.....do.....	Mouth, at Hebo.....	3.0
11	Little Nestucca River.	Pacific Ocean....	NW $\frac{1}{4}$ sec. 15, T. 5 S., R. 10 W., near Oretown.	17.0
1	Sourgrass Creek.	Little Nestucca River.	Mouth, highway crossing at Dolph.....	1.5
1	Onie Creek...	.....do.....	.....do.....	2.2
11	Neskowin Creek	Pacific Ocean....	SE $\frac{1}{4}$ sec. 35, T. 5 S., R. 11 W., 1 mile south of Neskowin.	2.5
11	Salmon River..	.....do.....	SW $\frac{1}{4}$ sec. 33, T. 6 S., R. 10 W., 2 miles southeast of Otis.	33.7

Miscellaneous discharge measurements in Pacific slope basins in Oregon and in lower Columbia River Basin during the water year October 1935 to September 1936--Continued

Coastal streams between Columbia River and Umpqua River, Oreg.

Date	Stream	Tributary to or diverting from-	Locality	Discharge
Sept. 11	Little Salmon River.	Salmon River.....	NE $\frac{1}{4}$ sec. 15, T. 6 S., R. 9 W., 9 miles northeast of Otis.	Sec.-ft. 2.4
11	Sulphur Creek.	.....do.....	SE $\frac{1}{4}$ sec. 20, T. 6 S., R. 9 W., at mouth	1.2
11	Widow Creek...	.....do.....	SW $\frac{1}{4}$ sec. 25, T. 6 S., R. 10 W., at mouth.	1.4
11	Slickcreek Creek.	.....do.....	NW $\frac{1}{4}$ sec. 35, T. 6 S., R. 10 W., at mouth.	5.5
11	McMullen Creek	.....do.....	SW $\frac{1}{4}$ sec. 34, T. 6 S., R. 10 W., at mouth.	2.5
11	Schooner Creek	Pacific Ocean.....	NW $\frac{1}{4}$ sec. 30, T. 7 S., R. 10 W., bridge $\frac{1}{2}$ mile east of Taft.	5.4
5	Depoe Creek...	.....do.....	NE $\frac{1}{4}$ sec. 8, T. 9 S., R. 11 W., above highway at Depoe Bay.	1.0
5	Rocky Creek...	.....do.....	NE $\frac{1}{4}$ sec. 19, T. 9 S., R. 11 W., highway crossing at mouth.	2.6
5	Spencer Creek.	.....do.....	SE $\frac{1}{4}$ sec. 5, T. 10 S., R. 11 W., highway crossing at mouth.	1.5
5	Wade Creek...	.....do.....	SE $\frac{1}{4}$ sec. 8, T. 10 S., R. 11 W., highway crossing at mouth.	1.5
5	Moloch Creek..	.....do.....	SW $\frac{1}{4}$ sec. 17, T. 10 S., R. 7 W., highway crossing at mouth.	1.6
12	Yaquina River.	.....do.....	SW $\frac{1}{4}$ sec. 31, T. 10 S., R. 9 W., at railroad bridge near Chitwood.	6.7
12	Little Elk Creek.	Yaquina River.....	Mouth at Eddyville.....	2.8
12	Beaver Creek..	.....do.....	SE $\frac{1}{4}$ sec. 12, T. 11 S., R. 11 W., highway crossing near Toledo.	1.5
14	Alsea River	Pacific Ocean.....	SW $\frac{1}{4}$ sec. 3, T. 14 S., R. 9 W., 8 miles west of Alsea.	74.5
14	North Fork of Alsea River.	Alsea River.....	NE $\frac{1}{4}$ sec. 29, T. 13 S., R. 7 W., above Crooked Creek.	12.4
14	Crooked Creek (Spencer).	North Fork of Alsea River.	SW $\frac{1}{4}$ sec. 15, T. 13 S., R. 7 W., near Alsea.	2.5
14	Yew Creek....	Crooked Creek.....	SE $\frac{1}{4}$ sec. 10, T. 13 S., R. 7 W., at highway crossing.	1.2
14	South Fork of Alsea River.	Alsea River.....	SE $\frac{1}{4}$ sec. 12, T. 14 S., R. 8 W., above Swamp Creek.	4.8
14	Mill Creek....	.....do.....	Highway crossing at mouth.....	2.8
14	Digger Creek..	.....do.....	.....do.....	1.4
14	Pail Creek....	.....do.....	.....do.....	6.9
14	Five Rivers...	.....do.....	NW $\frac{1}{4}$ sec. 17, T. 14 S., R. 9 W., above Bear Creek.	49.7
14	Scott Creek...	.....do.....	Highway crossing at mouth.....	7.2
14	Arnold Creek..	.....do.....	.....do.....	1.5
14	Darkey Creek..	.....do.....	.....do.....	2.2
14	Big Creek....	Pacific Ocean.....	SE $\frac{1}{4}$ sec. 2, T. 14 S., R. 12 W., at highway crossing at mouth.	2.7
	Yachats River.	.....do.....	SW $\frac{1}{4}$ sec. 26, T. 14 S., R. 12 W., at mouth, near Yachats.	21.2
4	Cummings Creek.	.....do.....	SE $\frac{1}{4}$ sec. 10, T. 15 S., R. 12 W., at highway crossing at mouth.	3.6
4	Bob Creek....	.....do.....	NE $\frac{1}{4}$ sec. 22, T. 15 S., R. 12 W., at highway crossing at mouth.	4.8
14	Tenmile Creek.	.....do.....	SE $\frac{1}{4}$ sec. 27, T. 15 S., R. 12 W., at highway crossing at mouth.	8.1
4	Rock Creek....	.....do.....	NW $\frac{1}{4}$ sec. 15, T. 16 S., R. 12 W., at highway crossing at mouth.	2.9
14	Big Creek....	.....do.....	SE $\frac{1}{4}$ sec. 15, T. 16 S., R. 12 W., at highway crossing at mouth.	2.9
4	China Creek...	.....do.....	NW $\frac{1}{4}$ sec. 22, T. 16 S., R. 12 W., at highway crossing at mouth.	1.8
14	Cape Creek....	.....do.....	SW $\frac{1}{4}$ sec. 34, T. 16 S., R. 12 W., at highway crossing.	4.5
4	Horse Creek...	.....do.....	SW $\frac{1}{4}$ sec. 3, T. 17 S., R. 12 W., at highway crossing at mouth.	2.0
4	Berry Creek...	.....do.....	NW $\frac{1}{4}$ sec. 15, T. 17 S., R. 12 W., at highway crossing at mouth.	2.5
5	Sutton Creek..	.....do.....	NW $\frac{1}{4}$ sec. 35, T. 17 S., R. 12 W., at highway crossing at mouth.	3.5
15	Greenleaf Creek.	Lake Creek.....	Highway crossing near mouth, 4 miles southwest of Triangle Lake.	3.2
15	Nelson Creek..	.....do.....	NW $\frac{1}{4}$ sec. 16, T. 17 S., R. 8 W., 7 miles southwest of Triangle Lake.	1.5
15	Deadwood Creek	.....do.....	NW $\frac{1}{4}$ sec. 14, T. 17 S., R. 9 W., at highway crossing at mouth.	21.3
15	Green Creek...	.....do.....	NE $\frac{1}{4}$ sec. 16, T. 17 S., R. 9 W., at highway crossing at mouth.	1.2
15	Indian Creek..	.....do.....	NE $\frac{1}{4}$ sec. 20, T. 17 S., R. 9 W., at highway crossing at mouth.	19.8
15	Thompson Creek	Siuslaw River.....	SW $\frac{1}{4}$ sec. 25, T. 17 S., R. 10 W., at highway crossing at mouth.	1.0
15	Divide Creek..	.....do.....	SW $\frac{1}{4}$ sec. 7, T. 18 S., R. 10 W., at highway crossing at mouth.	2.5
15	North Fork of Siuslaw River	.....do.....	NE $\frac{1}{4}$ sec. 34, T. 17 S., R. 11 W., 2 miles southwest of Minerva.	16.5
15	McLeod Creek..	North Fork of Siuslaw River.	SE $\frac{1}{4}$ sec. 24, T. 17 S., R. 11 W., 1 mile northeast of Minerva.	2.7
15	Condon Creek..	.....do.....	SE $\frac{1}{4}$ sec. 33, T. 17 S., R. 11 W., 3 miles southwest of Minerva.	2.8

Miscellaneous discharge measurements in Pacific slope basins in Oregon and in lower Columbia River Basin during the water year October 1935 to September 1936--Continued

Coastal streams between Columbia River and Umpqua River, Oreg.

Date	Stream	Tributary to or diverting from	Locality	Discharge
Sept. 17	Siltcoos River..	Pacific Ocean.....	NW $\frac{1}{4}$ sec. 33, T. 19 S., R. 12 W., at Westlake.	Sec.-ft. 4.3
16	Tahkenitch Creek	.....do.....	Outlet of Tahkenitch Lake.....	2.4

Umpqua River Basin, Oreg.

Sept. 16	Calapooya Creek.	Umpqua River.....	NW $\frac{1}{4}$ sec. 13, T. 25 S., R. 6 W., at bridge $2\frac{1}{2}$ miles west of Sutherlin.	24.7
16	Yellow Creek....	.....do.....	SW $\frac{1}{4}$ sec. 12, T. 24 S., R. 7 W., at mouth.	3.2
16	Elk Creek.....	.....do.....	Highway crossing at Drain.....	4.8
24	.....do.....	.....do.....	Mouth, at Elkton.....	26.1
16	Paradise Creek..	.....do.....	Mouth, 5 miles northwest of Elkton....	1.5
16	Mill Creek.....	.....do.....	Mouth, 3 miles west of Scottsburg.....	3.2

Coastal streams between Umpqua River and Rogue River, Oreg.

Sept. 17	Tennile Creek...	Pacific Ocean.....	Above Eel Creek, 1 mile west of Lakeside.	1.0
17	Eel Creek.....	Tennile Creek.....	At mouth, 1 mile west of Lakeside.....	2.2
17	Millilcoma River.	Coos River.....	Below East and West Forks, at Allegany	8.4
17	East Fork of Millilcoma River	Millilcoma River....	Mouth, at Allegany.....	4.8
17	West Fork of Millilcoma River	.....do.....	.....do.....	3.6
17	Bridge Creek....	.....do.....	SE $\frac{1}{4}$ sec. 22, T. 25 S., R. 12 W., at mouth.	1.0
18	Middle Fork of Coquille River.	Coquille River.....	Highway crossing, $2\frac{1}{2}$ miles southwest of Camas Valley.	1.0
18	Rock Creek.....	Middle Fork of Coquille River.	NE $\frac{1}{4}$ sec. 3, T. 30 S., R. 10 W., at mouth, near Remote.	2.4
18	Big Creek.....	.....do.....	Mouth, at Bridge.....	1.2
17	Beaver Creek....	Coquille River.....	NW $\frac{1}{4}$ sec. 15, T. 27 S., R. 13 W., at Coaledo.	1.5
17	Bear Creek.....	.....do.....	NW $\frac{1}{4}$ sec. 22, T. 28 S., R. 14 W., highway crossing, 4 miles east of Bandon.	1.7
18	China Creek....	Pacific Ocean.....	NE $\frac{1}{4}$ sec. 13, T. 29 S., R. 15 W., highway crossing, $3\frac{1}{2}$ miles south of Bandon.	1.2
18	Floras Creek...	.....do.....	SE $\frac{1}{4}$ sec. 3, T. 31 S., R. 15 W., at highway bridge.	2.3
18	Sixes River.....	.....do.....	SE $\frac{1}{4}$ sec. 9, T. 32 S., R. 15 W., above Crystal Creek.	7.3
18	Crystal Creek...	Sixes River.....	SE $\frac{1}{4}$ sec. 4, T. 32 S., R. 15 W., highway crossing at mouth.	1.0
18	Elk River.....	Pacific Ocean.....	Highway crossing, $3\frac{1}{2}$ miles north of Port Orford.	43.5
19	Hubbard Creek...	.....do.....	NE $\frac{1}{4}$ sec. 9, T. 33 S., R. 15 W., 1 mile southeast of Port Orford.	1.5
19	Brush Creek....	.....do.....	SW $\frac{1}{4}$ sec. 25, T. 35 S., R. 15 W., 5 miles southeast of Port Orford.	6.0
19	Bear Trap Creek.	.....do.....	SE $\frac{1}{4}$ sec. 36, T. 35 S., R. 15 W., $6\frac{1}{2}$ miles southeast of Port Orford.	2.2
19	Buchre Creek...	.....do.....	SE $\frac{1}{4}$ sec. 8, T. 35 S., R. 14 W., near mouth.	6.9

Rogue River Basin, Oreg.

Jan. 25	Evans Creek.....	Rogue River.....	NE $\frac{1}{4}$ sec. 34, T. 34 S., R. 3 W., at Bybee Springs.	248
Mar. 19	.....do.....	.....do.....	.....do.....	105
19	Pleasant Creek..	Evans Creek.....	SE $\frac{1}{4}$ sec. 28, T. 34 S., R. 4 W., at bridge 3 miles northwest of Wimer....	17.1
19	Ditch Creek....	Pleasant Creek....	Mouth, 2 miles northwest of Wimer....	6.2

Coastal streams south of Rogue River, Oreg.

Sept. 19	Hunter Creek...	Pacific Ocean.....	SW $\frac{1}{4}$ sec. 7, T. 37 S., R. 14 W., highway crossing, 2 miles south of Gold Beach.	2.5
19	Meyer Creek.....	.....do.....	NE $\frac{1}{4}$ sec. 7, T. 38 S., R. 14 W., 7 miles south of Gold Beach.	1.0
19	Chetco River....	.....do.....	SE $\frac{1}{4}$ sec. 34, T. 40 S., R. 13 W., below Jack Creek, near Harbor.	81.6
19	Winchuck River..do.....	SE $\frac{1}{4}$ sec. 24, T. 41 S., R. 13 W., above South Fork, near Harbor.	5.4

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