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PRELIMINARY INDEX

TO

RIVER SURVEYS MADE BY THE  
UNITED STATES GEOLOGICAL SURVEY  
AND OTHER AGENCIES

BY

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# PRELIMINARY INDEX TO RIVER SURVEYS MADE BY THE UNITED STATES GEOLOGICAL SURVEY AND OTHER AGENCIES

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By BENJAMIN E. JONES and RANDOLPH O. HELLAND

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## INTRODUCTION

In the determination of the extent of the natural resources of the United States many surveys of our rivers and lakes have been made by Federal, State, semipublic, and private agencies. The results have not been uniform, and many of the maps are difficult to obtain. In general the types of surveys may be divided into two groups—those which have been made primarily to determine features affecting navigation, and those which have been made to determine the possibilities of developing storage and power. Surveys of the first type have been made principally under the direction of the Corps of Engineers of the United States Army. Ordinarily, such surveys are made on a large scale, and the maps show the depth of water, location and character of obstructions, rapids, and the general topography of the banks. Many of these surveys do not show the elevations of the water surface, from which a profile could be made, nor details of topography by means of contours. They are made primarily in the interest of navigation and are of less value for studies of storage or power possibilities. Surveys of the second type as made by the United States Geological Survey in recent years show elevations of water surface and, by means of contours, the detailed topography of the land adjacent to the stream bed. Information concerning the maps made by the Corps of Engineers is contained in the annual reports of the Chief of Engineers, United States Army, and in indexes to those reports. Information relative to surveys of the second type has not heretofore been assembled. The present compilation has been prepared primarily for the use of Government bureaus to afford information concerning the rivers on which surveys have been made and the character of the maps available. The list embraces not only all the rivers surveyed and maps published by the United States Geological Survey but also many maps made and published by other Government agencies and the several States.

It is realized that in a compilation of this character many maps will be overlooked, as the files of the Geological Survey, although extensive, are not complete. As this index will be republished from time to time, to bring it up to date, any information concerning errors or omissions will be welcomed.

Some of the earlier maps show only the plan and profile of the stream with very little topography. The more recent surveys, especially those made by the United States Geological Survey, show topography, usually to a height of 200 feet or more above the water surface. The scale generally adopted by the Geological Survey for river surveys is 1:31,680, or half a mile to the inch. The contour interval ordinarily is 20, 25, or 50 feet on land and 5 feet on the water surface.

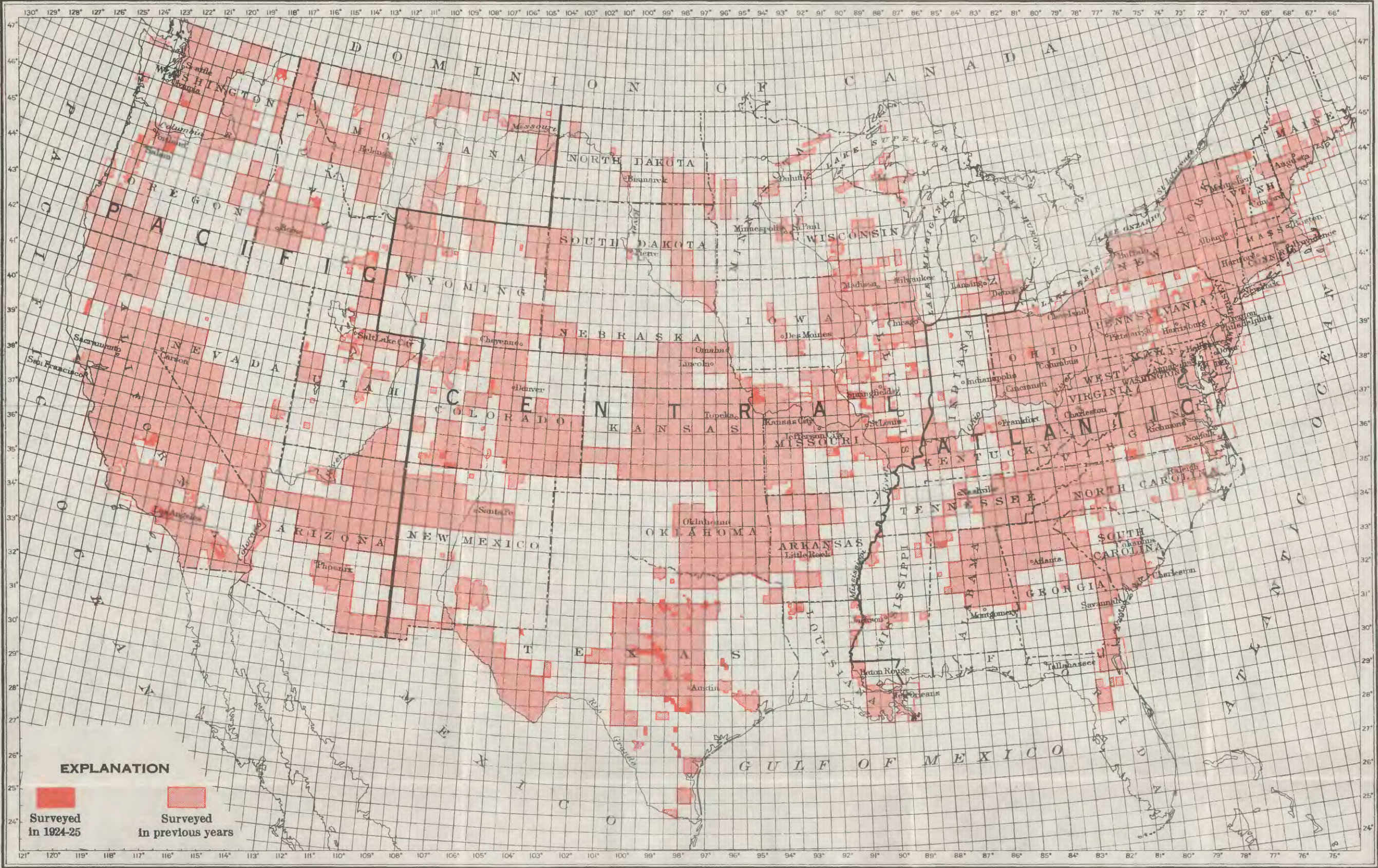
The standard topographic maps of areas in the United States published by the Geological Survey afford much information of value in connection with studies of river development and are particularly useful in areas where more detailed river surveys have not been made. The areas covered by these maps made prior to July 1, 1925, and the scale employed for each area are shown on Plate 1. In preparing the standard topographic maps it is necessary to survey the rivers, and these surveys will hereafter be made on a scale suitable for preparing detailed maps of rivers whose power, irrigation, or navigation features justify such maps. Thus each year's work will augment the maps of rivers available, until, as planned, at the end of 20 years all the streams in the country will have been surveyed.

In this compilation the surveys have been arranged by States and within the States by drainage basins. The tributary streams are indicated by letters; for example, a stream marked "(a)" is tributary to the last-named stream not marked with a letter, a stream marked "(b)" is tributary to the last-named stream marked "(a)," and so on. In the Great Basin tributaries of Great Salt Lake and other independent drainage systems are indicated by "(a)."

The index number, made up of letters and figures, in parentheses, refers to the drainage-area subdivisions shown on Plate 2. The numbers refer to the major areas that form the great drainage basins of the country as classified by the Geological Survey in its publications on stream flow and by the Weather Bureau in its meteorologic reports. These major areas are as follows:

1. North Atlantic basins.
2. South Atlantic and Gulf of Mexico basins.
3. Ohio River basin.
4. St. Lawrence River basin.
5. Upper Mississippi River and Hudson Bay basins.
6. Missouri River basin.
7. Lower Mississippi River basin.





AREAS COVERED BY TOPOGRAPHIC SURVEYS MADE BY UNITED STATES GEOLOGICAL SURVEY PRIOR TO JULY 1, 1925  
AND TERRITORY COVERED BY DIVISIONS OF TOPOGRAPHIC BRANCH



8. Western Gulf of Mexico basins.
9. Colorado River basin.
10. Great Basin.
11. Pacific basins in California.
12. North Pacific basins.

Each major area is divided into intermediate areas conforming to its dominant drainage systems and designated 12A, 12B, etc., the number in the designation being that of the major area and the letter referring to a specific intermediate area within it. The intermediate areas are further divided into minor areas, each designated by the number of the major area, the letter of the intermediate area, and a final letter distinguishing it from adjacent minor areas, as 12FA, 12FB. Each drainage division is lettered in order from the upper reaches of the basin to the lower.

The maps published by the Geological Survey may be purchased for a small sum from the Director of the Geological Survey, Washington, D. C. Maps prepared and published by the States can usually be obtained directly from the State engineers. Many of the published maps are out of print, but copies of the Geological Survey maps may be consulted at the office of the Survey in the Interior Building at Washington, and many of them can be sent to any district office of the Survey for consultation, upon application to the Director.

A few of the State agencies that have prepared reports on water supplies and water power are listed below. Many of them or their successors have in their files much detailed information concerning the water resources of their individual States:

- Geological Survey of Alabama, Montgomery, Ala.
- Geological Survey of Arkansas, Fayetteville, Ark.
- California Department of Public Works, Division of Engineering and Irrigation, Sacramento, Calif.
- State Water Commission of California, Sacramento, Calif.
- Geological Survey of Georgia, Atlanta, Ga.
- Rivers and Lakes Commission, Chicago, Ill.
- Sanitary District of Chicago, Chicago, Ill.
- Maine State Water Storage Commission, Augusta, Maine.
- Commission of Waterways and Public Lands of Massachusetts, Boston, Mass.
- State Drainage Commission of Minnesota, St. Paul, Minn.
- Commission on Water Conservation and Water Power of New Hampshire, Concord, N. H.
- Conservation Commission of New York, Albany, N. Y.
- State Water Storage Commission of New York, Albany, N. Y.
- North Carolina Geological and Economic Survey, Asheville, N. C.
- Water Supply Commission of Pennsylvania, Harrisburg, Pa.
- Tennessee Geological Survey, Nashville, Tenn.
- Wisconsin Geological and Natural History Survey, Madison, Wis.
- Railroad Commission of Wisconsin, Madison, Wis.



## PRELIMINARY INDEX TO RIVER SURVEYS

*Ratios for customary map scales<sup>a</sup>*

Scale 1 to—	Inches per mile	Inches per 1,000 feet	Miles per inch	Feet per inch	Meters per inch	Feet per 1/50 inch
600	105.60	20.000	0.00947	50	15.24	1.0
1,200	52.80	10.000	.01894	100	30.48	2.0
2,400	26.40	5.000	.03788	200	60.96	4.0
2,500	25.344	4.800	.03946	208.3	63.50	4.2
4,800	13.20	2.500	.07576	400	121.9	8.0
5,280	12.000	2.273	.08333	440	134.1	8.8
<sup>b</sup> 10,000	6.336	1.200	.15783	833.3	254.0	16.7
12,000	5.280	1.000	.18939	1,000	304.8	20.0
15,000	4.224	.800	.23674	1,250	381.0	25.0
<sup>c</sup> 15,840	4.0000	.758	.2500	1,320	402.3	26.4
<sup>b</sup> 20,000	3.168	.600	.31566	1,667	508	33.3
21,120	3.000	.5682	.33333	1,760	536.4	35.2
<sup>c</sup> 31,680	2.000	.3788	.50000	2,640	804.7	52.8
45,000	1.408	.2667	.71023	3,750	1,143.0	75.0
48,000	1.320	.2500	.75758	4,000	1,219.2	80.0
<sup>d</sup> 62,500	1.014	.1920	.98643	5,208.3	1,587.5	104.2
63,360	1.000	.1894	1.00000	5,280	1,589.3	105.6
90,000	.7040	.1333	1.4205	7,500	2,286.0	150.0
96,000	.6600	.1250	1.5152	8,000	2,438.4	160.0
<sup>d</sup> 125,000	.5069	.0960	1.9729	10,416.7	3,175.0	208.3
126,720	.5000	.0947	2.0000	10,560	3,218.7	211.2
192,000	.3300	.0625	3.0303	16,000	4,876.9	320.0
250,000	.2534	.0480	3.9457	20,833.3	6,350.0	416.7
253,440	.2500	.0473	4.000	21,120.0	6,437.4	422.4
380,160	.1667	.0316	6.000	31,680.0	9,656.1	633.6
500,000	.1267	.0240	7.8914	41,666.7	12,700	833.3
506,880	.1250	.02368	8.0000	42,240	12,875	844.8
1,000,000	.06336	.0120	15.783	83,333.3	25,400	1,666.7

<sup>a</sup> From U. S. Geol. Survey Bull. 650, 1916.<sup>b</sup> 1:10,000 and 1:20,000 are basic scales used by the Corps of Engineers, U. S. Army.<sup>c</sup> 1:15,840 and 1:31,680 are basic scales used by the General Land Office. 1:31,680 is also used by the U. S. Geological Survey on standard topographic maps and river-survey maps.<sup>d</sup> 1:62,500 and 1:125,000 are subdivisions of 1:1,000,000 used by the U. S. Geological Survey on topographic maps.

## ALABAMA

Chattahoochee River. See Georgia.

Coosa River (upper Mobile River) from Curry's Island to Broken Arrow Creek, 19 miles (2VM). Plan and profile by Corps of Engineers, United States Army. Scale, 1.3 inches=1 mile. A small tracing shows the plan of the river and nothing more. The profile is shown for the section between Wetumpka and Greensport, and elevations are given in Water-Supply Paper 107. Map is of little value except for the elevations.

Coosa River from Wetumpka to Greensport, 142 miles (2VM, 2VN, 2VO). Profile by Corps of Engineers, United States Army. Scale, 1.3 inches=1 mile. Elevations in Water-Supply Paper 107. Profile shows banks and bed of river and locks.

Alabama River (continuation of Coosa River).

(a) Tallapoosa River from Tallapoosa, Ga., to Matilda, Ala., 115 miles in Alabama and 3 miles in Georgia (2VA, 2VC). Plan and profile by United States Geological Survey, 1904. Scale, width 1:12,000; horizontal, 1:24,000. No topography. Plan is a straight-line projection and shows bridges, tributaries, and other features by relative distance along the river. This map was published as a supplement to Water-Supply Paper 204 but is now out of stock.

(a) Tallapoosa River from Griffin Shoals, in T. 23 N., R. 24 E., to Milstead, in sec. 13, T. 17 N., R. 21 E., 64 miles (2VC, 2VD). Unpublished plan and profile by United States Geological Survey, 1901. Scale, 1:253,000. No topography and very little detail.

(b) Big Sandy Creek from mouth 12 miles upstream to a point near Dadeville (2VC). A table of elevations from a map by the Corps of Engineers, United States Army, is published in "Water powers of Alabama," by the Alabama Geological Survey, 1916.

(a) Cahaba River from mouth to Shelby County, 108 miles (2WE, 2WD). Profile by Corps of Engineers, United States Army, 1874. Scale, 2.5 inches=1 mile. Elevations in Water-Supply Paper 107. Profile shows elevation of bed of stream and water surface.

(a) Tombigbee River.

(b) Black Warrior River from Tuscaloosa to Sipsey and Mulberry Fork, 92 miles (2XN, 2XO, 2XL). Profile by Corps of Engineers, United States Army. Scale, 2.5 inches=1 mile. Elevations in Water-Supply Paper 107. An unpublished profile which shows river bed and water surface. Probably surveyed before 1900.

(a) Ohio River.

(b) Tennessee River from sec. 23, T. 3 S., R. 11 W., to sec. 11, T. 2 S., R. 15 W. (3VM, 3VN). Surveyed by United States Geological Survey in 1924. Scale, 1:24,000. Contour interval, 5 feet. Shows topography 55 feet above water surface. In preparation. This map is in five sheets and covers parts of topographic maps of Muscle Shoals, Ioka, and Gravelly Springs quadrangles.

For areas in Alabama covered by standard United States Geological Survey topographic maps see Plate 1.

## ALASKA

Most of the maps of Alaska are based on exploratory and reconnaissance surveys. There are also a few scattered areas for which detailed topographic maps are available.

## ARIZONA

Colorado River from Lees Ferry, Ariz., to the mouth of Green River in Utah, 28 miles in Arizona and 188 miles in Utah (9FA, 9FC, 9FE). Plan and profile by United States Geological Survey, 1921. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. Published by United States Geological Survey in 16 sheets, 12 plans, and 4 profiles. Section in Arizona is shown on 3 sheets, 2 plans, and 1 profile.

Colorado River from Black Canyon to Lees Ferry, 356 miles (9FE, 9HA, 9HC, 9LA, 9LB, 9LC). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour intervals, 50 feet on land and 5 feet on water. Detailed topography. Published by United States Geological Survey in 21 sheets, 14 plans and 9 profiles

Colorado River from Mexican boundary to Black Canyon, about 254 miles (9LA, 9LB, 9LO). Plan and profile by United States Geological Survey, based on surveys in 1902-3 and 1920. Scale, 1:31,680. Contour intervals, 10 to 50 feet on land and 5 feet on water. Detailed topography. In preparation, to be published in 20 to 25 sheets. Four preliminary sheets showing the river from 33° N. to 34° N. (106 miles) were published by the Geological Survey in 1920.

Maps of the following dam sites on Colorado River and wholly or partly in Arizona are published, together with engineering and geologic discussions, in Water-Supply Paper 556. The references to mileage, except for the two Glen Canyon sites, refer to distances below Lees Ferry as shown on the river-survey maps. Maps of these dam sites and of two additional dam sites, about 18 and 24 miles above Lees Ferry, are also available or can be reproduced in the Geological Survey. The scale of most of the original maps is 1:4800.

Glen Canyon dam site No. 2 (9.6 miles above Lees Ferry). Contour interval, 100 feet. Topography, 900 feet above water surface.

Glen Canyon dam site No. 1 (4 miles above Lees Ferry). Contour interval, 100 feet. Topography, 900 feet above water surface.

Marble Gorge bridge site (mile 5). Contour interval, 20 feet. Topography, 400 feet above water surface.

Marble Gorge power site, alternate dam site No. 1 (Redwall) (mile 29.0). Contour interval, 50 feet. Topography, 300 feet above water surface.

Marble Gorge power site, Redwall dam site (mile 30.0). Contour interval, 10 feet. Topography, 250 feet above water surface.

Marble Gorge power site, alternate dam site No. 2 (Redwall) (mile 32.2). Contour interval, 50 feet. Topography, 1,150 feet above water surface.

Mineral Canyon dam site (mile 77.8). Contour interval, 20 feet. Topography, 480 feet above water surface.

Clear Creek dam site (mile 84.4). Contour interval, 50 feet. Topography, 1,000 feet above water surface.

Granite Wall dam site (mile 85.1). Contour interval, 50 feet. Topography, 1,000 feet above water surface.

Cremation dam site (mile 86.3). Contour interval, 20 feet. Topography, 580 feet above water surface.

Pipe Creek dam site (mile 88.9). Contour intervals, 10 and 50 feet. Topography, 500 feet above water surface.

Ruby Canyon dam site (mile 103.9). Contour interval, 10 feet. Topography, 250 feet above water surface.

Hakatai dam site (mile 110.7). Contour interval, 10 feet. Topography, 250 feet above water surface.

Big Bend dam site (mile 113.3). Contour interval, 20 feet. Topography, 280 feet above water surface.

Specter Chasm dam site (mile 130.0). Contour interval, 50 feet. Topography, 500 feet above water surface.

Havasú dam site (mile 156.6). Contour interval, 20 feet. Topography, 320 feet above water surface.

Prospect dam site (mile 190.1). Contour intervals, 50 feet and 10 feet. Topography, 220 feet above water surface.

Diamond Creek dam sites (miles 225.5 and 225.9). Contour interval, 50 feet. Topography, 700 feet above water surface.

Travertine Canyon dam site (mile 228.6). Contour interval, 50 feet. Topography, 950 feet above water surface.

Bridge Canyon dam site (mile 236.3). Contour interval, 50 feet. Topography, 800 feet above water surface.

Spencer Canyon dam site (mile 246.2). Contour interval, 50 feet. Topography, 700 feet above water surface.

Devils Slide dam site (mile 255.6). Contour interval, 20 feet. Topography, 500 feet above water surface.

Flour Sack Rapids power site (mile 266). Cross section at dam site.

Pierces Ferry dam site (mile 277.3). Contour interval, 10 feet. Topography, 200 feet above water surface.

Grand Wash Canyon dam site (mile 284.2). Contour interval, 50 feet. Topography, 330 feet above water surface.

Hualpai Rapids power site (mile 301.6). Contour interval, 20 feet. Topography, 300 feet above water surface.

Virgin Canyon power site (mile 304.7). Contour interval, 50 feet. Topography, 400 feet above water surface.

Boulder Canyon dam site (mile 334.0). Contour intervals, 10 and 50 feet. Under-water contour interval, 25 feet. Topography, 650 feet above bottom of the river.

Callville dam site (mile 341.8). Contour interval, 50 feet. Topography, 250 feet above water surface.



Upper Black Canyon dam site (mile 354.6). Contour interval, 50 feet. Underwater contour interval, 25 feet. Topography, 600 feet above water surface.

Middle Black Canyon dam site (mile 364.9). Contour interval, 50 feet. Topography, 300 feet above water surface.

Lower Black Canyon dam site (mile 373.9). Contour interval, 20 feet. Topography, 300 feet above water surface.

Eldorado dam site (mile 377.1). Contour interval, 10 feet. Topography, 160 feet above water surface.

Eagle Rock dam site (mile 397). Contour interval, 10 feet. Topography, 150 feet above water surface.

Bulls Head dam site (mile 421). Contour interval, 10 feet. Topography, 140 feet above water surface.

Mohave Canyon flood-control dam site. Elevation at water surface, 427 feet. Contour interval, 10 feet. Topography, 250 feet above water surface.

Parker diversion dam site (mile 524). Contour interval, 25 feet. Topography, 100 feet above water surface.

(a) West Canyon Creek from Utah-Arizona line to 3,900-foot contour, 6 miles (9FE). Plan by United States Geological Survey, 1921. Scale, 1:31,680. Contour interval, 20 feet. Topography, 300 feet above water surface. This creek was surveyed from its mouth in Utah to the 3,900-foot contour in Arizona. It is shown on parts of two sheets of the Colorado River map.

(a) Navajo Creek from mouth to 3,900-foot contour, 30 miles (9FE). Plan by United States Geological Survey 1921. Scale, 1:31,680. Contour interval, 20 feet. Topography detailed. Surveyed in connection with Colorado River. Plan is shown on parts of two sheets of the Colorado River map.

(b) Kaibito Creek from mouth to 3,900-foot contour, 6 miles (9FE). Plan by United States Geological Survey 1921. Scale, 1:31,680. Contour interval, 20 feet. Topography detailed. Surveyed in connection with the survey of Colorado River and Navajo Creek.

(a) Wahweap Creek from mouth to Arizona-Utah line, 5 miles (9FE). Plan by United States Geological Survey, 1921. Scale, 1:31,680. Contour interval, 20 feet. Topography detailed. Surveyed from the mouth in Arizona, to the 3,900-foot contour in Utah. The plan is shown on parts of two sheets of the Colorado River map.

(a) Paria River from mouth upstream 7 miles (9FE). Plan by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 150 to 300 feet above water surface. Surveyed in connection with Colorado River and shown on part of one sheet.

(a) Little Colorado River from mouth upstream 5 miles (9JE). Plan by United States Geological Survey, 1903 and 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 150 to 350 feet above water surface. Surveyed in connection with Colorado River and shown on part of one sheet.

(a) Bright Angel Creek from mouth upstream 2 miles (9HA). Plan by United States Geological Survey, 1903 and 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 50 to 500 feet above water surface. Surveyed in connection with Colorado River and shown on part of one sheet.

(a) Shinumo Creek from mouth upstream 3 miles (9HA). Plan by United States Geological Survey, 1905 and 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 50 to 700 feet above water surface. Surveyed in connection with Colorado River and shown on part of one sheet.

(a) Tapeats Creek from mouth upstream 3 miles (9HA). Plan by United States Geological Survey, 1921 and 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 50 to 800 feet above water surface. Surveyed in connection with Colorado River and shown on part of one sheet.

(a) Kanab Creek from mouth upstream 2 miles (9HB). Plan by United States Geological Survey, 1905, 1921, and 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 50 to 1,000 feet above water surface. Surveyed in connection with Colorado River and shown on part of one sheet.

(a) Havasu Creek from mouth to sec. 11, T. 33 N., R. 4 W., 6 miles (9HC). Plan by United States Geological Survey, 1921 and 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 50 to 1,200 feet above water surface. Surveyed in connection with Colorado River and shown on part of one sheet.

(a) Williams River from mouth to 500-foot contour, 9 miles (9LD). Plan and profile based on surveys in 1902-3. Contour interval, 10 feet. Topography, 10 to 100 feet above water surface. In preparation, to be published by United States Geological Survey in connection with map of Colorado River from Mexican boundary to Black Canyon.

(a) Gila River from mouth of Salt River to east line of T. 4 S., R. 11 E., about 80 miles (9ME). Plan compiled by Corps of Engineers, United States Army. Scale, 1:126,720. Contour interval, 10 feet. Topography shown in places. Published in House Document 791, Sixty-third Congress, second session, "San Carlos irrigation project, Arizona."

(a) Gila River from mouth of Agua Fria River, in sec. 33, T. 1 N., R. 1 W., to T. 3 S., R. 5 E., about 50 miles (9ME). Plan by United States Bureau of Reclamation, 1903-4. Scale, 1:31,680. Contour intervals, 5 and 10 feet to elevation, 1,350 feet; 50 feet above 1,350 feet. Detailed topography. River is shown on three sheets that form parts of a topographic map of the Salt River reclamation project.

(b) Salt River from mouth to mouth of Verde River, 44 miles (9NC). Plan by United States Bureau of Reclamation, 1902-3. Scale, 1:31,680. Contour interval, 5 feet. Detailed topography. River is shown on two sheets that form parts of a topographic map of the Salt River reclamation project.

(b) Salt River from west boundary of San Carlos Indian Reservation to junction of White and Black rivers, 58 miles (9NA). Unpublished plan and profile by Office of Indian Affairs, 1913. Scale, 1:24,000. Contour interval, 50 feet. Topography, 150 to 500 feet above water surface. Map in three sheets.

(b) Salt River from sec. 4, T. 3 N., R. 14 E., to San Carlos Indian Reservation, 38 miles (9NA). Unpublished plan and profile by United States Geological Survey, 1916. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Detailed topography.

(c) Black River from White River to Milk Creek, White Mountain-Apache Indian Reservation boundary, 92 miles (9NA). Unpublished plan and profile by Office of Indian Affairs, 1913. Scale, 1:24,000. Contour interval, 50 feet. Topography, 350 to 500 feet above water surface. Map in four sheets.

(c) White River from Black River to point above Paradise Creek, 58 miles (9NA). Unpublished plan and profile by Office of Indian Affairs, 1913. Scale, 1:24,000. Contour interval, 50 feet. Topography, 150 to 500 feet above water surface. Map in four sheets.

(d) North Fork of White River from Cottonwood Creek upstream 2 miles (9NA). Unpublished plan and profile by Office of Indian Affairs, 1913. Scale, 1:4,800. Contour interval, 10 feet. Topography, 250 feet above water surface. Map in one sheet showing Black Canyon reservoir site.

(d) East Fork of White River from mouth upstream 16 miles (9NA). Unpublished plan and profile by Office of Indian Affairs, 1913. Scale, 1:24,000. Contour interval, 50 feet. Topography, 150 feet above water surface. Map in one sheet.

(c) Verde River from Tangle Creek to sec. 35, T. 13 N., R. 5 E., 47 miles (9NB). Plan and profile by United States Geological Survey, 1916. Scale,

1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 to 250 feet above water surface. Published by United States Geological Survey in three sheets, two plans, and one profile.

For areas in Arizona covered by standard United States Geological Survey topographic maps see Plate 1.

### ARKANSAS

Mississippi River has been surveyed by the Mississippi River Commission for navigation and flood protection from the source to the mouth. The surveys were made at different dates, and the amount of topography shown varies. For copies of the maps application should be made to the Mississippi River Commission, St. Louis, Mo.

(a) White River from Richland Creek in sec. 30, T. 17 N., R. 28 W., to Missouri-Arkansas line in sec. 9, T. 21 N., R. 26 W. (7H). Plan and profile by United States Geological Survey and State of Arkansas, 1909. Scale, 1:24,000. Contour intervals, 10 feet on land and 5 feet on water. Topography, 20 to 350 feet above water surface. In "Water powers of Arkansas," published by Arkansas Geological Survey, 1911.

(a) White River from Missouri-Arkansas line in sec. 15, T. 21 N., R. 19 W., to Buffalo, T. 17 N., R. 14 W., 91 miles (7H). Plan and profile by United States Geological Survey and State of Arkansas, 1909. Scale, 1:24,000. Contour intervals, 10 feet on land and 5 feet on water. Topography, 20 to 180 feet above water surface. In "Water powers of Arkansas," published by Arkansas Geological Survey, 1911.

(b) Buffalo Fork of White River from mouth to sec. 3, T. 15 N., R. 23 W., 130 miles (7H). Plan and profile by United States Geological Survey and State of Arkansas, 1910. Scale, 1:24,000. Contour intervals, 10 feet on land and 5 feet on water. Topography, 20 to 100 feet above water surface. In "Water powers of Arkansas," published by Arkansas Geological Survey, 1911.

(b) North Fork of White River from mouth to sec. 35, T. 20 N., R. 12 W., 18 miles (7H). Plan and profile by United States Geological Survey and State of Arkansas, 1909. Scale, 1:24,000. Contour intervals, 10 feet on land and 5 feet on water. Topography, 40 to 100 feet above water surface. In "Water powers of Arkansas," published by Arkansas Geological Survey, 1911.

(a) Red River.

(b) Ouachita River from point near Hot Springs to T. 1 S., R. 24 W., 57 miles (7P). Plan by Corps of Engineers, United States Army 1909-10. Scale 1:63,360. Contour interval, 50 feet. Detailed topography. Map shows a section of the river through the mountains, where dams are possible. A dam site on the township line between Tps. 1 and 2 S., R. 21 W., is shown on a scale of 1:6,400 with contour interval of 10 feet and topography 300 feet above water surface. Most of this course is covered also by a map on a scale of 1:15,000 published in House Document 588, Sixty-second Congress, second session.

For areas in Arkansas covered by standard United States Geological Survey topographic maps see Plate 1.

### CALIFORNIA

Mojave River from sec. 6, T. 7 N., R. 4 W., to sec. 6, T. 2 N., R. 4 W., 35 miles (10NE). Plan by office of Public Roads, United States Department of Agriculture, and California State Department of Engineering. Scale, 1:82,200 (0.77 inch=1 mile). Contour interval, 50 feet. Topography is shown over a wide area in connection with proposed irrigation. Published in a report on the utilization of Mojave River for irrigation in Victor Valley, Calif. (California Dept. Engineering Bull. 5, 1918.)



Salton Sea basin (9LC). Survey completed by United States Geological Survey in 1925. In preparation.

Colorado River from Mexican boundary to California-Nevada line (9LA, 9LB, 9LC). Plan and profile by United States Geological Survey, based on surveys in 1902-3 and 1920. Scale, 1:31,680. Contour intervals, 10 to 50 feet on land and 5 feet on water. Detailed topography. In preparation, to be published in 20 to 25 sheets. Four preliminary sheets showing the river from 33° N. to 34° N. (106 miles) were published by the United States Geological Survey in 1920. For surveys of Colorado River above the California-Nevada line see under Arizona, Utah, and Colorado.

Mojave Canyon dam site. See Arizona.

Parker dam site. See Arizona.

San Joaquin River from Friant, in sec. 7, T. 11 S., R. 21 E., to forks in T. 5 S., R. 25 E., 67 miles (11FG). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 150 feet above water surface. Published in four sheets by State Water Commission of California, 1914.

San Joaquin River from Southern Pacific Railroad crossing in sec. 31, T. 12 S., R. 19 E., to Friant, 19 miles (11FH). Plan by United States Geological Survey, 1916. Scale, 1:31,680. Contour interval, 5 feet. Topography, 50 to 100 feet above water surface. Published in two sheets by State of California. This is a flat section of the river. Many elevations are shown in red on the map.

(a) North Fork of San Joaquin River from mouth to Iron Creek, 8 miles (11FF). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 200 feet above water surface. Published in one sheet by State Water Commission of California, 1914.

(a) Middle Fork of San Joaquin River from mouth to Fish Creek, 14 miles (11FF). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 400 feet above water surface. Published in two sheets by State Water Commission of California, 1914.

(a) South Fork of San Joaquin River from mouth to Blaney Hot Springs, 35 miles (11FF). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 100 feet above water surface. Published in three sheets by State Water Commission of California, 1914.

(a) Kings River. A stretch of Kings River is mapped on the regular topographic maps on a scale of 1:31,680 with a 5-foot contour interval. Such sheets, in general, are not listed as river surveys in this compilation, although for the stretch of river covered they give the same information as a river survey.

(a) Tuolumne River from La Grange, in sec. 20, T. 3 S., R. 14 E., to sec. 21, T. 1 N., R. 21 E., 74 miles (11FM, 11FN). Plan and profile by United States Geological Survey, 1899 and 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 feet above water surface. Published in six sheets in report of State Water Commission of California for 1912.

(b) Woods Creek from mouth to sec. 2, T. 1 S., R. 14 E., 3 miles (11FN). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 75 feet above water surface. Mapped in connection with the survey of Tuolumne River. Plan and profile are shown on one sheet of Tuolumne River map.

(a) Stanislaus River from Knights Ferry, in sec. 28, T. 1 S., R. 12 E., to Robinson Ferry, in sec. 24, T. 2 N., R. 13 E., 24 miles (11FP). Plan and profile by

United States Geological Survey, 1914. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 feet above water surface. In preparation, to be published in two sheets, one plan and one profile.

(a) Stanislaus River (including Middle Fork) from mouth to junction of Clark Fork and Relief Creek, 128 miles (11FO, 11FP). Unpublished profile compiled by California Power Board, 1922-23. Scale, 1 inch=11½ miles for main stream and 1 inch=7 miles for Middle Fork. Map is in files of Federal Power Commission.

(a) Middle Fork of Stanislaus River, Beardsley Flat reservoir (11FO). Unpublished plan by California Power Board, 1922. Scale, 1:25,000. Two contours outlining a reservoir of 30,000 and 60,000 acre-feet capacity. Map is in files of Federal Power Commission.

(a) Stanislaus River, Robinson Ferry dam site at the bend, 2 miles above Robinsons Ferry (11FP). Scale, 1:3,600. Contour interval, 10 feet. Topography, 350 feet above water surface. Map is in files of Federal Power Commission.

(a) Stanislaus River, Melones dam site, one-fourth mile below mouth of Mormon Creek, in sec. 11, T. 1 N., R. 13 E. (11FP). Unpublished plan compiled by California Power Board, 1922. Scale, 1:1,260. Contour interval, 5 feet. Topography, 250 feet above water surface. Map is in files of Federal Power Commission.

(a) Stanislaus River, Black Creek dam site, about 1 mile below the mouth of Black Creek, in secs. 1 and 11, T. 1 S., R. 12 E. (11FP). Unpublished plan by California Power Board, 1922. Scale, 1:3,600. Contour interval, 10 feet. Topography, 170 feet above water surface. Map is in files of Federal Power Commission.

(b) Relief Creek from mouth upstream 12 miles (11FO). Unpublished profile by California Power Board, 1922. Scale, 1 inch=7 miles. Map is in files of Federal Power Commission.

(c) East Fork of Relief Creek from mouth to source, 11 miles (11FO). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=7 miles. Map is in files of Federal Power Commission.

(b) Clark Fork, from mouth upstream 5½ miles (11FO). Unpublished profile by California Power Board, 1922. Scale, 1 inch=7 miles. Map is in files of Federal Power Commission.

(b) North Fork of Stanislaus River from mouth to Silver Valley, 40 miles (11FO). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=7 miles. Map is in files of Federal Power Commission.

(b) North Fork of Stanislaus River, Ramsey reservoir site, in secs. 12, 13, 14, and 23, T. 6 N., R. 16 E. (11FO). Unpublished plan by California Power Board, 1922. Scale, 1:13,300. Contour interval, 10 feet. Topography, 170 feet above water surface at dam site. Map is in files of Federal Power Commission.

(c) Highland Creek from mouth upstream 18 miles (11FO). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=7 miles. Map is in files of Federal Power Commission.

(c) Highland Creek, Spicer Meadows dam site, at elevation 6,380 feet. Unpublished plan by California Power Board, 1922. Scale, 1:1,800. Contour interval, 5 feet. Topography, 60 feet above water surface. Map is in files of Federal Power Commission.

(b) South Fork of Stanislaus River from mouth upstream 40 miles (11FO). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=7 miles. Map is in files of Federal Power Commission.

(a) Mokelumne River from Woodridge to sec. 34, T. 5 N., R. 5 E., 14 miles (11DK). Plan and profile by Corps of Engineers, United States Army, 1913.

Scale, 1:7,200. Contour interval, 2 feet. Very little topography. This is a survey for navigation, published in House Document 1160, Sixty-third Congress, second session.

Sacramento River from sec. 27, T. 28 N., R. 3 W., to sec. 15, T. 29 N., R. 3 W., 20 miles (11BM). Unpublished plan by United States Geological Survey, 1904. Scale, 1:24,000. Contour interval, 25 feet. Topography, 25 to 75 feet above water surface. Map shows Iron Canyon reservoir site.

Sacramento River from mouth of Feather River to Chico Landing, near Chico, 120 miles (11BN, 11BP). Plan and profile by Corps of Engineers, United States Army, 1909. Profile extends from Sacramento to Chico Landing. Survey was made primarily for navigation, and soundings are shown at frequent intervals. A few contours are shown. Scale, 1:4,800. Contour interval, 2 feet. Map is in 30 sheets, published in House Document 76, Sixty-second Congress, first session, entitled "Sacramento River, Calif., from Sacramento to Red Bluff."

(a) Pit River from sec. 9, T. 41 N., R. 9 E., to sec. 14, T. 42 N., R. 11 E., 25 miles (11BD). Unpublished plan by United States Bureau of Reclamation, 1908. Scale, 1:31,680. Contour interval, 10 feet. Topography, 60 feet above water surface. This is the Warm Springs Valley reservoir site.

(a) Pit River from sec. 27, T. 37 N., R. 7 E., to sec. 28, T. 41 N., R. 8 E., 40 miles (11BD). Plan by United States Bureau of Reclamation, 1904. Scale, 1:31,680. Contour interval, 10 feet. Topography, 90 feet above water surface. This section of Pit River constitutes the Big Valley reservoir site, and the map is unpublished on this scale. It is published on a scale of 1:126,720 and contour interval of 20 feet in the report of the State Water Commission of California for 1912. The dam site in T. 37 N., R. 7 E., is mapped on a scale of 1:1,200 with a contour interval of 5 feet, to a height of 100 feet above the water surface. This map is unpublished.

(a) Pit River from mouth to sec. 22, T. 37 N., R. 7 E., 123 miles (11BD, 11BE). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in eight sheets in report of the State Water Commission of California for 1912.

(b) South Fork of Pit River from sec. 10, T. 39 N., R. 14 E., to sec. 1, T. 39 N., R. 14 E., 3 miles (11BC). Plan by United States Bureau of Reclamation. Scale, 1:34,600 (1.04 inches=3,000 feet). Contour interval, 10 feet. Topography, 100 feet above water surface at dam site. Scale of map of dam site, 1:6,860. This is the Jess Valley reservoir site. Published in report on Pit River basin by United States Bureau of Reclamation and State of California in 1915.

(b) Ash Creek from sec. 21, T. 39 N., R. 9 E., to sec. 2, T. 39 N., R. 9 E., 4 miles (11BD). Plan by United States Geological Survey and United States Bureau of Reclamation, 1904. Scale, 1:15,840. Contour interval, 10 feet. Topography, 80 feet above water surface. This is the Round Valley reservoir site. Published on a scale of 1:42,240 in a report on Pit River basin by the United States Bureau of Reclamation and State of California. The map of the dam site is published in the same report on a scale of 1:6,000.

(b) McCloud River from mouth to sec. 7, T. 39 N., R. 1 W., 50 miles (11BF). Profile. Scale, 1 inch=2 miles. This unpublished profile of the river is based on United States Geological Survey topographic maps, surveys by private engineers, and aneroid readings.

(a) Clear Creek, Whiskeytown dam site, in secs. 27 and 28, T. 32 N., R. 6 W. (11BH). Unpublished plan by California Power Board, 1922. Scale, 1:900. Contour intervals, 50 and 100 feet. Topography, 250 feet above water surface. Map is in files of Federal Power Commission.



(a) Feather River.

(b) Middle Fork of Feather River from mouth, in sec. 25, T. 20 N., R. 4 E., to Nelson Point, 56 miles (11CE). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 5 and 100 feet. Topography, 100 to 400 feet above water surface. Map is in four sheets, published in report of the State Water Commission of California for 1912.

(b) Yuba River from dam of California Débris Commission to Smartville Narrows, 4 miles (11CJ). Unpublished plan by United States Geological Survey, 1905. Scale, 1:6,000. Contour interval, 2 feet. Detailed topography. This survey was made in connection with the study of the transportation of debris by running water. Plan is in two sheets.

(a) American River from sec. 35, T. 10 N., R. 7 E., to Middle Fork, sec. 1, T. 12 N., R. 8 E., 24 miles (11DH, 11DF). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in two sheets in report of the State Water Commission of California for 1912.

(b) North Fork of American River from mouth, in sec. 1, T. 12 N., R. 8 E., to sec. 8, T. 16 N., R. 15 E., 64 miles (11DD). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in five sheets in report of the State Water Commission of California for 1912.

(b) Middle Fork of American River from mouth, in sec. 1, T. 12 N., R. 8 E., to sec. 28, T. 15 N., R. 14 E., 50 miles (11DE). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in three sheets in report of State Water Commission of California for 1912.

(b) Middle Fork of American River from mouth to French Meadows reservoir site at elevation 5,140 feet, 39 miles (11DE, 11DF). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=8½ miles. Map is in files of Federal Power Commission.

(c) Rubicon River from mouth to elevation 6,605 feet, 49 miles (11DE). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=8½ miles. Map is in files of Federal Power Commission.

(d) Little South Fork of Rubicon River from mouth to point 5 miles above Gerla Creek, 15 miles (11DE). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=8½ miles. Map is in files of Federal Power Commission.

(e) Gerla Creek from mouth 7 miles upstream (11DE). Unpublished profile compiled by California Power Board, 1922. Scale 1 inch=8½ miles. Map is in files of Federal Power Commission.

(d) Pilot Creek from mouth upstream 16 miles (11DE). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=8½ miles. Map is in files of Federal Power Commission.

(b) South Fork of American River from mouth, in sec. 19, T. 10 N., R. 8 E., to sec. 24, T. 11 N., R. 12 E., 49 miles (11DG). Plan and profile by United States Geological Survey 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in three sheets in report of State Water Commission of California for 1912.

(b) South Fork of American River from a point 5 miles below Coloma power house, upstream 43 miles (11DG). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=8½ miles. Map is in files of Federal Power Commission.

(c) Echo Lake reservoir site, in secs. 35 and 36, T. 12 N., R. 17 E., and secs. 1 and 2, T. 11 N., R. 17 E. (11DG). Plan by engineers of the city of Sacramento. Scale, 1:11,800. Contour interval, 10 feet. Dam site is shown on a scale of 1:2,180 and contour interval of 10 feet. Published in 1916 by city commission of Sacramento in a report on possible sources of water supply for the city.

(c) Silver Fork.

(d) Twin Lakes reservoir site, in secs. 13 and 24, T. 10 N., R. 17 E., secs. 17, 18, 19, 20, and 30, T. 10 N., R. 18 E. (11DG). Plan by engineers of the city of Sacramento. Scale, 1:14,300. Contour interval, 5 feet. Dam sites are shown on scales of 1:2,500 and 1:1,285 and contour interval of 2 feet. Published in 1916 by city commission of Sacramento in a report on possible sources of water supply for the city.

(d) Silver Lake reservoir site, in sec. 5, T. 9 N., R. 17 E., and sec. 32, T. 10 N., R. 17 E. (11DG). Plan by engineers of city of Sacramento. Scale, 1:12,600. Contour interval, 10 feet. Dam site is shown on a scale of 1:2,500 and contour interval of 2 feet. Published in 1916 by city commission of Sacramento in a report on possible sources of water supply for the city.

(c) Alder Creek reservoir site from dam site in sec. 8, T. 10 N., R. 15 E., upstream about 2 miles (11DG). Plan by engineers of the city of Sacramento. Scale, 1:10,200. Contour interval, 10 feet. Topography, 150 feet above water surface at dam site. Published in 1916 by the city commission of Sacramento in a report on possible sources of water supply for the city.

(c) Silver Creek from mouth to Tells Creek, 11 miles (11DG). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=8½ miles. Map is in files of Federal Power Commission.

Eel River.

(a) Middle Eel River from Dos Rios, in sec. 31, T. 22 N., R. 13 W., to junction of North Fork and Middle Fork of Middle Fork, 30 miles (11EC, 11ED). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 200 to 450 feet above water surface. Map in preparation.

(b) Mill Creek. Round Valley to an elevation of 1,550 feet (11ED). Plan by United States Geological Survey, 1925. Scale, 1:31,680. Contour interval, 25 feet. Map in preparation.

Klamath River from sec. 13, T. 13 N., R. 1 E., to sec. 28, T. 13 N., R. 2 E., 5 miles (11AL). Plan and profile by United States Geological Survey, 1915 and 1921. Scale, 1:48,000. Topography, 25 to 225 feet above water surface. Contour intervals, 25 feet on land and 5 feet on water. In preparation.

Klamath River from sec. 12, T. 10 N., R. 3 E., to Oregon-California boundary, 177 miles (11AL, 11AJ, 11AG, 11AE). Plan and profile by United States Geological Survey, 1913 and 1923. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 to 400 feet above water surface. In preparation. To be printed in ten sheets; six plans and four profiles. The map also covers 25 miles in Oregon between Keno, Oreg., and the boundary. Three dam sites in Oregon were surveyed. (See Oregon.)

Klamath River. Jackman dam site, in sec. 12 or 13, T. 10 N., R. 3 E., Humboldt meridian (11AL). Unpublished plan compiled by California Power Board, 1922. Scale, 1:1,800. Contour interval, 10 feet. Topography, 180 feet above water surface. Map is in files of Federal Power Commission.

The following dam sites were surveyed in 1915, 1921, and 1923, and the maps are published in three sheets by United States Geological Survey on a scale of 1:2,400, with contour interval of 10 feet. The mileage refers to the Klamath River maps.

Tully Rapids site, at mile 0.8, to an elevation of 170 feet above the water surface.

Weitchpec site, at mile 9, to an elevation of 120 feet above water surface.

Slate Creek site, at mile 15.7, to an elevation of 245 feet above water surface.

Red Cap site, at mile 19.3, to an elevation of 260 feet above the water surface.

Shasta River site, at mile 143.2, to an elevation of 190 feet above the water surface.

Brush Creek site, at mile 156.8 to an elevation of 190 feet above the water surface.

Jenny Creek site, at mile 162.1, to an elevation of 120 feet above the water surface.

Fall Creek site, at mile 164.5, to an elevation of 90 feet above the water surface.

(a) Scott River from mouth to sec. 28, T. 44 N., R. 10 W., 22 miles (11AH). Plan and profile by United States Geological Survey, 1914. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 to 400 feet above water surface. In preparation. To be printed in two sheets; one plan and one profile.

(a) Salmon River from mouth to forks, sec. 13, T. 10 N., R. 7 E., 19 miles (11AK). Plan and profile by United States Geological Survey, 1914-15. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 125 to 400 feet above water surface. In preparation. Map including North and South Forks will be printed in four sheets; two plans and two profiles.

(b) North Fork of Salmon River from mouth to sec. 19, T. 40 N., R. 10 W., 21 miles (11AK). Plan and profile by United States Geological Survey, 1914-15. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. In preparation. See also above under Salmon River.

(b) South Fork of Salmon River from mouth, in sec. 13, T. 10 N., R. 7 E., to Grizzly Creek, sec. 18, T. 37 N., R. 10 W., 30 miles (11AK). Plan and profile by United States Geological Survey 1914-15. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 400 feet above water surface. In preparation. See also above under Salmon River.

(a) Trinity River from mouth to sec. 29, T. 6 N., R. 6 E., 39 miles (11AN). Plan and profile by United States Geological Survey, 1921. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 200 to 300 feet above water surface. In preparation. To be printed in three sheets; one plan and two profiles. Horse Linto Creek dam site, at mile 20, was surveyed to an elevation of 240 feet above the water surface by the United States Geological Survey. Scale, 1:2,400. Contour interval, 10 feet. Map of dam site is printed on a sheet with dam sites on Klamath River.

(a) Trinity River from mouth to a point about 20 miles above Lewiston, 110 miles (11AM, 11AN). Unpublished profile compiled by California Power Board, 1922. Scale, 1 inch=15 miles. Map is in files of Federal Power Commission.

Unpublished maps of the following dam sites on Trinity River were prepared by the California Power Board, 1922, and are in the files of the Federal Power Commission:

Fairview dam site, 6 miles above Lewiston, in sec. 10, T. 34 N., R. 8 W. Scale, 1:2,740. Contour interval, 50 feet. Topography, 350 feet above water surface.

Lewiston dam site, in sec. 8, T. 33 N., R. 8 W. Scale, 1:2,800. Contour interval, 25 feet. Topography, 175 feet above water surface.

Steiners Flat dam site, in sec. 34, T. 33 N., R. 10 W. Scale, 1:2,400. Contour intervals, 10 and 100 feet. Topography, 1,500 feet above water surface.

Helena dam site, in sec. 32, T. 34 N., R. 11 W. Scale, 1:3,600. Contour interval, 10 feet. Topography, 370 feet above water surface.



Swede dam site, in sec. 23, T. 5 N., R. 7 E. Scale, 1:2,400. Contour interval, 100 feet. Topography, 2,000 feet above water surface.

Ironside Mountain dam site, in sec. 35, T. 6 N., R. 6 E. Scale, 1:1,800. Contour interval, 10 feet. Topography, 270 feet above water surface.

Salyer dam site, sec. in 19 T. 6 N., R. 6 E. Scale, 1:1800. Contour interval, 10 feet. Topography, 180 feet above water surface.

Beaver dam site, 5 miles above mouth of Trinity River, in sec. 35, T. 9 N., R. 4 E. Scale, 1:1,800. Contour interval, 10 feet. Topography, 180 feet above water surface.

(b) South Fork of Trinity River from mouth to sec. 26, T. 6 N., R. 5 E., 5 miles (11AO). Plan and profile by United States Geological Survey, 1921. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 75 to 200 feet above water surface. In preparation. To be printed on parts of two sheets; one plan and one profile.

(b) South Fork of Trinity River: Hyampom dam site 18 miles above the mouth in T. 3 N., R. 6 E. Unpublished plan by California Power Board, 1922. Scale, 1:3,600. Contour interval, 10 feet. Topography, 350 feet above water surface. Map is in the files of the Federal Power Commission.

Smith River (12RE).

(a) South Fork of Smith River from sec. 30, T. 16 N., R. 2 E., to sec. 33, T. 15 N., R. 3 E., 16 miles (12RE). Plan and profile by United States Geological Survey, 1914-15. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 250 feet above water surface. Map in two sheets; one plan and one profile. In preparation.

A number of small-scale maps of river basins in California and diagrams showing the schemes of power development are published in Water-Supply Paper 493, "Hydroelectric power systems of California and their extensions into Oregon and Nevada."

A large section of California is covered by standard topographic maps on scales of 1:31,680 and 1:62,500, with various contour intervals. (See pl. 1.)

## COLORADO

Mississippi River basin.

(a) Missouri River.

(b) North Platte River (head of Platte River) from Wyoming-Colorado line, in sec. 23, T. 12 N., R. 80 W., to sec. 12, T. 80 N., R. 81 W., 25 miles (6NA, 6ND). Unpublished plan of North Park Reservoir site. Scale, 1:63,360. No topography.

(b) Platte River.

(c) South Platte River, including South Fork, from Eagle Rock, sec. 6, T. 8 S., R. 69 W., to sec. 21, T. 12 S., R. 76 W., 97 miles (6OA, 6OC). Unpublished plan and profile by United States Geological Survey, 1922. Scale, 1:31,680. Contour interval, 50 feet. Topography, 300 to 500 feet above water surface. Map is in three sheets.

(c) South Platte River from line between Tps. 6 and 7 S., R. 69 W., to North Fork, 7 miles (6OE). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on one sheet.

(d) North Fork of South Platte River from mouth to Kanosha Creek, 43 miles (6OD). Unpublished plan and profile by United States Geological Survey, 1922. Scale, 1:31,680. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on one sheet.

(e) Geneva Creek from mouth to sec. 13, T. 6 S., R. 75 W., 7 miles (6OD). Unpublished plan and profile by United States Geological Survey, 1922. Scale,

1:31,680. Contour interval, 50 feet. Topography, 150 to 250 feet above water surface. Plan is on one sheet with part of North Fork of South Platte River.

(d) Clear Creek, sec. 33, T. 3 S., R. 74 W., 1 mile (60F). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:6,000. Contour intervals, 20 and 100 feet. Detailed topography.

(d) Clear Creek including Middle Fork from sec. 36, T. 3 S., R. 71 W., to sec. 17, T. 4 S., R. 75 W., 37 miles (60F). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on one sheet.

(e) South Fork of Clear Creek from mouth to sec. 29, T. 4 S., R. 74 W., 2 miles (60F). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 200 to 300 feet above water surface. Plan is on part of one sheet.

(e) Chicago Creek from mouth to sec. 24, T. 4 S., R. 74 W., 7 miles (60F). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on part of one sheet.

(e) North Fork of Clear Creek from mouth to sec. 34, T. 2 S., R. 73 W., 8 miles (60F). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on part of one sheet.

(d) St. Vrain Creek (60J).

(e) North St. Vrain Creek from sec. 17, T. 3 N., R. 70 W., to sec. 19, T. 3 N., R. 72 W., 20 miles (60J). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on part of one sheet.

(e) South St. Vrain Creek from sec. 17, T. 3 N., R. 70 W., to sec. 30, T. 2 N., R. 72 W., 19 miles (60J). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on part of one sheet.

(f) Middle St. Vrain Creek from mouth to sec. 18, T. 2 N., R. 72 W., 8 miles (60J). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on part of one sheet.

(e) Lefthand Creek from sec. 23, T. 2 N., R. 71 W., to sec. 10, T. 1 N., R. 72 W., 12 miles (60J). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on part of one sheet.

(f) James Creek from mouth to sec. 31, T. 2 N., R. 72 W., 11 miles (60J). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on part of one sheet.

(e) Boulder Creek (60H).

(f) Middle Boulder Creek from Boulder, in T. 1 N., R. 71 W., to sec. 18, T. 1 S., R. 73 W., 23 miles (60H). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Mapped with South Boulder Creek.

(f) South Boulder Creek from sec. 26, T. 1 S., R. 71 W., to sec. 6, T. 2 S., R. 73 W., 26 miles (60H). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan of both Middle Fork and South Fork of Boulder Creek on one sheet.

(d) Thompson River from sec. 12, T. 5 N., R. 70 W., to sec. 26, T. 5 N., R. 73 W., 30 miles (60G). Unpublished plan and profile by United States Geo-

logical Survey, 1923. Scale, 1: 63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan on one sheet.

(d) Cache La Poudre River from sec. 4, T. 8 N., R. 70 W., to sec. 34, T. 8 N., R. 75 W., 50 miles (6OK). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1: 63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan on one sheet.

(a) Arkansas River from sec. 15, T. 8 S., R. 79 W., to sec. 4, T. 49 N., R. 9 E., 77 miles (7AA, 7AB). Unpublished plan and profile by United States Geological Survey, 1921. Scale, 1: 63,360. Contour interval, 50 feet. Topography, 250 to 400 feet above water surface. Plan on two sheets.

(a) Arkansas River from sec. 4, T. 49 N., R. 9 E., to sec. 32, T. 18 S., R. 70 W., 55 miles (7AB, 7AC). Unpublished plan and profile by United States Geological Survey, 1921. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 250 to 500 feet above water surface. Plan on one sheet.

(b) Tennessee Fork from mouth to sec. 22, T. 8 S., R. 80 W., 6 miles (7AA). Unpublished plan and profile by United States Geological Survey, 1921. Scale, 1: 63,360. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan on part of one sheet.

(b) Halfmoon Creek from mouth to sec. 19, T. 10 S., R. 81 W., 10 miles (7AA). Unpublished plan and profile by United States Geological Survey, 1922. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 200 to 2,000 feet above water surface. Plan and profile on one sheet.

(b) Lake Creek from sec. 24, T. 11 S., R. 81 W., to sec. 3, T. 11 S., R. 82 W., 20 miles (7AA). Unpublished plan and profile by United States Geological Survey, 1922. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 500 to 800 feet above water surface. Plan and profile on two sheets.

(b) Cottonweed Creek from mouth to sec. 8, T. 15 S., R. 80 W., 17 miles (7AA). Unpublished plan and profile by United States Geological Survey, 1922. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 50 to 500 feet above water surface. Plan and profile on one sheet.

(b) Chalk Creek from mouth to sec. 36, T. 51 N., R. 6 E., 24 miles (7AB). Unpublished plan and profile by United States Geological Survey, 1922. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 50 to 500 feet above water surface. Plan and profile on one sheet.

(b) South Fork of Arkansas River from mouth to sec. 5, T. 49 N., R. 6 E., 21 miles (7AB). Unpublished plan and profile by United States Geological Survey, 1922. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 200 to 600 feet above water surface. Plan and profile on one sheet.

(b) Grape Creek from sec. 36, T. 21 S., R. 73 W., to sec. 6, T. 19 S., R. 70 W., 29 miles (7AD). Unpublished plan and profile by United States Geological Survey, 1921. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 150 to 400 feet above water surface. Plan on one sheet.

(b) Beaver Creek from sec. 16, T. 17 S., R. 68 W., to forks, in sec. 5, T. 17 S., R. 68 W., 2 miles (7AD). Unpublished plan and profile by United States Geological Survey, 1921. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 1,000 feet above water surface.

(c) East Fork of Beaver Creek from mouth to sec. 15, T. 16 S., R. 68 W., 4 miles (7AD). Unpublished plan and profile by United States Geological Survey, 1921. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 200 to 1,000 feet above water surface.

(c) West Fork of Beaver Creek from mouth to sec. 36, T. 15 S., R. 69 W., 9 miles (7AD). Unpublished plan and profile by United States Geological Survey, 1921. Scale, 1: 31,680. Contour interval, 50 feet. Topography, 50 to 800 feet above water surface.

Colorado River from Grand Junction to Colorado-Utah line, 40 miles (9DM). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 600 feet above water surface. Published in Water-Supply Paper 396. This is part of a map of Colorado River extending from Grand junction, Colo., to the mouth of Green River in Utah. See under Utah.

Colorado River from Kremling in sec. 18, T. 1 N., R. 80 W., to Glenwood Springs, 90 miles (9DC, 9DE). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 200 to 400 feet above water surface. Published in Water-Supply Paper 396.

Colorado River, Kremling reservoir site (9DA). Plan by United States Bureau of Reclamation, 1905. Scale, 1:48,000. Contour interval, 20 feet. Topography, 200 feet above water surface at dam site. Dam sites in Gore Canyon immediately below the reservoir are shown on a scale of 1:2,400 and contour interval of 10 feet, with topography to the same height as the reservoir survey.

(a) Blue River from mouth to Breckinridge, 58 miles (9DB). Unpublished plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour interval, 50 feet. Topography, 300 feet above water surface. Plan is on one sheet. Green Mountain reservoir site, with dam in sec. 10, T. 1 S., R. 80 W., is shown on a separate sheet on a scale of 1:31,680 with 50-foot contour interval.

(a) Eagle River from mouth to sec. 30, T. 6 S., R. 80 W., 52 miles (9DD). Unpublished plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour interval, 50 feet. Topography, 200 to 600 feet above water surface. Plan is on one sheet.

(a) Roaring Fork River from mouth to Snowmass, sec. 27, T. 8 S., R. 86 W., 29 miles (9DF). Unpublished plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour interval, 50 feet. Topography, 200 to 300 feet above water surface. Plan is on one sheet.

(a) Gunnison River from Cimarron Creek to Gunnison, sec. 2, T. 49 N., R. 1 W., 39 miles (9EC). Plan and profile by United States Geological Survey, 1909. Scale, 1:31,680. No topography. Published in Water-Supply Paper 396.

(a) Dolores River from Paradox Valley, sec. 31, T. 47 N., R. 18 W., to Colorado-Utah line, 55 miles (9DL, 9DK). Unpublished plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour interval, 50 feet. Topography, 200 to 800 feet above water surface. Plan of river from mouth in Utah to Paradox Valley in Colorado is on one sheet.

(b) San Miguel River from mouth to Sawpit, 66 miles (9DK). Unpublished plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour interval, 50 feet. Topography, 250 to 500 feet above water surface. Plan is on one sheet.

(a) Green River (all of river within State), 41 miles (9BA, 9AK). Plan and profile by United States Geological Survey and United States Bureau of Reclamation, 1904 and 1922. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 to 300 feet above water surface. Published by United States Geological Survey in three sheets, two plans and one profile, being part of a map of Green River from Green River, Utah, to Green River, Wyo., in 16 sheets, 10 plans and 6 profiles.

(a) Yampa River from Craig to Sidney, 50 miles (9CA). Unpublished plan and profile. Scale, 1:126,720. This is part of the fire map of the Routt National Forest with a small-scale profile attached.

(a) Yampa River from sec. 32, T. 6 N., R. 93 W., to Craig, T. 6 N., R. 90 W., 28 miles (9CB). Unpublished plan and profile. Scale, 1:126,720. No topog-

raphy. This section is shown on part of an old white-print map, evidently a compilation. It shows the plan of the river without contours and a small-scale profile.

(a) Yampa River from mouth to sec. 32, T. 6 N., R. 93 W., 111 miles (9CB, 9CD). Plan and profile by United States Geological Survey, 1922. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 100 to 200 feet above water surface. Published by United States Geological Survey in five sheets, three plans and two profiles.

(b) Little Snake River from mouth to sec. 9, T. 7 N., R. 98 W., 12 miles (9CC). Plan by United States Geological Survey, 1922. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 20 to 100 feet above water surface. Published on part of one of the Yampa River sheets.

For areas in Colorado covered by standard United States Geological Survey topographic maps see Plate 1.

### CONNECTICUT

Connecticut River from Hartford 3 miles upstream and from Windsor Locks to Thompsonville, 10 miles (1GP, 1GN). Plan and profile by Corps of Engineers, United States Army, 1903 and 1914. Scale, 1:7,200. Contour interval, 5 feet. Topography, 20 to 80 feet above water surface. Published in House Document 417, Sixty-fourth Congress, first session. The river has been surveyed for navigation by the United States Engineer Corps throughout its length in Connecticut. Maps of two short sections are published in House Document 417, Sixty-fourth Congress, first session. A profile of the river on a small scale from Hartford, Conn., to Holyoke, Mass., is given in the same report.

Connecticut is covered by standard United States Geological Survey topographic maps, scale, 1:62,500; contour interval, 20 feet. (See pl. 1.)

### DELAWARE

Delaware is covered by standard United States Geological Survey topographic maps; scales, 1:62,500 and 1:125,000; contour intervals, 10 and 20 feet. (See pl. 1.)

### DISTRICT OF COLUMBIA

Potomac River. See Virginia.

The District of Columbia and immediate vicinity is covered by a standard United States Geological Survey topographic map, scale, 1:31,680; contour interval, 10 feet. (See pl. 1.)

### FLORIDA

The northeastern part of Florida is covered by standard United States Geological Survey topographic maps, scale, 1:62,500; contour interval, 10 feet. (See pl. 1.)

### GEORGIA

Chattooga River from Tallulah River to Russell Bridge, S. C., 30 miles (2JB). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 20 to 70 feet above water surface. Profile and elevations are given in Water-Supply Paper 115, and elevations in Water-Supply Paper 197.

Tugaloo River from mouth of Tallulah River to mouth of Seneca River, 46 miles (2JB). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 10 to 70 feet above water surface. Map is a continuation of the map of Tallulah River and

is continued on the map of Savannah River. Elevations are given in Water-Supply Paper 197.

Savannah River from Tugaloo River to Broad River, 42 miles (2JC). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 10 to 70 feet above water surface. Elevations for this section of Savannah River are given in Water-Supply Paper 197.

Savannah River from Broad River to Augusta, 54 miles (2JF, 2JH, 2JJ). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:63,360. Map shows plan and profile but practically no contours. Elevations for this section of Savannah River are given in Water-Supply Paper 197.

(a) Tallulah River from mouth to Persimmon Creek, 36 miles (2JB). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 20 to 70 feet above water surface. Profile and elevations are given in Water-Supply Paper 115, and elevations in Water-Supply Paper 197.

(a) Broad River from mouth to Harrison Bridge, near Carnesville, 66 miles (2JD, 2JE). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 20 to 50 feet above water surface. Profile is given in Water-Supply Paper 115, and elevations in Water-Supply Paper 197.

Altamaha River.

(a) Ocmulgee River.

(b) South River from Macon to Constitution, 107 miles (2KE, 2KF). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 25 to 50 feet above water surface. Map shows plan and profile. The profile is given in Water-Supply Paper 115, and elevations in Water-Supply Paper 197. A condensed plan and profile is published in the Twenty-second Annual Report of the United States Geological Survey, pages 167-172.

(b) Yellow River from mouth to Yellow River (village), 56 miles (2KE). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, about 50 feet above water surface. A small-scale profile is given in Water-Supply Paper 115, and elevations in Water-Supply Paper 197.

(b) Alcovy River from mouth to Starrsville, 18 miles (2KE). Plan and profile by United States Geological Survey, 1903. Scale, 1:22,500. Contour interval, 10 feet. Topography, about 50 feet above water surface. A profile is given in Water-Supply Paper 115, and elevations in Water-Supply Paper 197.

(b) Towaliga River from mouth to High Falls Bridge, 22 miles (2KF). Unpublished profile by United States Geological Survey, 1903. The contour map of Towaliga River was destroyed by fire. There is, however, a profile and a sketched plan with no contours. Elevations are given in Water-Supply Paper 197.

(b) Oconee River from Milledgeville to junction of North Fork and Middle Fork, 89 miles (2KA, 2KB, 2KC). Unpublished plan and profile by Corps of Engineers, United States Army, and United States Geological Survey, 1885 and 1902. Scale 1:63,360. See also Middle Fork of Oconee River. Elevations are given in Water-Supply Paper 197.

(b) Middle Fork of Oconee River from junction with North Fork to railroad bridge near Mulberry, 40 miles (2KA). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. Elevations are given in Water-Supply Paper 197.



Oconee River and Middle Fork. Map shows profile and projected plan with no contours. It is based on a survey in 1885 from Milledgeville to the mouth of Apalachee River by the Corps of Engineers, United States Army, and a survey in 1902 of the remaining distance by the United States Geological Survey.

(c) Mulberry River from mouth to Mulberry Forks, 18 miles (2KA). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. Map is a sketched plan projected from the profile. Elevations are given in Water-Supply Paper 197.

(b) Apalachee River from mouth to High Shoals Bridge, 32 miles (2KA). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:63,360. Map shows profile and sketched plan but no contours. Elevations are given in Water-Supply Paper 197.

Chattahoochee River (head of Apalachicola River) from Chattahoochee to Franklin, 65 miles (2RC). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 50 to 100 feet above water surface.

Chattahoochee River from Franklin to West Point, 38 miles (2RD, 2RC). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:63,360. Plan and profile are given without contours from Franklin to Columbus.

Chattahoochee River from West Point to Columbus, 37 miles (2RE, 2RD). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 50 to 100 feet above water surface.

Chattahoochee River from point south of Eufaula to Flint River (2RH, 2RG). Unpublished plan by Corps of Engineers, United States Army, 1873. Scale, 1:63,360. Map shows results of a survey made for navigation purposes by Engineer Corps. No elevations are given.

Chattahoochee River from Santee to Chestatee River, 55 miles (2RA). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 50 to 100 feet above water surface.

Chattahoochee River from mouth of Chestatee River to Chattahoochee, 58 miles (2RB). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:63,360. No contours.

Chattahoochee River from mouth to Gainesville, 205 miles (2R). Small-scale profile (1 inch=16 miles) is given in a report entitled "Water powers of Georgia," published in 1921 by the Georgia Geological Survey.

Chattahoochee River from Columbus to Nacoochee, 250 miles (2R). A table of elevations covering this section of the river is given in Water-Supply Paper 197.

(a) Soque River from mouth to Clarksville, 8 miles (2RA). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 20 to 80 feet above water surface. Small-scale profile is given in Water-Supply Paper 115, and table of elevations in Water-Supply Paper 197.

(a) Chestatee River from mouth to Willow, 47 miles (2RA). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 40 to 70 feet above water surface. Small-scale profile is published in Water-Supply Paper 115, and elevations in Water-Supply Paper 197.

(a) Flint River from Woodbury to Creek Agency Reserve, 45 miles (2SB). Unpublished plan and profile by United States Geological Survey, 1900. Scale, 1:36,000. No topography. Elevations are shown in Water-Supply Paper 197.

(a) Flint River from mouth to Albany, 109 miles (2SF, 2SH). Unpublished plan by Corps of Engineers, United States Army, 1873. Scale, 1:12,000. Map shows a survey for navigation. No elevations.

Coosawatee River from Carters to Ellijay, 25 miles (2VG). Plan and profile by United States Geological Survey, 1900. Scale, 1:63,360. Map shows profile and a sketched plan. A small-scale profile is published in Twenty-second Annual Report of the United States Geological Survey, Part IV. Elevations are given in Water-Supply Paper 197.

(a) Etowah River from Rome to Little River, 63 miles (2VF). Unpublished plan and profile by Corps of Engineers, United States Army, 1879. Scale, 1:63,360. Map shows profile and sketched plan. Elevations are given in Water-Supply Paper 197.

(a) Tallapoosa River from Tallapoosa to Alabama-Georgia line, 3 miles (2VA). Unpublished plan and profile by United States Geological Survey, 1904. Map shows profile and sketched plan. Scale of plan is 1:12,000 for width of the river and 1:24,000 horizontal. This is part of a map of the river from Tallapoosa, Ga., to Matilda, Ala. See Alabama.

Mississippi River.

(a) Ohio River.

(b) Tennessee River.

(c) Hiwassee River from Hiwassee, Ga., to North Carolina-Georgia line, 5 miles (3UJ). Unpublished plan and profile by United States Geological Survey, 1903.\* Scale, 1:24,000. Contour interval, 10 feet. Topography, 50 feet above water surface. Map covers the stretch from Hiwassee, Ga., to Tennessee-North Carolina line. Elevations are given in Water-Supply Paper 197.

(d) Nolteley River from Blairsville to North Carolina-Georgia line, 20 miles (3UJ). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 40 to 70 feet above water surface. Map shows the river to its mouth in North Carolina. Small-scale profile is given in Water-Supply Paper 115, and elevations in Water-Supply Paper 197.

(d) Toccoa River from Butts Bridge, near Dial, to Georgia-Tennessee line, 36 miles (3UK). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 50 feet above water surface. Elevations are given in Water-Supply Papers 115 and 197.

For areas in Georgia covered by standard United States Geological Survey topographic maps see Plate 1.

## HAWAII

The greater parts of the islands of Kanai, Oahu, Molokai, Lanai, Maui, and Hawaii have been surveyed, but not all the maps have been published. Scales, 1:62,500 and 1:31,680. Contour intervals, 10, 25, and 50 feet.

## IDAHO

Great Salt Lake.

(a) Bear River from Riverdale, sec. 31, T. 14 S., R. 40 E., to Novene, sec. 3, T. 11 S., R. 43 E., 83 miles (10HC). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 50 feet above water surface. Published in Water-Supply Paper 350.

Columbia River.

(a) Kootenai River (12A).

(b) Moyie River from mouth, in sec. 15, T. 62 N., R. 2 E., to sec. 2, T. 63 N., R. 2 E., 11 miles (12AH). Unpublished plan by United States Forest Service,

1912. Scale, 1:15,840. Topography, 1,500 feet above water surface. Contour interval, 100 feet.

(a) Clark Fork from St. Regis, Mont., to Pend Oreille Lake, Idaho, in sec. 4, T. 55 N., R. 2 E., 9 miles in Idaho and 120 miles in Montana (12DC, 12DD, 12DF, 12DG, 12DH). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 346.

(a) Clark Fork from Priest River, Idaho, to Canadian boundary in Washington, 7 miles in Idaho and 72 miles in Washington (12DM, 12DN). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Very little topography. Contour intervals, 25 feet on land and 5 feet on water. Published in Water-Supply Paper 346.

(a) Clark Fork, Albany Falls dam site, near Albany Falls, Idaho (12DM). Surveyed by Columbia Basin Survey Commission, 1920. Scale, 1:1,300. Contour interval, 10 feet. Topography, 30 to 60 feet above water surface. Published in a report on Columbia Basin project by the Columbia Basin Survey Commission of the State of Washington, 1920.

(a) Snake River from Lewiston, Idaho, in sec. 25, T. 36 N., R. 6 W., to Huntington, Oreg., in sec. 8, T. 14 S., R. 45 E., 187 miles (12HR, 12HN, 12HK). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 300 feet above water surface. Published by United States Geological Survey in 17 sheets, 10 plans and 7 profiles. Sheet J shows four dam sites on a scale of 1:4,800 and one site on a scale of 1:2,400, as indicated below. The contour interval is 10 feet for all sites.

Mountain Sheep Creek dam site, between miles 50 and 51; topography, 170 feet above water surface.

Corral Creek dam site, between miles 77 and 78; topography, 350 feet above water surface.

Squaw Creek dam site, between miles 95 and 96; topography, 280 feet above water surface.

32 Point Creek dam site, between miles 112 and 113; topography, 170 feet above water surface.

Nelson Creek dam site, between miles 120 and 121; topography, 90 feet above water surface.

(a) Snake River from Enterprise, in sec. 16, T. 1 N., R. 3 W., to Minidoka, in sec. 1, T. 9 S., R. 25 E., 242 miles (12HC, 12HA, 12GS, 12GR, 12GP). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography is shown to various heights. Published in Water-Supply Paper 347.

The following maps of dam sites on Snake River are in preparation for publication and were prepared from surveys by the United States Geological Survey in 1922. The mileage refers to the distance above Enterprise.

Guffy dam site (mile 13.5). Scale, 1:6,000. Contour interval, 10 feet. Topography, 50 feet above water surface.

Crocker dam site (mile 41). Scale, 1:6,000. Contour interval, 10 feet. Topography, 90 feet above water surface.

Halls Ferry dam site (mile 66.3). Scale, 1:6,000. Contour interval, 10 feet. Topography, 110 feet above water surface.

Crane Falls dam site (mile 72.4). Scale, 1:6,000. Contour interval, 10 feet. Topography, 90 feet above water surface.

Dam site at mile 118.3. Scale, 1:6,000. Contour interval, 10 feet. Topography, 80 feet above water surface.

Dam site at mile 124. Scale, 1:6,000. Contour interval, 10 feet. Topography, 90 feet above water surface.

Dam site at mile 127.6. Scale, 1:6,000. Contour interval, 10 feet. Topography, 120 feet above water surface.

Bickel Springs power site (miles 152 and 153). Scale, 1:6,000. No contours. Map shows location and elevation of springs from which water can be collected by conduit for developing power.

Box Canyon Power site (mile 156.3). Scale, 1:6,000. Contour interval on water surface, 5 feet. No topography.

Kanoka Rapids dam site (mile 160). Scale, 1:4,800. Contour interval, 5 feet. Topography, 75 feet above water surface.

Clear Lakes power site (mile 161.2). Scale, 1:4,800. No topography.

Devils Washboard dam site (mile 162.4). Scale, 1:4,800. Contour interval, 5 feet. Topography, 40 feet above water surface.

Dam site at mile 165.2. Scale, 1:4,800. Contour interval, 5 feet. Topography, 20 feet above water surface.

Dry Creek dam site (mile 199.7). Scale, 1:2,400. Contour interval, 5 feet. Topography, 35 feet above water surface.

(a) Snake River from sec. 8, T. 3 S., R. 35 E., to sec. 16, T. 4 N., R. 37 E. (12GJ). Unpublished plan and profile. Scale, 1:31,680. No topography. Plan taken from General Land Office township plats. Profile based on elevations at 12 points.

(a) Snake River from mouth to source. Unpublished profile. Scale, 1 inch=40 miles. Prepared by Oregon Short Line Railroad.

(a) Snake River from T. 4 N., R. 40 E., to T. 1 N., R. 43 E., 21 miles (12GG). Unpublished profile. Scale, 1 inch=2 miles.

(b) Henrys Fork from St. Anthony, in Sec. 2, T. 7 N., R. 40 E., to sec. 33, T. 14 N., R. 44 E., 79 miles (12GH). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 1,000 feet above water surface. Published in Water-Supply Paper 420.

(c) Henrys Lake outlet from mouth to sec. 31, T. 16 N., R. 43 E., 22 miles, (12GH). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in Water-Supply Paper 420.

(b) Blackfoot River from mouth to point near source, 100 miles (12GK). Unpublished profile. Scale, 1 inch=4 miles.

(b) Payette River from sec 23, T. 7 N., R. 2 E., to T. 13 N., R. 3 E., about 50 miles (12HG). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 300 feet above water surface. In preparation.

(c) South Fork of Payette River from mouth to T. 9 N., R. 12 E., about 75 miles (12HG). Plan and profile by United States Geological Survey, 1924-25. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 300 feet above water surface. In preparation.

(c) South Fork of Payette River, dam site and reservoir site at Big Meadows, T. 9 N., R. 12 E. (12HG). Plan by United States Geological Survey, 1925. Scale of dam-site survey, 1:4,800; of reservoir survey, 1:31,680. Contour interval, 10 feet. Topography, 150 feet above water surface at dam site. In preparation.

(d) Warm Springs Creek from mouth 5 miles upstream (12HG). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 250 feet above water surface. In preparation

(d) Canyon Creek from mouth 5 miles upstream (12HG). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 250 feet above water surface. In preparation.

(d) Deadwood River from mouth to Deadwood Basin, 20 miles (12HG). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 250 feet above water surface. In preparation.

Dam site and reservoir site at Lower Deadwood Basin. Plan by United States Geological Survey, 1925. Scale of dam-site survey, 1:4,800; of reservoir survey, 1:31,680. Contour interval, 10 feet. Topography, 150 feet above water surface at dam site. In preparation.

(b) Salmon River from sec. 6, T. 21 N., R. 22 E. (Salmon) to sec. 34, T. 11 N., R. 13 E. (Stanley), 124 miles (12JA). Plan and profile by United States Geological Survey, 1916, 1919, and 1924. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 400 feet above water surface. Published by United States Geological Survey, in seven sheets, four plans and three profiles.

A dam site was surveyed by the United States Geological Survey in 1924 at McNabbs Point, mile 57.3, in sec. 35, T. 15 N., R. 19 E. Scale, 1:2,400. Contour interval, 10 feet. Topography, 250 feet above surface. Map in preparation.

(b) Salmon River from Little Salmon, in sec. 15, T. 24 N., R. 1 E., to Salmon, in sec. 6, T. 21 N., R. 22 E., 173 miles (12JC, 12JE, 12JG). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 200 feet above water surface. Published in Water-Supply Paper 347.

The following maps of dam sites on Salmon River were prepared from surveys by the United States Geological Survey in 1922 and are in preparation for publication. The scale is 1:2,400 and contour interval 10 feet. The mileage refers to the distance below Salmon, Idaho:

Dam site at mile 28. Topography, 100 feet above water surface.

Shoup dam site (mile 40.8). Topography, 100 feet above water surface.

Dam site at mile 45. Topography, 100 feet above water surface.

Long Tom dam site (mile 59.4). Topography, 180 feet above water surface.

Pinnacle dam site (mile 62). Topography, 90 feet above water surface.

Proctor Fall dam site (mile 65.4). Topography, 130 feet above water surface.

Horse Creek dam site (mile 73.4). Topography, 140 feet above water surface.

Dam site at mile 78.3. Topography, 110 feet above water surface.

Black Canyon dam site (mile 89.7). Topography, 220 feet above water surface.

Dillinger Creek dam site (mile 96.2). Topography, 130 feet above water surface.

Rattlesnake dam site (mile 99.6). Topography, 90 feet above water surface.

Growler dam site (mile 111). Topography, 170 feet above water surface.

Painted Rock dam site (mile 118). Topography, 120 feet above water surface.

Castle dam site (mile 127.6). Topography, 130 feet above water surface.

Crooked Bar dam site (136.5). Topography, 80 feet above water surface.

Rheims dam site (mile 146.4). Topography, 120 feet above water surface.

Crevice dam site (160). Topography, 170 feet above water surface.

(b) Salmon River from mouth to Little Salmon River, sec. 15, T. 24 N., R. 1 E. (Riggins), 87 miles (12JJ). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on

water. Topography, 100 to 200 feet above water surface. Published in Water-Supply Paper 347.

The following maps of dam sites on Salmon River were prepared from surveys made by the United States Geological Survey in 1922 and are in preparation for publication. The mileage refers to the distance below Riggins, Idaho. Scale, 1:2,400. Contour interval, 10 feet.

Poodle Dog diversion dam site (miles 13 and 14). Topography, 120 feet above water surface.

Rhett Creek dam site (mile 19.5). Topography, 100 feet above water surface.

Red Canyon dam site (mile 41.7). Topography, 200 feet above water surface.

Green Canyon dam site (mile 53.5). Topography, 140 feet above water surface.

Snow Hole dam site (mile 63.5). Topography, 90 feet above water surface.

Section Line dam site (mile 72). Topography, 80 feet above water surface.

Lower Canyon dam site (mile 83). Topography, 180 feet above water surface.

(c) Little Salmon River from mouth, in sec. 15, T. 24 N., R. 1 E., to sec. 13, T. 19 N., R. 1 E., 40 miles (12JH). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography about 100 to 400 feet above water surface. Published in Water-Supply Paper 347.

The following surveys were made on Clearwater River and tributaries in 1924, and the data as to distances are taken mostly from the estimates in the specifications for the surveys. Four dam sites were surveyed on a scale of 1:2,400 with 10-foot contour interval.

(b) Clearwater River from Lewiston to Kooskia, 70 miles (12KB, 12KD). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.

(c) Middle Fork of Clearwater River from Kooskia to Forks, 22 miles (12KB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.

(d) Lochsa Fork from Forks to White Sand Creek, 60 miles (12KA). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.

(d) Selway River from Forks to Trapper Creek, 68 miles (12KA). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.

(c) South Fork of Clearwater River from Kooskia to Golden, 50 miles (12KB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.

(c) Lolo Creek from mouth upstream 4 miles (12KB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.

(c) North Fork of Clearwater River from mouth to Kelley Creek, 100 miles (12KC). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.

(c) Orofino Creek from mouth upstream 4 miles (12KB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.



(c) Potlatch Creek from mouth upstream 9 miles (12KD). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. In preparation.

For areas in Idaho covered by standard United States Geological Survey topographic maps see Plate 1.

## ILLINOIS

Mississippi River has been surveyed by the Mississippi River Commission for navigation and flood protection from the source to the mouth. The surveys were made at different dates, and the amount of topography shown varies. For copies of the maps application should be made to the Mississippi River Commission, St. Louis, Mo. A table of distances and elevations of Mississippi River along the State of Illinois is given in a report entitled "Water resources of Illinois," published in 1914 by the Rivers and Lakes Commission of Illinois.

Mississippi River from Cairo to St. Louis (5MA, 5MB, 5MF, 5MH). Plan and profile surveyed at different dates. Detailed topography. Published in House Document 50, Sixty-first Congress, first session. This is a report by the Board on Examination and Survey of Mississippi River.

(a) Ohio River from Cairo, Ill., to Pittsburgh, Pa., 967 miles, has been surveyed at different dates by the Corps of Engineers, United States Army. The maps have been prepared in the interest of navigation and are on file in those district offices of the Corps of Engineers which are concerned with Ohio River. A table of distances and elevations of Ohio River along the State of Illinois is given in a report entitled "Water resources of Illinois," published in 1914 by the Rivers and Lakes Commission of Illinois.

(b) Wabash River.

(c) Embarrass River from mouth to sec. 2, T. 9 N., R. 9 E., 110 miles (3OV, 3OU). Plan and profile by United States Geological Survey, 1910-11. Scale, 1:24,000. Contour interval, 5 feet. Detailed topography. This is a topographic map of the river prepared to show drainage possibilities and published by the United States Geological Survey. Map is out of stock. A table of distances and elevations along this section of Embarrass River is given in a report entitled "Water resources of Illinois," published in 1914 by the Rivers and Lake Commission of Illinois.

(d) North Fork of Embarrass River from mouth to sec. 2, T. 9 N., R. 13 E., 35 miles (3OU). Plan and profile by United States Geological Survey, 1910-11. Scale, 1:24,000. Contour interval, 5 feet. Detailed topography. Published by United States Geological Survey, but out of stock.

(c) Little Wabash River from Carmi to point 4 miles above Louisville, 115 miles (3PR, 3PP, 3PO). Plan and profile by Office of Experiment Stations, United States Department of Agriculture, 1907-8. Scale, 1:24,000. No contours, but map shows flood line. Published in 1911 in 11 sheets as a supplement to the report of the Rivers and Lakes Commission of Illinois. A table of distances and elevations along this section of Little Wabash River is given in a report entitled "Water resources of Illinois," published in 1914 by the Rivers and Lakes Commission of Illinois.

(d) Skillet Fork from mouth to Baltimore & Ohio Southwestern Railway bridge, 92 miles (3PR). Plan and profile by Office of Experiment Stations, United States Department of Agriculture in 1907-8. Scale, 1:24,000. No contours, but flood line is shown. Published in 1911 in 11 sheets as a supplement to the report of the Rivers and Lakes Commission of Illinois. A table of distances and elevations along Skillet Fork is given in a report entitled "Water

resources of Illinois," published in 1914 by the Rivers and Lakes Commission of Illinois.

(a) Illinois River and Des Plaines River from Henry to Joliet, 100 miles (5KD, 5KE, 5KH, 5KJ). Plan and profile by Sanitary District of Chicago, 1894. Scale, 1:63,360. Contour interval, 10 feet. Detailed topography. Topography is shown for several miles each side of the rivers. Original map is in the files of the Sanitary District of Chicago. A table of distances and elevations along Illinois and Des Plaines rivers from the mouth of Illinois River to Joliet, 289 miles, is given in a report entitled "Water resources of Illinois," published in 1914 by the Rivers and Lakes Commission of Illinois.

(b) Kankakee River from mouth upstream about 15 miles (5KC). Unpublished plan by Sanitary District of Chicago, 1894. Scale, 1:63,360. Contour interval, 10 feet. Detailed topography. This section of Kankakee River is shown on the map of Illinois River between Henry and Joliet.

(b) Spoon River from mouth to London Mills, 70 miles (5LB). Unpublished profile by United States Geological Survey, 1911. Scale, 1 inch=4 miles. The unpublished map is a small drawing showing a profile of the river based on a survey and United States Geological Survey topographic maps. A table of distances and elevations along Spoon River is given in a report entitled "Water resources of Illinois," published by the Rivers and Lakes Commission in 1914.

(b) Sangamon River from sec. 6, T. 19 N., R. 6 W., to sec. 23, T. 15 N., R. 3 W., 65 miles (5LD). Plan and profile by United States Geological Survey, 1905-1908 and 1922. Scale, 1:48,000. Contour interval, 10 feet. Detailed topography. This is a drainage project, and topography of the whole valley is shown. A few copies of the map are available for distribution.

(c) South Fork of Sangamon River from mouth to sec. 27, T. 12 N., R. 2 W. 70 miles (5LD). Plan and profile by United States Geological Survey, 1905-1907 and 1922. Scale, 1:48,000. Contour interval, 10 feet. Detailed topography. Published by United States Geological Survey on same map as Sangamon River.

(d) Flat Branch from mouth to sec. 35, T. 14 N., R. 1 E., 18 miles (5LD). Plan and profile by United States Geological Survey, 1905-1907 and 1922. Scale, 1:48,000. Contour interval, 10 feet. Detailed topography. Published by United States Geological Survey on same map as Sangamon River.

(d) Bear Creek from mouth to sec. 27, T. 12 N., R. 3 W., 9 miles (5LD). Plan and profile by United States Geological Survey, 1905-1907 and 1922. Scale, 1:48,000. Contour interval, 10 feet. Detailed topography. Published by United States Geological Survey on same map as Sangamon River.

(c) Sugar Creek from mouth to sec. 2, T. 14 N., R. 5 W., 17 miles (5LD). Plan and profile by United States Geological Survey, 1905-1907 and 1922. Scale, 1:48,000. Contour interval 10 feet. Detailed topography. Published by United States Geological Survey on same map as Sangamon River.

(a) Kaskaskia River from mouth to Cowden Bridge, 148 miles (5MC, 5MD, 5ME). A table of distances and elevations along this stretch of Kaskaskia River is given in a report entitled "Water resources of Illinois," published in 1914 by the Rivers and Lakes Commission of Illinois.

(a) Big Muddy River from mouth to a point 2 miles above Plumfield, 86 miles (5MG). Unpublished profile based on a survey made under direction of United States Geological Survey, 1910. A table of distances and elevations along Big Muddy Creek for this section is given in a report entitled "Water resources of Illinois," published in 1914 by the Rivers and Lakes Commission of Illinois.

For areas in Illinois covered by standard United States Geological Survey topographic maps see Plate 1.

## INDIANA

## Mississippi River.

(a) Ohio River from Cairo, Ill., to Pittsburgh, Pa., 967 miles, has been surveyed at different dates by the Corps of Engineers, United States Army. The maps have been prepared for use in connection with navigation and are on file in the district offices of the corps of engineers that are concerned with Ohio River.

A few standard United States Geological Survey topographic maps are available for areas in Indiana; scale, 1:62,500; contour interval, 20 feet. (See pl. 1.)

## IOWA

The only river surveys in Iowa are those by the Corps of Engineers, United States Army, with reference to navigation on Mississippi and Missouri rivers.

Mississippi River has been surveyed by the Mississippi River Commission for navigation and flood protection from the source to the mouth. The surveys were made at different dates, and the amount of topography shown varies. For copies of the maps application should be made to the Mississippi River Commission, St. Louis, Mo.

(a) Missouri River from mouth to Three Forks, Mont., 2,551 miles. Plan by Corps of Engineers, United States Army, 1878-1894. Scale, 1:63,360. No contours; topography indicated by hachures. Map is in 93 sheets, including 9 index sheets. Published by the Missouri River Commission, St. Louis, Mo.

For areas in Iowa covered by standard United States Geological Survey topographic maps see Plate 1.

## KANSAS

## Mississippi River.

(a) Missouri River from mouth to Three Forks, Mont., 2,551 miles. Plan by Corps of Engineers, United States Army, 1878-1894. Scale, 1:63,360. No topography. Map is in 93 sheets including 9 index sheets. Published by the Missouri River Commission, St. Louis, Mo.

(b) Kansas River.

(c) Republican River.

(d) South Fork of Republican River (6PK).

(e) Cleveland Run, reservoir site in T. 2 S., R. 40 W., 0.5 mile (6PK). Plan. Scale, 1:4,320. Contour interval, 2 feet. Topography, 18 feet above water surface. Published in Senate Document 1021, Sixty-second Congress, third session, "Irrigation from reservoirs in western Kansas and Oklahoma."

(d) Beaver Creek from sec. 25, T. 5 S., R. 37 W., to sec. 20, T. 5 S., R. 36 W., 3 miles (6PN). Plan. Scale, 1:14,000. Contour interval, 5 feet. Topography, 30 feet above water surface. Published in Senate Document 1021, Sixty-second Congress, third session, "Irrigation from reservoirs in western Kansas and Oklahoma."

(a) Arkansas River.

(b) Cimarron River and North Fork of Cimarron River, reservoir site in T. 30 S., R. 35 W., 5 miles (7BA, 7BB, 7BC). Plan. Scale, 1:18,000. Contour interval, 5 feet. Topography, 25 feet above water surface. Published in Senate Document 1021, Sixty-second Congress, third session, "Irrigation from reservoirs in western Kansas and Oklahoma."

Most of Kansas is covered by standard United States Geological Survey topographic maps, scale, 1:125,000; contour intervals, 20, 25, and 50 feet. (See pl. 1.)

## KENTUCKY

## Mississippi River.

(a) Ohio River from Cairo, Ill., to Pittsburgh, Pa., 967 miles, has been surveyed at different dates by the Corps of Engineers, United States Army. The maps have been prepared for use in connection with navigation and are on file

in the district offices of the Corps of Engineers that are concerned with the Ohio River.

About half of Kentucky is shown on standard United States Geological Survey topographic maps, scales, 1:62,500 and 1:125,000; contour intervals, 20, 50, and 100 feet. (See pl. 1.)

### LOUISIANA

Mississippi River has been surveyed by the Mississippi River Commission for navigation and flood protection from the source to the mouth. The surveys were made at different dates, and the amount of topography shown varies. For copies of the maps application should be made to the Mississippi River Commission, St. Louis, Mo.

The southeastern part of Louisiana, south and east of Baton Rouge, is nearly all covered by standard United States Geological Survey topographic maps; scales, 1:31,680 and 1:125,000; contour intervals, 5, 10, and 20 feet. (See Pl. 1.)

### MAINE

St. Croix River and West Branch, from mouth to Leweys Lake, 30 miles (1BA). Profile by State Water Storage Commission of Maine, about 1911. Scale,  $1\frac{1}{4}$  inches=10,000 feet. Published in Third Annual Report of Maine State Water Storage Commission for 1912.

Union River and certain ponds in its basin from Ellsworth to Great Pond, 34 miles (1BC). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 10 feet. Topography, 10 to 50 feet above water surface. Plan and profile of river in two sheets. There are also three sheets of maps of lakes and ponds; scale, 1:24,000 for ponds and 1:2,400 for outlets, as follows: Abrams Pond, Scammon Pond and dam at outlet of Scammon Pond, Molasses Pond and dam at outlet of Molasses Pond, and dam on Webb Brook near Webb Pond outlet, Alligator Pond, Spectacle Lake, Rocky Lake, Branch Lake, Great Pond, and dams at their outlets and vicinity of dam at outlet of Green Lake. Published by United States Geological Survey. Sheets out of stock.

Penobscot River from Bangor to North Twin Lake, 91 miles (1BE, 1BG, 1BH, 1BJ). Plan and profile by United States Geological Survey, 1904. Scale, 1:28,800. Contour intervals, 1 foot and 20 feet. Topography, 20 to 120 feet above water surface. Published in Water-Supply Paper 279.

A series of lakes in the Penobscot Basin were surveyed in 1907, and the maps are published in Water-Supply Paper 279, as follows: Chamberlain, Webster, Telos, Round Pond, Baskahegan, First and Second Grand, Allagash—scale, 1:48,000; and Schoodic, Sebouis, Endless, Mattawamkeag, and Pleasant—scale, 1:63,360. Sheets are out of stock.

(a) West Branch of Penobscot River from Chesuncook Lake to Ambejeus Lake, 25 miles (1BE). Plan and profile by United States Geological Survey, 1906. Scale, 1:24,000. Contour intervals, 1 foot and 20 feet. Very little topography. Published in Water-Supply Paper 279.

(a) West Branch of Penobscot River from Chesuncook Lake to Seboomook, 29 miles (1BD). Plan and profile by United States Geological Survey, 1905. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Very little topography. Published in Water-Supply Paper 279.

(a) East Branch of Penobscot River from Grand Lake to mouth, 46 miles (1BF). Plan and profile by United States Geological Survey, 1908. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Very little topography. Published in Water-Supply Paper 279.

(a) Mattawamkeag River from Penobscot River to North Bancroft, 33 miles (1BG). Plan and profile by United States Geological Survey, 1907. Scale,

1:24,000. Contour intervals, 1 foot and 10 feet. Very little topography. Published in Water-Supply Paper 279.

(a) Piscataquis River from Harland to Barrows Falls, 60 miles (1BH). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 5 to 25 feet above water surface. Map in 5 sheets, plan and profile on each sheet. Sheets are out of stock. Published by United States Geological Survey.

(b) Sebec River from mouth to Sebec, 10 miles (1BH). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 5 to 25 feet above water surface. Published in one sheet by United States Geological Survey; sheet out of stock.

(c) Sebec Lake (1BH). Plan by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 25 feet above water surface. The dam site at the lake outlet is shown on a scale of 1:24,000, with contour interval 5 feet and topography 25 feet above water surface. Published in one sheet by United States Geological Survey; sheet out of stock.

(b) Pleasant River from mouth to Silver Lake, 24 miles (1BH). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 15 to 25 feet above water surface. Published by United States Geological Survey. Map in two sheets, plan and profile on each. Sheets out of stock.

(c) Silver Lake (1BH). Plan by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 25 feet above water surface. Lake is shown on part of one sheet. Dam site at outlet is shown on scale of 1:2,400, with contour interval 5 feet and topography 15 feet above water surface. Published by United States Geological Survey; sheets out of stock.

(c) Houston Stream from mouth to Big Houston Pond, 6 miles (1BH). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 15 to 25 feet above water surface. Published in one sheet by United States Geological Survey; sheet out of stock.

(d) Big Houston Pond (1BH). Plan by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 25 feet above water surface. Dam site at outlet of pond is shown on a scale of 1:2,400 and contour interval 5 feet. Published in one sheet by United States Geological Survey; sheet out of stock.

(b) Schoodic Stream from Schoodic Lake to mouth, 4 miles (1BH). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 10 to 25 feet above water surface. Published by United States Geological Survey. Map on part of one sheet. Schoodic Lake is shown in Water-Supply Paper 279. See notes under Penobscot River.

Kennebec River from Moosehead Lake to Skowhegan, 83 miles (1CB). Plan and profile by United States Geological Survey, in cooperation with the State of Maine, 1903-4. Scale, 1:24,000. Contour intervals, 1, 10, and 20 feet. Topography, 20 to 80 feet above water surface. Published by United States Geological Survey in six sheets, five plans and one profile. Sheets out of stock. See Water-Supply Paper 198.

Kennebec River from Skowhegan to Hallowell, 38 miles (1CE, 1CF). Plan and profile by United States Geological Survey, 1903. Scale, 1:62,500. Contour intervals, 10 and 20 feet. Plan from Skowhegan to Hallowell is shown on the standard topographic maps; scale, 1:62,500, and contour interval, 20 feet. Profile in one sheet shows the river from Hallowell to Moosehead Lake. Sheet showing profile out of stock, but small-scale profile is in Water-Supply Paper 198.

(a) Moosehead Lake (1CB). Plan from surveys in 1900 and 1905. Scale, 1:63,360. No topography. This is merely a map of the outline of the lake.

Part of the lake is shown on Moosehead Lake topographic map; scale, 1:62,500, and contour interval, 20 feet.

(b) Moose River from Moosehead Lake to Brassua Lake, 3 miles (1CB). Plan by United States Geological Survey, 1905. Scale, 1:15,840. Contour intervals, 1, 10, and 20 feet. Topography, 20 feet above water surface. Published by United States Geological Survey on part of one sheet; out of stock.

(c) Holeb Pond (1CB). Plan by United States Geological Survey, 1906. Scale, 1:27,000. Contour interval, 10 feet. Topography, 10 feet above water surface. Published by United States Geological Survey on part of one sheet; map out of stock. Holeb Pond is shown on Attean Pond topographic map; scale, 1:48,000, and contour interval, 20 feet.

(c) Attean Pond (1CB). Plan by United States Geological Survey, 1906. Scale, 1:20,000. Contour interval, 5 feet. Topography, 15 feet above water surface. Published by United States Geological Survey in one sheet. Map out of stock. Most of the pond is shown on Attean Pond topographic map; scale, 1:48,000, and contour interval, 20 feet.

(c) Wood Pond (1CB). Plan by United States Geological Survey, 1905. Scale, 1:20,000. Contour interval, 5 feet. Topography, 10 feet above water surface. Published by United States Geological Survey in one sheet, which also shows the outlet on a scale of 1:2,000 and contour interval 2 feet. Topography at the outlet is carried 12 feet above water surface. This map is out of stock, but Wood Pond is shown on Attean Pond topographic map; scale, 1:48,000, and contour interval, 20 feet.

(c) Long Pond (1CB). Plan by United States Geological Survey, 1906. Scale, 1:48,000. Contour interval, 20 feet. Topography, 20 feet above water surface. Published by United States Geological Survey on part of one sheet, which is out of stock.

(c) Brassua Lake (1CB). Plan by United States Geological Survey, 1905. Scale, 1:15,840. Contour interval, 5 feet. Topography, 25 feet above water surface. Published by United States Geological Survey on part of one large sheet, which shows the lake and dam site at the outlet. Dam-site scale, 1:1,475, and contour interval, 2 feet.

(a) Roach River (1CB).

(b) Lower Roach Pond (1CB). Plan by United States Geological Survey, 1906. Scale, 1:48,000. Contour interval, 10 feet. Topography, 20 feet above water surface. Published by United States Geological Survey on part of one sheet as supplement to Water-Supply Papers 198 and 201; out of stock.

(b) Middle Roach Pond (1CB). Plan by United States Geological Survey, 1906. Scale, 1:48,000. Contour interval, 10 feet. Topography, 20 feet above water surface. Published by United States Geological Survey on part of one sheet as a supplement to Water-Supply Papers 198 and 201; out of stock.

(a) Dead River from mouth to Chain of Ponds, 76 miles (1CC). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour intervals, 1 foot and 5 feet. Topography, 15 to 25 feet above water surface. Published by United States Geological Survey. Map is in six sheets, plan and profile on each sheet. Two dam sites are also shown on a scale of 1:2,400 and contour interval of 2 feet. The sites are at outlet of Greenbush reservoir and at outlet of Chain of Ponds. The maps are out of stock. An additional sheet, also out of stock, shows Long Falls on Dead River on a scale of 1:2,400 with contour interval of 2 feet.

(b) South Branch of Dead River from mouth upstream 11 miles (1CC). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour intervals, 1 foot and 5 feet. Topography, 15 to 25 feet above water surface. Published by United States Geological Survey in one sheet which is out



of stock. Twin Pond and the dam site at its outlet are shown on the same sheet on a scale of 1:2,400 with contour interval of 2 feet. Topography, 20 feet above water surface.

(b) Flagstaff Lake (1CC). Plan by United States Geological Survey, 1906. Scale, 1:48,000. Contour interval, 10 feet. Topography, 20 feet above water surface. Published by United States Geological Survey; out of stock.

(b) West Carry Pond (1CC). Plan by United States Geological Survey, 1906. Scale, 1:48,000. Contour interval, 10 feet. Topography, 20 feet above water surface. Published by United States Geological Survey on part of one sheet as a supplement to Water-Supply Papers 198 and 201; out of stock.

(b) Spring Lake (1CC). Plan by United States Geological Survey, 1906. Scale, 1:48,000. Contour interval, 10 feet. Topography, 20 feet above water surface. Published by United States Geological Survey on part of one sheet; out of stock.

(b) Spencer Stream from mouth upstream 9 miles (1CC). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour intervals, 1 foot and 5 feet. Topography, 10 to 20 feet above water surface. Published by United States Geological Survey; out of stock.

(c) Little Spencer Stream from mouth upstream 4 miles (1CC). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour intervals, 1 foot and 5 feet. Topography, 10 to 20 feet above water surface. Published by United States Geological Survey on part of one sheet; out of stock.

(b) Spencer Ponds (1CC). Plan by United States Geological Survey, 1906. Scale, 1:63,360. Contour interval, 10 feet. Topography, 20 feet above water surface. Published by United States Geological Survey on part of one sheet; out of stock.

Baker Pond, King and Bartlett Lake, Little Bartlett Lake. These ponds are all shown on one sheet. Their outlets are mapped on a scale of 1:2,400 and contour interval of 2 feet, but topography shown is mostly downstream from the outlet and below the lake level. Maps out of stock.

(a) Sandy River from mouth to Madrid, 61 miles (1CD). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour intervals, 1 foot and 5 feet. Topography, 10 to 25 feet above water surface. Published by United States Geological Survey, in five sheets, plan and profile on each. Clear Water Pond and outlet, located on a tributary, are shown on one sheet. Maps out of stock.

(a) Sebasticook River (1CE, 1CG).

(b) Moose Pond (1CG). Plan by United States Geological Survey, 1912. Scale, 1:24,000. Contour interval, 5 feet. Topography, 15 feet above water surface. Published by United States Geological Survey in one sheet, which is out of stock.

Androscoggin River from Brunswick to Umbagog Lake, 167 miles (1DB, 1DC). Plan and profile by United States Geological Survey, 1906. Scale, 1:24,000. Contour interval, 20 feet. Topography, 20 to 240 feet above water surface. Published by United States Geological Survey in 10 sheets. Brunswick to Livermore Falls, 56 miles, profile only on two sheets. Remaining distance is shown on eight sheets, plan and profile on each sheet. Sheets out of stock.

(a) Umbagog Lake (1DB). Surveyed by United States Geological Survey, 1909. Scale, 1:48,000. Contour interval, 5 feet. Topography, 10 feet above water surface. Published by United States Geological Survey on part of one sheet; out of stock.

(b) Rapid River from Umbagog Lake to point above Pond-in-River, 6 miles (1DB). Plan and profile by United States Geological Survey, 1910. Scale,

1:12,000. Contour interval, 5 feet. Topography, 10 to 20 feet above water surface. Published by United States Geological Survey on one sheet; out of stock.

(c) Upper and Lower Richardson lakes (1DB). Plan by United States Geological Survey, 1909. Scale, 1:48,000. Contour interval, 5 feet. Topography, 15 feet above water surface. Lakes are shown on part of one sheet, and dam and vicinity of outlet of lower lake are shown on another sheet. Scale, 1:4,800 and contour interval, 5 feet. Sheets out of stock.

(d) Mooselookmeguntic Lake (1DB). Plan by United States Geological Survey, 1909. Scale, 1:48,000. Contour interval, 5 feet. Topography, 10 feet above water surface. Published by United States Geological Survey on one sheet. Dam and vicinity at the outlet are shown on part of another sheet on a scale of 1:4,800, and contour interval, 5 feet.

(e) Kennebago River from Rangeley River to Kennebago Falls, 12 miles (1DB). Plan and profile by United States Geological Survey, 1910. Scale, 1:12,000. Contour interval, 5 feet. Topography, 10 to 20 feet above water surface. Published by United States Geological Survey in one sheet, which is out of stock. Outlet of Kennebago Lake is shown on a scale of 1:4,800 with contour interval of 5 feet. Topography is shown 30 feet above water surface.

(f) Kennebago Lake and Little Kennebago Lake (1DB). Plan by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 20 feet above water surface. Published by United States Geological Survey in one sheet, which is out of stock.

(e) Rangeley River from Rangeley Lake dam to Kennebago River, 1 mile (1DB). Plan and profile by United States Geological Survey, 1910. Scale, 1:12,000. Very little topography. Contour interval, 5 feet. Published by United States Geological Survey on part of one sheet. Remainder of sheet shows outlet of Kennebago Lake and Kennebago River. Map out of stock.

(f) Rangeley Lake (1DB). Plan by United States Geological Survey, 1910. Scale, 1:24,000. Contour interval, 5 feet. Topography, 20 feet above water surface. Published by United States Geological Survey in two sheets, one of the lake and one of the outlet. Outlet is shown on a scale 1:2,400 with contour interval of 5 feet for 15 feet above the water surface of the lake. Maps out of stock.

Saco River from mouth to Maine-New Hampshire line, 81 miles (1DG, 1DE). Profile by Maine State Water Storage Commission, about 1910. Scale, about  $\frac{3}{4}$  inch=1 mile. Published in Second Annual Report of Maine State Water Storage Commission, for 1911.

For areas in Maine covered by standard United States Geological Survey topographic maps see Plate 1.

## MARYLAND

Susquehanna River. See Pennsylvania.

Potomac River. See Virginia.

Mississippi River.

(a) Ohio River.

(b) Monongahela River.

(c) Youghiogheny River from a point 16 miles above Friendsville upstream 7 miles (3BJ). Youghiogheny River reservoir site No. 5, which extends up Little Youghiogheny River to Oakland. Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

Youghiogheny River from a point 5.5 miles above Friendsville upstream 6 miles (3BJ). Youghiogheny River reservoir site No. 4. Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

Youghiogheny River from a point 1.5 miles above Friendsville upstream 2 miles (3BJ). Youghiogheny River reservoir site No. 3. Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

Youghiogheny River from the Pennsylvania-Maryland State line upstream 5 miles (3BJ). Youghiogheny River reservoir site No. 2. Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

Maryland is covered by standard United States Geological Survey topographic maps; scale, 1:62,500; contour intervals, 10 and 20 feet. (See pl. 1.)

## MASSACHUSETTS

### Connecticut River.

(a) Deerfield River from mouth to mouth of East Branch, 62 miles (1GL). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(a) Ware River (head of Chicopee River) from mouth to Smithville dam, 28 miles (1GM). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(a) Chicopee River from mouth to junction of Swift and Quaboag rivers at Three Rivers, 18 miles (1GM). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(b) Swift River from mouth to North Dana dam, 25 miles (1GM). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(b) Quaboag River from mouth to East Brookfield, 27 miles (1GM). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(a) Westfield River from mouth to junction of East and West branches, 24 miles (1GN). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=4 miles. Published in report on water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(b) East Branch of Westfield River from mouth to East Windsor Branch, 27 miles (1GN). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(b) West Branch of Westfield River from mouth to railroad bridge at Becket, 16 miles (1GN). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

Merrimack River.

(a) Nashua River from Massachusetts-New Hampshire line to junction of North and South forks, 23 miles (1EE). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(b) South Branch of Nashua River from mouth to Wachusett reservoir, 5 miles (1EE). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

(b) North Branch of Nashua River from mouth upstream 17 miles (1EE). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

Taunton River from tidewater to Salisbury Lake, 44 miles (1FD). Profile compiled by Commission on Waterways and Public Lands, 1916-17. Scale, 1 inch=5 miles. Published in report on the water resources of Massachusetts by the Commission on Waterways and Public Lands, 1918.

Massachusetts is covered by standard United States Geological Survey topographic maps; scale, 1:62,500; contour interval, 20 feet. (See pl. 1.)

## MICHIGAN

A considerable part of southern Michigan is covered by standard United States Geological Survey topographic maps; scale, 1:62,500; contour intervals, 5, 10, and 20 feet. (See pl. 1.)

## MINNESOTA

Most of the maps of river surveys in Minnesota were published by the State Drainage Commission in Atlas of Water Resources, 1912. The surveys were made by the United States Geological Survey under a cooperative agreement with the State.

Lake Superior.

(a) Pigeon River from Pigeon Bay to South Fowl Lake, 30 miles (4AA). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 5 and 10 feet. Topography, 10 to 100 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Brule River from mouth upstream 7 miles (4AA). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 60 to 200 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Devil Track River from mouth, in sec. 13, T. 61 N., R. 1 E., to outlet of Elbow Lake, in sec. 34, T. 62 N., R. 1 E., 5 miles (4AA). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 20 to 200 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Cascade River from mouth upstream 7 miles (4AA). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 20 to 100 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Poplar River from mouth upstream 6 miles (4AA). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 100 to 200 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Temperance River from mouth upstream 5 miles (4AA). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 20 to 100 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Cross River from mouth upstream 8 miles (4AB). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 20 to 100 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Manitou River from mouth upstream 5 miles (4AB). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 40 to 160 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Baptism River from mouth upstream 9 miles (4AB). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 20 to 160 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Beaver River from mouth upstream 6 miles (4AB). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 20 to 200 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Gooseberry River from mouth upstream 3 miles (4AC). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:12,000. Contour intervals, 10 and 20 feet. Topography, 20 to 100 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) St. Louis River from Scanlon to Norman, 149 miles (4AD, 44AE, 4AF). Plan and profile by United States Geological Survey and State of Minnesota, 1910. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Topography, 20 to 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(b) Cloquet River from mouth to Brimson, 70 miles (4AF). Plan and profile by United States Geological Survey and State of Minnesota, 1910. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Topography, 20 to 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

Nelson River and Lake Winnepeg.

(a) Red River from international boundary to Lake Traverse, 455 miles (5O, 5P). Plan and profile by Bureau of Public Roads, United States Department of Agriculture. Scale plan, 1:53,000; profile, 1 inch=10 miles. No topography, but many elevations are given on the plan, which was prepared in connection with drainage investigations. Published in Bulletin 1017 of the Department of Agriculture, entitled "Report on drainage and prevention of overflow in the valley of the Red River of the North."

(b) Ottertail River from Phelps, in sec. 34, T. 134 N., R. 41 W., to sec. 26, T. 132 N., R. 44 W., 50 miles (5OB). Plan and profile by United States Geological Survey, 1910. Scale, 1:12,000. Contour intervals, 1 foot and 5 feet. Topography, about 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(c) Ottertail Lake, 4 miles (5OB). Plan by United States Geological Survey, 1911. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Very little topography. Published in Atlas of Water Resources of Minnesota, 1912.

(b) Wild Rice River from sec. 1, T. 144 N., R. 42 W., to sec. 31, T. 144 N., R. 48 W., 104 miles (5OH). Plan and profile by United States Geological Survey, 1911-12. Scale, 1:12,000. Contour intervals, 1 foot and 10 feet. Topography, 10 to 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(b) Red Lake River from Crookston to Red Lake, 143 miles (5PB). Plan and profile by United States Geological Survey, 1909-10. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Very little topography. Published in Atlas of Water Resources of Minnesota, 1912.

(c) Upper Red Lake, 24 miles (5PA). Plan by United States Geological Survey, 1911. Scale, 1:36,000. Contour interval, 5 feet. Very little topography. Published in Atlas of Water Resources of Minnesota, 1912.

(c) Lower Red Lake, 24 miles (5PA). Plan by United States Geological Survey, 1911. Scale, 1:36,000. Contour interval, 5 feet. Topography, about 20 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Winnepeg River and Lake of the Woods.

(b) Rainy River (5N).

(c) Birch River from mouth to sec. 23, T. 62 N., R. 11 W., 4 miles (5NA). Plan by United States Geological Survey and State of Minnesota, 1911. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Topography, 20 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(c) Kawishiwi River and certain lakes from sec. 29, T. 62 N., R. 10 W., to sec. 17, T. 62 N., R. 11 W., 29 miles (5NA). Plan by United States Geological Survey and State of Minnesota, 1911. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Very little topography. Published in Atlas of Water Resources of Minnesota, 1912. The map shows a short section of Kawishiwi and Birch rivers and Birch, White Iron, Farm, and Garden lakes.

(c) Vermilion River from Vermilion Lake, in sec. 11, T. 63 N., R. 17 W., to Crane Lake, 42 miles (5NB). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:24,000. Contour interval, 5 feet. Topography, 20 to 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(c) Little Fork from Rainy River to sec. 16, T. 62 N., R. 20 W., 122 miles (5ND). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Topography, 20 to 90 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(d) Sturgeon River from mouth, in sec. 4, T. 62 N., R. 21 W., to sec. 34, T. 62 N., R. 21 W., 8 miles (5ND). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Topography, 10 to 80 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(c) Big Fork River from Rainy River to sec. 32, T. 150 N., R. 25 W., 153 miles (5NE). Plan and profile by United States Geological Survey and State of Minnesota, 1912. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Topography, 10 to 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

Mississippi River from Lake Itasca to mouth, 2,449 miles. Scale, Minneapolis to mouth, 1:20,000; above Minneapolis, 1:10,000. Contour interval, 5 feet. Topography, 1 mile from banks. Mississippi River has been surveyed by the Mississippi River Commission for navigation and flood protection from the source to the mouth. The surveys were made at different dates, and the amount of topography shown varies. For copies of the maps, application should be made to the Mississippi River Commission, St. Louis, Mo. A profile of Mississippi River in Minnesota is published in the Report of Water Resources Investigation of Minnesota, 1909-10.

(a) Prairie River from mouth to Crooked Lake, 32 miles (5AB). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale,



1:12,000. Contour intervals, 1 foot and 5 feet. Topography, 5 to 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Crow Wing River from mouth to Crow Wing dam, above Shell River, 89 miles (5AD). Plan and profile by United States Geological Survey and State of Minnesota, 1909. Scale, 1:12,000. Contour intervals, 1 foot and 5 feet. Topography, 5 to 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Rum River from mouth to Onamia, 141 miles (5AH). Plan and profile by United States Geological Survey and State of Minnesota, 1909. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Topography, 1 foot to 50 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(b) Mille Lacs, 17 miles (5AH). Plan by United States Geological Survey, 1909. Scale, 1:36,000. Contour interval, 5 feet. Very little topography. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Minnesota River from mouth to Big Stone Lake, 339 miles (5BA, 5BB, 5BC, 5BD, 5BE, 5BF). Profile by Corps of Engineers, United States Army, 1909-10. Scale, 1 inch=8 miles. This is a small-scale profile in the "Maps and profiles" section of the Report of Water Resources Investigation of Minnesota, 1909-10.

(a) Cannon River from mouth to Faribault, 60 miles (5CE). Plan and profile by United States Geological Survey and State of Minnesota, 1909. Scale, 1:24,000. Topography, 1 foot to 40 feet above water surface. Contour intervals, 1 foot and 10 feet. Published in Atlas of Water Resources of Minnesota, 1912.

(b) Straight River from mouth upstream 2 miles (5CE). Plan and profile by United States Geological Survey and State of Minnesota, 1909. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Very little topography. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Zumbro River, including South Branch, from Griffith's Lake to point 4 miles above Middle Branch, 68 miles (5CN). Plan and profile by United States Geological Survey and State of Minnesota, 1911. Scale, 1:24,000. Contour intervals, 1 foot and 5 feet. Topography, 20 to 70 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Middle Branch of Zumbro River from mouth upstream 3 miles (5CN). Plan and profile by United States Geological Survey, 1911. Scale, 1:24,000. Contour intervals, 1 foot and 5 feet. Topography, 25 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

(a) Root River from mouth to point 8 miles above Chatfield, 107 miles (5DA). Plan and profile by United States Geological Survey, 1910. Scale, 1:24,000. Contour intervals, 1, 5, and 10 feet. Topography, 5 to 30 feet above water surface. Published in Atlas of Water Resources of Minnesota, 1912.

For areas in Minnesota covered by standard topographic maps see Plate 1.

## MISSISSIPPI

Mississippi River has been surveyed by the Mississippi River Commission for navigation and flood protection from the source to the mouth. The surveys were made at different dates and the amount of topography shown varies. For copies of the maps application should be made to the Mississippi River Commission, St. Louis, Mo.

Mobile River.

(a) Tombigbee River from Fulton to Columbus, 108 miles (2XA, 2XC, 2XD), Unpublished plan and profile by United States Geological Survey, 1908. Scale, 1:12,000. No topography. Map is on seven sheets, plan and profile on each sheet.

Pearl River from Edinburg to sec. 17, T. 11 N., R. 10 E.,  $3\frac{1}{2}$  miles (2ZA). Plan by United States Geological Survey and Mississippi Geological Survey, 1923. Scale, 1:24,000. Contour interval, 10 feet. Topography, 20 to 50 feet above water surface. Published by United States Geological Survey. This is a short section included on the sheet showing the supplemental survey between Boston Branch and Byram. (See below.)

Pearl River from Boston Branch, in sec. 25, T. 1 N., R. 1 E., to Byram, in sec. 24, T. 4 N., R. 1 W. (2ZC, 2ZD). Plan by United States Geological Survey and Mississippi Geological Survey, 1906 and 1923. Scales, 1:24,000 and 1:62,500. Contour intervals, 10 and 20 feet. Published by United States Geological Survey. One large sheet shows topography not shown on the Florence topographic map. The Florence topographic map is on a scale of 1:62,500, with contour interval of 20 feet. The supplemental survey is on a scale of 1:24,000, with 10-foot contour interval.

(a) Strong River from sec. 11, T. 10 N., R. 21 W., to sec. 14, T. 2 N., R. 4 E., about 25 miles (2ZD). Plan by United States Geological Survey and Mississippi Geological Survey, 1923. Scale, 1:24,000. Contour interval, 10 feet. Topography, 20 to 80 feet above water surface. Published by United States Geological Survey on one large sheet.

For areas in Mississippi covered by standard United States Geological Survey topographic maps see Plate 1.

## MISSOURI

Mississippi River.

(a) Missouri River from mouth to Three Forks, Mont., 2,551 miles (597 miles in Missouri) (6R, 6S). Plan by Corps of Engineers, United States Army, 1878-1894. Scale, 1:63,360. No contours; topography indicated by hachures. Map is in 93 sheets, including 9 index sheets, based on various surveys. Published by the Missouri River Commission.

(b) Gasconade River from Arlington to Rich Fountain, 53 miles (6S). Plan and profile by State of Missouri and United States Geological Survey, 1922. Scale, 1:15,840. Contour interval, 10 feet. Topography, 100 to 150 feet above water surface. Map is in 5 large sheets, 4 plans and 1 profile. Published by United States Geological Survey and Missouri Bureau of Geology and Mines.

For areas in Missouri covered by standard United States Geological Survey topographic maps see Plate 1.

## MONTANA

Mississippi River basin.

(a) Red Rock River (head of Missouri River) from sec. 32, T. 13 S., R. 6 W., to sec. 13, T. 14 S., R. 1 W., 45 miles (6AA). Unpublished plan, 1923. Scale, 1:126,720. Four contour lines, the flow lines of a proposed reservoir, are shown.

(a) Missouri River from Great Falls to Three Forks, T. 2 N., R. 2 E., 209 miles (6B). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 400 feet above water surface. Published in Water-Supply Paper 367.

(a) Missouri River from Fort Benton to State boundary, 520 miles (6B, 6C, 6E). Plan by Corps of Engineers, United States Army, 1891. Scales, 1:7,200 and 1:12,000. Contour interval, 20 feet. Topography, 100 to 500 feet above water surface. From Three Forks to Great Falls the river has been surveyed by the United States Geological Survey. From Fort Benton to the mouth a map by the Corps of Engineers in 93 sheets, including 9 index sheets, without topography, is available. These maps have been redrawn by the United States Geological Survey on a scale of 1:63,360 for the section of the river in Montana not shown on standard United States Geological Survey topographic maps. The maps of the original survey are available in the office of the Missouri River Commission and the district offices of the Corps of Engineers covering portions of Missouri River.

(b) Ruby River from sec. 8, T. 7 S., R. 4 W., to sec. 36, T. 7 S., R. 5 W., 5 miles (6AD). Unpublished plan by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Map shows a possible reservoir site. A diagram showing the location of this reservoir site is shown in the Twelfth Annual Report of the Director, page 152.

(b) Big Hole River from sec. 2, T. 5 S., R. 8 W., to sec. 34, T. 1 N., R. 11 W., 45 miles (6AG). Unpublished plan by United States Geological Survey, 1923. Scale, 1:126,720. Contour interval, 20 feet. Only a small amount of topography is shown, mainly in T. 4 S., Rs. 8 and 9 W., T. 5 S., R. 8 W., and T. 1 S., R. 10 W.

(b) Madison River from sec. 6, T. 2 S., R. 2 E., to sec. 35, T. 11 S., R. 2 E., 78 miles (6AL). Unpublished plan and profile by United States Geological Survey (reconnaissance), 1923. Scale, 1:63,360. Contour interval, 20 feet. Topography, 20 to 220 feet above water surface. Map is in three sheets and shows topography only at potential power sites.

(b) Judith River from mouth, in sec. 26, T. 23 N., R. 16 E., to sec. 4, T. 18 N., R. 16 E., 43 miles (6CD). Unpublished plan and profile in two sheets by United States Geological Survey (reconnaissance), 1909. Scale, 1:31,680. No topography.

(b) Musselshell River from mouth to sec. 32, T. 10 N., R. 31 E., 125 miles (6CH, 6CJ). Unpublished plan by United States Geological Survey, 1922. Scale, 1:63,360. Very little topography. Map is in four sheets.

(b) Yellowstone River from mouth of Big Horn River to State boundary (6GA, 6GC, 6GG, 6GH). Plan by Corps of Engineers, United States Army, 1878. Scale, 1:9,600. No topography. This is an old survey for navigation, and only a few elevations are given. It is of little value in connection with water power.

(c) Big Horn River from sec. 18, T. 6 S., R. 31 E. (Mont.), to sec. 34, T. 57 N., R. 94 W. (Wyo.), 55 miles (6HO). Unpublished plan and profile. Scale, 1:126,720. This is valuable only as a profile of about 55 miles of the river, as the plan shows no topography.

#### Columbia River.

(a) Clark Fork from Deer Lodge, in sec. 33, T. 8 N., R. 9 W., to St. Regis, in sec. 30, T. 18 N., R. 27 W., 189 miles (12BB, 12BC, 12BE, 12BG, 12DA). Plan and profile by United States Geological Survey, 1910. Scale, 1:31,680. Contour interval, 5 feet. Very little topography. Published in Water-Supply Paper 346.

(a) Clark Fork from St. Regis, in sec. 30, T. 18 N., R. 27 W., to Idaho-Montana line, 120 miles (12DC, 12DD, 12DF, 12DG, 12DH). The survey extends to Lake Pend Oreille, Idaho, 9 miles beyond the State line. Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 400 feet above water surface. Published in Water-Supply Paper 346.

(b) Flathead River from Paradise, sec. 29, T. 19 N., R. 25 W., to sec. 22, T. 22 N., R. 21 W., 69 miles (12CH). Unpublished plan and profile by United States Geological Survey and United States Bureau of Reclamation (reconnaissance). Scale, 1:31,680. Only the profile is of value, as there is practically no topography on the plan.

(b) Flathead River, Big Rock dam site  $1\frac{1}{2}$  miles below Flathead Lake (12CG). Plan by Columbia Basin Survey Commission, 1920. Scale, 1:960. Contour interval, 5 feet. Topography, 45 feet above water surface. Published in a report on the Columbia Basin project by Columbia Basin Survey Commission, State of Washington, 1920.

(c) South Fork of Flathead River from mouth, in sec. 6, T. 30 N., R. 19 W., to sec. 14, T. 26 N., R. 16 W., 40 miles (12CD). Unpublished plan and profile by United States Geological Survey (reconnaissance), 1907, 1911, and 1923. Scale, 1:126,720. Topography, 400 feet above water surface at the dam site. Contour interval, 50 feet. All but the first 4 miles of this map was taken from the Nyack topographic map. The section of river embraced above mile 4 is a reservoir site. A dam-site survey was made in sec. 21, T. 30 N., R. 19 W.; scale, 1:6,000; contour interval, 25 feet; topography, 400 feet above water surface. Map is in one sheet.

(c) Swan River from Flathead Lake to Lion Creek, 45 miles (12CF). Plan and profile by United States Geological Survey, 1916. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 200 feet above water surface.

(c) Crow Creek from sec. 21, T. 21 N., R. 19 W., to sec. 18, T. 21 N., R. 18 W., 5 miles (12CH). Unpublished plan and profile by United States Bureau of Reclamation, 1908. Scale, 1:31,680. No topography.

(c) Mission Creek from sec. 16, T. 18 N., R. 19 W., to sec. 6, T. 18 N., R. 18 W., 6 miles (12CH). Unpublished plan and profile by United States Reclamation Service, 1908. Scale, 1:31,680. No topography.

(d) Dry Creek from sec. 34, T. 18 N., R. 19 W., to sec. 27, T. 18 N., R. 18 W., 8 miles (12CH). Unpublished plan and profile by United States Bureau of Reclamation, 1908. Scale, 1:31,680. No topography.

(d) Post Creek from sec. 4, T. 19 N., R. 19 W., to sec. 31, T. 20 N., R. 18 W., 9 miles (12CH). Unpublished plan and profile by United States Bureau of Reclamation, 1908. Scale, 1:31,680. No topography.

(c) Jocko River from mouth to sec. 35, T. 17 N., R. 18 W., 32 miles (12CH). Unpublished plan and profile by United States Bureau of Reclamation, 1908. Scale, 1:126,720. No topography.

For areas in Montana covered by standard United States Geological Survey topographic maps see Plate 1.

## NEBRASKA

### Mississippi River.

(a) Missouri River from mouth to Three Forks, Mont., 2,551 miles. Plan by Corps of Engineers, United States Army, 1878-1894. Scale, 1:63,360. No topography. Map is in 93 sheets, including 9 index sheets. Published by the Missouri River Commission, St. Louis, Mo.

(b) North Platte River (head of Platte River) from sec. 10, T. 26 N., R. 65 W., Wyo., to sec. 20, T. 19 N., R. 48 W., 75 miles in Nebraska and 45 miles in Wyoming (6N). Surveyed by United States Bureau of Reclamation, 1911. Plan only. Scale, 1:31,680. Contour intervals, 10 and 20 feet. Detailed topography. Published by the United States Bureau of Reclamation in five sheets. This map covers the North Platte irrigation project.

For areas in Nebraska covered by standard United States Geological Survey topographic maps see Plate 1.

## NEVADA

Colorado River from Black Canyon, Ariz., to Arizona-Nevada line, 68 miles (9LA, 9HC). Plan and profile by United States Geological Survey and United States Bureau of Reclamation, 1919-20. Scale, 1:31,680. Topography about 500 feet above water surface. Contour intervals, 50 feet on land and 5 feet on water. Published by United States Geological Survey in 6 sheets, 4 plans and 2 profiles. This is part of a map of Colorado River from Lees Ferry, Ariz. to Black Canyon (356 miles) published by the United States Geological Survey in 21 sheets. (See Arizona.)

Colorado River from Nevada-California-Arizona line to Black Canyon (9LA). Mileage is listed under survey from Black Canyon to Mexican boundary, Ariz. (See Arizona.) Plan and profile by United States Geological Survey and United States Bureau of Reclamation, 1902-3 and 1920. Scale, 1:31,680. Detailed topography. Contour intervals, 10 to 50 feet on land and 5 feet on water surface. In preparation for publication by United States Geological Survey; will probably be printed in 20 to 25 sheets.

The following dam sites are partly in Nevada and partly in Arizona. The maps are described under Arizona, which see.

Hualpai Rapids.

Virgin Canyon.

Boulder Canyon.

Callville.

Black Canyon.

Middle Black Canyon.

Lower Black Canyon.

Eldorado.

Eagle Rock.

Bulls Head.

(a) Virgin River from mouth upstream 37 miles (9K). Plan and profile by United States Bureau of Reclamation, 1903 and 1923. Scale, 1:31,680. Topography, 50 to 500 feet above water surface. Contour interval, 50 feet. Published by United States Geological Survey in 3 sheets, 2 plans and 1 profile.

For areas in Nevada covered by standard United States Geological Survey topographic maps see Plate 1.

## NEW HAMPSHIRE

Androscoggin River. (See Maine.)

Pemigewasset River (head of Merrimack River).

(a) Mad River from Snow Brook to head, 5 miles (1EA). Plan by United States Geological Survey, 1912. Scale, 1:24,000. Detailed topography. Map in one sheet; out of stock.

From 2 to 4 miles of the headwaters of the following brooks in the Pemigewasset River basin have been surveyed: Anderson Brook, Gibbs Brook, Burnt Brook, Covert Brook, and Shoal Pond Brook. Scales, 1:9,600 to 1:24,000. Contour intervals, 20 and 100 feet. Each brook is shown on a single sheet; all out of stock.

Connecticut River.

(a) Ammonoosuc River from Assaquan Brook to headwaters, 5 miles (1GB). Plan by United States Geological Survey, 1912. Scale, 1:24,000. Contour interval, 100 feet. Detailed topography. Map in one sheet; out of stock.

(b) Zealand River from Zealand Pond downstream 5 miles (1GB). Plan by United States Geological Survey, 1911-12. Scale, 1:24,000. Detailed topography. Contour, 100 feet. Map in one sheet; out of stock.

For areas in New Hampshire covered by standard United States Geological topographic maps see Plate 1.

## NEW JERSEY

New Jersey is covered by standard United States Geological Survey topographic maps; scale, 1:62,500; contour intervals, 10 and 20 feet. (See pl. 1.)

## NEW MEXICO

Mississippi River.

(a) Canadian River.

(b) Mora River from mouth to sec. 5, T. 18 N., R. 21 E., 36 miles (7CD). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 500 feet above water surface. Published in Water-Supply Paper 421.

Rio Grande from Embudo, in sec. 19, T. 23 N., R. 10 E., to Colorado-New Mexico line, 68 miles (8BG, 8BF). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 200 to 500 feet above water surface. Published in Water-Supply Paper 421.

Rio Grande from sec. 4, T. 16 N., R. 6 E., to sec. 13, T. 19 N., R. 7 E., 23 miles (8BL). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 200 feet above water surface. Published in Water-Supply Paper 421.

Rio Grande from San Marcial to mouth of White Rock Canyon, in sec. 9, T. 16 N., R. 6 E., about 180 miles (8BL, 8BM, 8CA, 8CC). Plan by the State in 1917-18. Scale, 1 inch=2,000 feet. Contour intervals, 2 and 10 feet. Topography, 50 to 100 feet above water surface. Published by State in 34 sheets.

Rio Grande from Mescal Canyon to San Marcial, 57 miles (8CC, 8CE). Unpublished plan by United States Bureau of Reclamation, 1903 and 1909. Scale, 1:60,000. Contour interval, 50 feet. Topography, 50 feet above water surface. The map of the river from Mescal Canyon to San Marcial shows the Elephant Butte reservoir site of the Rio Grande project.

Rio Grande from sec. 19, T. 16 S., R. 4 W., to sec. 32, T. 10 S., R. 3 W., about 50 miles (8CC, 8CE). Unpublished plan by United States Bureau of Reclamation, 1903. Scale, 1:12,000. Contour interval, 10 feet. Topography, about 70 feet above water surface.

Rio Grande from sec. 12, T. 35 S., R. 9 E. in Texas, to sec. 9, T. 21 S., R. 1 W. in New Mexico, about 150 miles (8CF, 8CE). Unpublished plan by United States Bureau of Reclamation, 1903-4. Scale, 1:12,000. Contour intervals, 10 feet on land and 5 feet on water. Topography, 10 to 50 feet above water surface. Map in 16 sheets.

(a) Pecos River from sec. 16, T. 16 N., R. 12 E. to Panchuela Creek, 17 miles (8FA). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 200 to 300 feet above water surface. Published in Water-Supply Paper 421.

(a) Pecos River from sec. 2, T. 23 S., R. 28 E., to sec. 24, T. 22 S., R. 27 E., 9 miles (8FL). Unpublished plan and profile by United States Bureau of Reclamation. Scale, 1:12,000. Contour interval, 5 feet. Topography on west bank only.

(a) Pecos River from sec. 23, T. 26 S., R. 28 E., to sec. 33, T. 24 S., R. 29 E., 18 miles (8FL). Unpublished plan. Topography, about 100 feet above water surface. Scale of original map, 1:1,200. Contour interval, 5 feet. This section is a proposed reservoir site on Pecos River. Map of the dam site is also available; topography, 75 feet above water surface.

#### Colorado River.

(a) Gila River from sec. 20, T. 19 S., R. 20 W., to sec. 4, T. 16 S., R. 17 W., 44 miles (9MA). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour interval, 25 feet on land and 5 feet on water. Topography, 100 to 500 feet above water surface. Two dam sites are also shown on a scale of 1:12,000 with 25-foot contour interval. Published in Water-Supply Paper 396.

(a) Gila River from sec. 19, T. 19 S., R. 19 W., to sec. 29, T. 18 S., R. 18 W., 10 miles (9MA). Plan by United States Geological Survey, 1920. Scale, 1:24,000. Contour interval, 10 feet. Detailed topography. This section is Bedrock reservoir site. Three possible dam sites were mapped in 1920 by the United States Geological Survey in connection with this reservoir on a scale of 1:1,200, with a

10-foot contour interval. The Cliff dam site in the NE.  $\frac{1}{4}$  sec. 21, T. 16 S., R. 17 W., was surveyed in 1920 by the United States Geological Survey on a scale of 1:2,400 with a contour interval of 10 feet and topography 220 feet above water surface. Maps of all these surveys on Gila River in New Mexico are in preparation.

(b) San Francisco River from sec. 9, T. 11 S., R. 20 W., to sec. 4, T. 10 S., R. 20 W., 10 miles (9MB). Unpublished plan by United States Geological Survey and United States Bureau of Reclamation. Scale, 1:24,000. Contour interval, 10 feet. Topography, 200 feet above water surface. This section is Alma reservoir site. There is also a map of the Alma dam site on a scale of 1:2,400 with a 10-foot contour interval and topography 200 feet above water surface.

For areas in New Mexico covered by standard United States Geological Survey topographic maps see Plate 1.

## NEW YORK

Hudson River from mouth to source, 159 miles (1KA, 1KB, 1KE, 1KF, 1JA, 1JB, 1JC, 1JD, 1JK, 1JL). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Fishing Brook from mouth to source, 18 miles (1JA). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Cedar River from mouth to source, 36 miles (1JA). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(b) Rock River from mouth to source, 13 miles (1JA). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Indian River from mouth to mouth of Jessup River, 21 miles (1JA). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Jessup River from mouth to source, 15 miles (1JA). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Boreas River from mouth to source, 23 miles (1JB). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Thirteenth Brook from mouth to source, 8 miles (1JB). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Schroon River from mouth to source, 61 miles (1JB). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Schroon River from Tumblehead Falls to Schroon Falls, 24 miles (1JB). Plan by New York State Water Supply Commission, 1909. Scale, 1:38,000. Contour interval, 20 feet. Topography, 20 to 60 feet above water surface. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Schroon River.

(b) Black Brook, Hammond Pond reservoir near (East) North Hudson (1JB). Surveyed by New York State Water Storage Commission, 1902. Scale, 1:9,600. Contour interval, 10 feet. Topography, 50 feet above water level at dam site.



The dam site is shown on a scale of 1:1,200 with contour interval of 2 feet and topography 40 feet above water level. Published by New York Water Storage Commission, 1903.

(b) The Branch of Schroon River from mouth to source, 16 miles (1JB). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(b) Paradox Creek from mouth to source, 15 miles (1JB). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(b) Mill Brook from mouth to source, 13 miles (1JB). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(b) Trout Brook from mouth to source, 19 miles (1JB). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(c) Minerva Stream from mouth to source, 15 miles (1JB). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Sacandaga River from mouth to source, 75 miles (1JC). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(b) Sacandaga Lake and Pleasant Lake (1JC). Plan by New York State Water Supply Commission, 1908. Scale, 1:20,000. Contour interval, 10 feet. Very little topography, but flow line of proposed reservoir is shown. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Sacandaga reservoir from Hadley to Broadalbin (1JC). Plan by New York State Water Supply Commission in 38 sheets, 1907. Scale of original sheets, 1:4,800. Eleven sheets showing towns within the flowage area and dam sites and 22 sheets showing the reservoir site are published in Third Annual Report of the Commission, 1908. Contour interval, 5 feet. A map of the dam site near Conklingville, scale 1:4,500, contour interval 5 feet, topography 100 feet above water surface, is also published in the Third Annual Report of the Commission.

(b) Kunjamuk Creek from mouth to source, 15 miles (1JC). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(b) East Branch of Sacandaga River from mouth to source, 25 miles (1JC). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(b) West Branch of Sacandaga River from mouth to source, 31 miles (1JC). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(b) West Branch of Sacandaga River (Piseco Lake reservoir site) near Piseco Lake (1JC). Surveyed by New York Water Storage Commission, 1902. Scale, 1:19,200. Contour interval, 10 feet. Topography, 80 feet above water surface at dam site. The dam site is shown on a scale of 1:4,800, with contour interval of 10 feet and topography 80 feet above the water surface. Published by New York Water Storage Commission, 1903.

(b) Vly Creek from mouth to junction of Mayfield and Kenyetto creeks, 5 miles (1JC). Profile by New York State Water Supply Commission, 1908.

Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(c) Mayfield Creek from mouth to source, 11 miles (1JC). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(c) Kenyetto Creek from mouth to junction of Alder and Cadman creeks, 16 miles (1JC). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(c) Hans Creek from mouth to source, 17 miles (1JC). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Batten Kill from mouth to source, 56 miles (1JD). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Fish Creek from mouth to source, 43 miles (1JD). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Hoosic River from mouth to point 5 miles above Cheshire, 66 miles (1JE). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

Delaware River from New York State boundary to junction of East and West branches, 76 miles (1LC, 1LE). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

Delaware River from Narrowsburg to Cohecton, 10 miles (1LC). Cohecton reservoir site. Plan by New York State Water Supply Commission, 1908. Scale, 1:13,200. Contour interval, 10 feet. Topography, 30 to 60 feet above water surface. Dam site is shown on a scale of 1:1,320; contour interval, 5 feet; topography, 70 feet above water surface. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.<sup>1</sup>

(a) West Branch of Delaware River from point 5 miles below Cannonsville Bridge to Granton, 10 miles (1LA). Cannonsville reservoir site. Plan by New York State Water Supply Commission, 1908. Scale, 1:13,200. Contour interval, 10 feet. Topography, 50 to 120 feet above water surface. Dam site is shown on a scale of 1:1,200; contour interval, 5 feet; topography, 80 feet above water surface. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) West Branch of Delaware River from junction with East Branch to a point  $4\frac{1}{2}$  miles above Granton Bridge, 31 miles (1LA). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=2 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

Susquehanna River in Binghamton, 6 miles (1NC, 1NF). Plan from surveys in 1890. Scale, 1:9,250. No contours. Published by New York Water Storage Commission, 1903.

(a) Chemung River at Elmira, 2 miles (1NJ). Plan and profile. Plan from surveys in 1889. Scale, 1:2,400. No contours, but many elevations. Published by New York Water Storage Commission, 1903.

(b) Canisteo River through Hornellsville, 6 miles (1NH). Plan by New York State Water Storage Commission, 1902. Scale, 1:5,250. Contour interval, 2 feet. Very little topography. Maps show area flooded by high water. Published by New York Water Storage Commission, 1903.

(b) Canisteo River through Canisteo, 6 miles (1NH). Plan by New York State Water Storage Commission, 1902. Scale, 1:5,250. Contour interval, 2 feet. Topography only in area flooded by river at high water. Published by New York State Water Storage Commission, 1903.

(a) Chenango River in Binghamton  $2\frac{1}{2}$  miles (1NE). Plan from surveys in 1890. Scale, 1:9,250. No contours. Published by New York Water Storage Commission, 1903.

Niagara River from Lake Erie to Lake Ontario, 37 miles (4MA). Profile compiled by New York Conservation Commission. Scale, 1 inch=1.4 miles. Published in Second Annual Report of New York Conservation Commission, Division of Inland Water, 1912.

Niagara River from La Salle to Lewiston, 15 miles (4MA). Plan by United States Army, Corps of Engineers, 1919. Scale, 1:10,000. Detailed topography. Contour intervals, 2 and 10 feet on land; no water-surface contours. Published in report entitled "Division of water from the Great Lakes and Niagara River," Government Printing Office.

St. Lawrence River from Ogdensburg to Montreal, 120 miles (4). Plan and profile. Scale, 1 inch=5 miles. No contours. Published in Second Annual Report of New York State Water Power Commission, for 1922.

(a) Buffalo River in Buffalo, from mouth upstream 8 miles (4LJ). Plan and profile by Bureau of Engineering of Buffalo, 1902. Scale, 1:7,200. No contours. Map shows area affected by floods. Published by New York State Water Storage Commission, 1903.

(a) Little Tonawanda Creek from Linden to Dale, 6 miles (4MA). Plan by New York Conservation Commission, 1912. Scale, 1:12,000. Contour interval, 5 feet. Topography, 30 to 70 feet above water surface. This section is Linden reservoir site. Published in Second Annual Report of New York Conservation Commission, 1912.

(a) Genesee River in Rochester, 9 miles (4MF). Plan from surveys made prior to 1902. Scale, 1:17,300. No contours. Published by New York Water Storage Commission, 1903.

(a) Genesee River, Portage reservoir site, from power-house site below Portage upstream 28 miles (4ME). Plan by New York State Water Supply Commission, 1907. Scale, 1:22,600. Contour intervals, 10 and 20 feet. Detailed topography. The dam site is mapped on a scale of 1:4,450; contour interval of 10 feet; topography, 150 feet above water surface. Published in Third Annual Report of New York State Water Supply Commission, 1908.

(a) Black River from point below Hawkinsville to Forestport, 8 miles (4MH). Hawkinsville reservoir site. Plan by New York Water Supply Commission. Scale, 1:30,000. Contour interval, 20 feet. Topography, 20 to 120 feet above water surface. The dam site is shown on a scale of 1:10,800; contour interval, 10 feet; topography, 100 feet above water surface. Published in Sixth Annual Report of New York State Water Supply Commission, 1911.

(b) Moose River.

(c) South Branch of Moose River from Higley Mountain upstream 13 miles (4NH). Higley Mountain reservoir site. Plan by New York State Water Supply Commission. Scale, 1:43,200. Contour intervals, 20 and 100 feet. Topography, 200 to 400 feet above water surface. Published in the Sixth Annual Report of New York State Water Commission, 1911.

(a) Oswegatchie River from mouth to junction of East and West branches, 73 miles (4OC). Profile by New York Conservation Commission. Scale, 1 inch=4 miles. Published in Third Annual Report of New York Conservation Commission, Division of Inland Waters, 1913.

(a) East Branch of Oswegatchie River (head of Oswegatchie River) from Newton Falls to Cranberry Lake, 11 miles (4OB). Plan by New York Conservation Commission, 1913. Scale, 1:36,000. Contour interval, 10 feet. Topography, 40 feet above water surface at dam site. Map shows Newton Falls reservoir site. Published in Third Annual Report of New York Conservation Commission, Division of Inland Waters, 1913.

(a) East Branch of Oswegatchie River (head of Oswegatchie River) from mouth to Cranberry Lake, 42 miles (4OB). Profile by New York Conservation Commission. Scale, 1 inch=4 miles. Published in Third Annual Report of New York Conservation Commission, Division of Inland Waters, 1913.

(b) West Branch of Oswegatchie River from mouth to point 7 miles above Harrisville, 27 miles (4OB). Profile by New York Conservation Commission. Scale, 1 inch=4 miles. Published in Third Annual Report of New York Conservation Commission, Division of Inland Waters, 1913.

(b) West Branch and Middle Branch of Oswegatchie River from their junction 4 miles up West Branch and about 7 miles up Middle Branch (4OB). This section is Harrisville reservoir site. Plan by New York Conservation Commission. Scale, 1:36,000. Contour interval, 10 feet. Topography, 40 feet above water surface. Published in Third Annual Report of New York Conservation Commission, Division of Inland Waters, 1913.

(b) Indian River (tributary to Oswegatchie River) from Black Lake to Indian Lake, 70 miles (4OC). Profile by New York Conservation Commission. Scale, 1 inch=4 miles. Published in Third Annual Report of New York Conservation Commission, Division of Inland Waters, 1913.

(a) Raquette River from mouth to source, 165 miles (4OF). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=3.6 miles. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Raquette River from Colton downstream  $1\frac{1}{4}$  miles (4OF). Plan by New York State Water Supply Commission, 1908. Scale, 1:1,800. Contour interval, 5 feet. Topography, 15 to 175 feet above water surface. Published in Fourth Annual Report of New York State Water Supply Commission, 1909.

(a) Raquette River from Raquette Pond to Raquette Falls, 19 miles (4OF). Tupper Lake reservoir. Plan by New York State Water Supply Commission, 1909. Scale, 1:34,000. Contour interval, 20 feet. Topography, 50 feet above water surface. Published in Fourth Annual Report of New York State Water Supply Commission.

(b) Brandreth Lake Branch from outlet of Forked Lake to source, 13 miles (4OF). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=3.6 miles. Published in Fourth Annual Report of New York Water Supply Commission, 1909.

(b) Sucker Brook from Raquette Lake to source, 10 miles (4OF). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=3.6 miles. Published in Fourth Annual Report of New York Water Supply Commission, 1909.

(b) Cold River from mouth to source, 20 miles (4OF). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=3.6 miles. Published in Fourth Annual Report of New York Water Supply Commission, 1909.

(b) Bog River from Tupper Lake upstream 10 miles (4OF). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=3.6 miles. Published in Fourth Annual Report of New York Water Supply Commission, 1909.

(c) Little Tupper Lake Branch from mouth to source, 19 miles (4OF). Profile by New York State Water Supply Commission, 1908. Scale, 1 inch=3.6 miles.

Published in Fourth Annual Report of New York Water Supply Commission, 1909.

New York is covered by standard United States Geological Survey topographic maps, scale, 1:62,500. (See pl. 1.)

## NORTH CAROLINA

Roanoke River from Weldon, N. C., to Roanoke, Va., 32 miles in North Carolina and 202 miles in Virginia (2CA, 2CB, 2CF). Plan and profile by United States Geological Survey, 1905. Scale, 1:24,000. No topography. Published by United States Geological Survey in 11 sheets, with plan and profile on each sheet. Section of river in North Carolina is shown on one sheet. Remaining sheets show section in Virginia. Sheets out of stock.

Cape Fear River from Fayetteville to Natmore Creek, 77 miles (2EF, 2EG). Unpublished plan by Corps of Engineers, United States Army. Scale, 1:12,000. Topography, 70 feet above water surface. Contour interval, 10 feet. Map is in eight sheets.

(a) Deep River from mouth to Jamestown, 114 miles (2EC, 2ED). Scale, 1:51,000. No contours. Map prepared and published by North Carolina Geological and Economic Survey in Economic Paper 54, "Water-power investigation of Deep River."

Yadkin River from Tinsley Shoals, 12 miles above North Wilkesboro, to Barlow Shoals, 3 miles (2FB). Profile by North Carolina Geological and Economic Survey. Scale, 1 inch=800 feet. Published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

Yadkin River, Tinsley Shoals dam site, 12 miles above North Wilkesboro (2FB). Plan by North Carolina Geological and Economic Survey. Scale, 1:5,450. Contour interval, 10 feet. Topography, 60 feet above water surface. Published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

Yadkin River from Bean Shoals, 7½ miles below mouth of Ararat River, to North Wilkesboro, 57 miles (2FB, 2FC). Profile by North Carolina Geological and Economic Survey. Scale, 1 inch=one-half mile. Published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

Yadkin River at Bean Shoals, from mouth of Little Yadkin River upstream 4 miles (2FC). Plan and profile by North Carolina Geological and Economic Survey. Scale, 1:14,600. Two contours. There is also a map of the river for 2½ miles above the dam site at Bean Shoals; scale, 1:6,320; contour interval, 10 feet; topography, 70 feet above water surface. Published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

Yadkin River from Uharie River to Abbots Creek, 19 miles (2FD). Plan by United States Geological Survey in cooperation with North Carolina Geological Survey, 1898. Scale, 1:32,000; contour interval, 10 feet. Topography, 20 to 50 feet above water surface. Published in Bulletin 8 of North Carolina Geological Survey, entitled "Water power," 1899.

(a) Lewis Fork in Wilkes County, 4 miles (2FB). Profile. Scale, 1 inch=1,600 feet. Prepared and published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

(b) South Fork of Lewis Fork in Wilkes County, 5 miles (2FB). Profile. Scale, 1 inch=1,600 feet. Prepared and published by North Carolina Geologi-

cal and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

(b) West Fork of Lewis River in Wilkes County, 4 miles (2FB). Profile. Scale, 1:1,765. Prepared and published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

(a) Roaring River from mouth upstream 11 miles (2FB). Profile. Scale, 1 inch=4,000 feet. Prepared and published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

(a) Elkin River from mouth to Elkin Power Co.'s dam, 4 miles (2FB). Profile. Scale, 1 inch=1,650 feet. Prepared and published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

(a) Mitchell River from point 1 mile below Cumming's mill and 3 miles above mouth upstream 18 miles (2FB). Profile. Scale, 1 inch=1,500 feet. Prepared and published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

(a) Fisher River from Dobson-Mount Airy highway bridge upstream 13 miles (2FB). Profile by North Carolina Geological and Economic Survey. Scale, 1 inch=1,600 feet. Horseshoe dam site, about 8 miles above the Dobson-Mount Airy bridge, is shown on a scale of 1:8,000, contour interval 10 feet, topography 100 feet above water surface. Published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

(a) Ararat River from mouth to Douglas Ford, 8 miles (2FB). Profile by North Carolina Geological and Economic Survey. Scale, 1 inch=1,870 feet. Two dam sites are shown as follows: Hiatt's dam site, near bridge on road from Dobson to Pilot Mountain, scale not given, contour intervals 5 and 10 feet, topography 30 to 80 feet above water surface; Matthew's mill site, scale, 1:2,600, contour interval 10 feet, topography 90 feet above water surface. Maps of the dam sites and river profile published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

Catawba River (head of Wateree and Santee rivers) from Marion to Connelly Springs, 45 miles (2GA). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 20 to 50 feet above water surface. A small-scale profile is published in Water-Supply Paper 115. Map in two sheets.

Catawba and Wateree rivers (head of Santee River) from Halltown Road Ford, N. C., to Camden, S. C., 216 miles (2GB, 2GC, 2GD). Profile by United States Geological Survey from surveys at different dates. Scale, 1 inch=2 miles. Published in two sheets; out of stock.

Catawba River (head of Wateree and Santee rivers) from point 14 miles above Buck Creek to North Carolina-South Carolina line, 140 miles (2GA, 2GB, 2GC). Unpublished plan by Corps of Engineers, United States Army, 1879. Scale, 1:8,672. Map is in four large sheets and shows little except the course of the river. Map also shows 28 miles in South Carolina.

(a) Broad River (head of Congaree River and tributary to Wateree River) from Green River, N. C., to Columbia, S. C., 143 miles (2GE). Profile by Corps of Engineers, United States Army, and United States Geological Survey, 1879. Scale, 1 inch=2 miles. Profile published by United States Geological Survey in one sheet; out of stock.

## Mississippi River.

## (a) Ohio River.

(b) South Fork of New River (head of New River (3FA)). Plan and profile from point 18 miles below Bowie to Bowie. Scale, 1:29,000. No contours. Prepared and published by North Carolina Geological and Economic Survey in Economic Paper 53, "Water-power survey of Surry and Wilkes counties," 1922.

(b) French Broad River (head of Tennessee River) from Paint Rock to Asheville, 43 miles (3TF, 3TG). Plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. Unpublished profile on one sheet. This is a straight-line plan projected from the profile and shows distances along the river but no topography.

(b) French Broad River from Brevard to bridge near Asheville, 48 miles (3TF). Unpublished plan and profile by Corps of Engineers, United States Army, 1878. Scale, 1:48,000. No topography. Plan and profile on one sheet.

## (b) Tennessee River.

(c) Nolichucky River from Caney River to Erwin, Tenn., 15 miles (3TJ). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. Profile on one sheet. Toe and North Toe rivers are shown on the same sheet. A straight-line plan projected from the profile shows distances along the river but no topography.

(d) Caney River from mouth to Burnsville, 25 miles (3TJ). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. No topography. Plan and profile on one sheet.

(d) Toe River from mouth to forks, 22 miles (3TJ). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. A straight-line plan projected from the profile shows distances along the river but no topography.

(e) North Toe River from mouth to Plum Tree, 33 miles (3TJ). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. No topography.

## (c) Holston River.

## (d) Watauga River. See Tennessee.

(c) Hiwassee River from North Carolina-Georgia line to North Carolina-Tennessee line, 58 miles (3UJ). Unpublished plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Topography, 50 feet above water surface. Contour interval, 10 feet. Plan on two sheets, profile on one sheet. Map shows river from Hiwassee, Ga., to Apalachia, Tenn.

(d) Nottely River from mouth to North Carolina-Georgia line, 18 miles (3UJ). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 40 to 70 feet above water surface. Plan on one sheet. Map shows river from the mouth to Blairsville, Ga.

For areas in North Carolina covered by standard United States Geological Survey topographic maps see Plate 1.

## NORTH DAKOTA

## Mississippi River.

(a) Missouri River from Montana-North Dakota line to Iowa line at Sioux City, 947 miles (6E, 6J, 6L). Plan by Corps of Engineers, United States Army, 1892. Scale, 1:12,000. Contour interval, 20 feet. Height to which topography is carried varies. This is part of a map prepared for use in connection with navigation, showing the river from the mouth to Three Forks, Mont., 2,551 miles. There are no contours on this map, but topography is indicated by hachures. Published by the Missouri River Commission, St. Louis, Mo.

Nelson River and Lake Winnepeg.



(a) Red River from international boundary to Lake Traverse, 455 miles (50, 5P). Plan and profile by Bureau of Public Roads, United States Department of Agriculture. Scale, plan 1:53,000; profile 1 inch=10 miles. No topography, but many elevations are given on the plan, which was prepared in connection with drainage investigations. Published in Bulletin 1017 of the Department of Agriculture, entitled "Report on drainage and prevention of overflow in the valley of the Red River of the North."

For areas in North Dakota covered by standard United States Geological Survey topographic maps see Plate 1.

## OHIO

Mississippi River.

(a) Ohio River from Cairo, Ill., to Pittsburgh, Pa., 967 miles, has been surveyed at different dates by the Corps of Engineers, United States Army. The maps have been prepared for use in connection with navigation and are on file in the district offices of the Corps of Engineers that are concerned with Ohio River.

Ohio is covered by standard United States Geological Survey topographic maps; scale, 1:62,500, contour intervals, 10 and 20 feet. (See pl. 1.)

## OKLAHOMA

Most of eastern Oklahoma is covered by standard United States Geological Survey topographic maps; scales, 1:125,000 and 1:62,500; contour intervals, 20, 25, and 50 feet. (See pl. 1.)

## OREGON

Silver Lake.

(a) Silver Creek, Thompson Valley reservoir site, in Tps. 30 and 31 S., Rs. 13 and 14 E. (10 AC). Plan by United States Bureau of Reclamation and State of Oregon, 1914. Scale, 1:48,000. Contour interval, 5 feet. Topography, 60 feet above water surface at dam site. Dam site is shown on a scale of 1:24,000; contour interval, 5 feet; detailed topography. Published by United States Bureau of Reclamation and State of Oregon in a report on Silver Lake Irrigation project, 1915.

Malheur Lake and Harney Lake.

(a) Silvies River, Silvies Valley reservoir site, from sec. 15, T. 19S., R. 31 E., to sec. 25, T. 17 S., R. 31 E. (10AB). Plan by United States Bureau of Reclamation and State of Oregon, 1904. Scale, 1:63,360. Contour interval, 5 feet. Topography, 100 feet above water surface at dam site. The dam site is shown on a scale of 1:24,000, contour interval, 10 feet. Published by United States Bureau of Reclamation and State of Oregon in a report on Harney and Silver Creek irrigation projects, 1916.

(a) Silvies River, Lower Silvies reservoir site, in Tps. 20 and 21 S., R. 29 E. (10AB). Plan by United States Bureau of Reclamation and State of Oregon, 1916. Scale, 1:63,360. Contour interval, 50 feet. Topography, 100 feet above water surface at dam site. Two dam sites are shown on a scale of 1:4,800; contour interval, 10 feet; topography, 300 feet and 70 feet, respectively, above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on Harney and Silver Creek irrigation projects, 1916.

(b) Emigrant Creek, Emigrant Creek reservoir site, in Tps. 20 and 21 S., R. 28 E. (10AB). Scale, 1:63,360. Contour intervals, 10 and 50 feet. Topography, 150 feet above water surface at dam site. Dam site is shown on a scale of 1:3,160; contour interval, 10 feet; topography, 150 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on Harney and Silver Creek irrigation projects, 1916.

(a) Silver Creek from sec. 22, T. 21 S., R. 26 E., to sec. 33, T. 23 S., R. 27 E. (10AA). Plan by United States Bureau of Reclamation and State of Oregon. Silver Creek reservoir site comprises the area above sec. 6, T. 22 S., R. 26 E. It is mapped on a scale of 1:48,000; contour interval, 10 feet; topography, 100 feet above water surface at dam site. The dam site is shown on a scale of 1:2,400; contour interval, 10 feet; topography, 150 feet above water surface. Below the reservoir site the scale is 1:190,080 and the contour intervals 10 and 50 feet. Topography for this lower section covers a wide area it is proposed to irrigate. Published by United States Bureau of Reclamation and State of Oregon in a report on Harney and Silver Creek irrigation projects, 1916.

Klamath River from California-Oregon boundary to Keno, Oreg., 25 miles (11AE). Plan and profile by United States Geological Survey, 1923. Scale, 1:48,000. Topography, 150 to 700 feet above water surface. Contour intervals, 25 feet on land and 5 feet on water. In preparation. This is part of a map of the river from sec. 12, T. 10 N., R. 3 E., Calif., to Keno, Oreg., 202 miles. (See California.)

The following dam sites were surveyed on Klamath River in Oregon—scale, 1:2,400; contour interval, 10 feet. The maps are published in one sheet (sheet F) by United States Geological Survey. For maps of dam sites in California see California.

Salt Caves site, mile 178.9; topography, 160 feet above water surface.

Spencer Creek site, mile 193.1; topography, 80 feet above water surface.

Keno site, mile 200.5; topography, 60 feet above water surface.

Columbia River from Oregon-Washington boundary, in T. 6 N., R. 31 E., to Celilo Falls, in T. 2 N., R. 15 E., 110 miles (12MA, 12MG). Unpublished plan and profile by Corps of Engineers, United States Army, 1906. Scale, 1:10,000. Very little topography. Columbia River has been surveyed from the international boundary to its mouth by the Corps of Engineers. The surveys were made to obtain data for navigation, however, and for the most part show little topography. Maps of the stretch indicated above are on file in the offices of the Geological Survey in Washington, D. C. Correspondence concerning surveys should be addressed to the district engineer of the corps at Portland, Oreg.

(a) Snake River from Lewiston, Idaho, to Huntington, Oreg. (see Idaho) (12HR, 12HN, 12HK). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 500 feet above water surface. Published by United States Geological Survey in 17 sheets, 10 plans and 7 profiles. The major portion of the stretch from Huntington, Oreg., to Lewiston, Idaho, is along the boundary between Oregon and Idaho, and the mileage, 187 miles, is given under Idaho. Sheet J shows four dam sites on a scale of 1:4,800 and one site on a scale of 1:2,400, as listed below; contour interval, 10 feet.

Mountain Sheep Creek dam site, between miles 50 and 51; topography, 170 feet above water surface.

Corral Creek dam site, between miles 77 and 78; topography, 350 feet above water surface.

Squaw Creek dam site, between miles 95 and 96; topography, 280 feet above water surface.

32 Point Creek dam site, between miles 112 and 113; topography, 170 feet above water surface.

Nelson Creek dam site, between miles 120 and 121; topography, 90 feet above water surface.

Snake River from mouth to source. Unpublished profile. Scale, 1 inch=40 miles. Prepared by Oregon Short Line Railroad.

(b) Owyhee River, Duncan Ferry reservoir site, from sec. 8, T. 32 S., R. 42 E., to sec. 4, T. 31 S., R. 41 E., about 9 miles (12HE). Plan by United States Bureau of Reclamation, 1906. Scale, 1:12,000. Contour interval, 10 feet. Topography, 100 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report entitled "Malheur and Owyhee projects, irrigation and drainage," 1916. Scale of published map, 1:63,360. Contour interval, 10 feet. Topography, 100 feet above water surface at dam site. Dam site is shown on a scale of 1:2,400; contour intervals, 10 and 50 feet; topography, 300 feet above water surface.

(b) Owyhee River, Red Butte reservoir site, in T. 26 S., Rs. 43 and 44 E. (12HE). Plan by United States Bureau of Reclamation and State of Oregon, 1904. Scale, 1:63,360. Contour interval, 10 feet. Topography, 150 feet above water surface at dam site. Dam site is shown on a scale of 1:7,200, contour interval, 10 feet, topography 200 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report entitled "Malheur and Owyhee projects, irrigation and drainage," 1916.

(b) Owyhee River, Owyhee Canyon diversion dam site, in sec. 14, T. 21 S., R. 45 E. (12HE). Surveyed by United States Bureau of Reclamation and State of Oregon, 1904. Scale, 1:9,600. Contour interval, 10 feet. Topography, 160 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report entitled "Malheur and Owyhee projects, irrigation and drainage," 1916.

(b) Malheur River, Harper reservoir site, from sec. 17, T. 19 S., R. 43 E., to sec. 34, T. 20 S., R. 41 E., about 15 miles (12HH). Unpublished plan by United States Bureau of Reclamation, 1909. Scale, 1:31,680. Contour interval, 50 feet. Topography, about 150 feet above water surface at dam site.

(c) Middle Fork of Malheur River, Warm Springs reservoir site, from sec. 8, T. 23 S., R. 37 E., to sec. 27, T. 21 S., R. 36 E., 10 miles (12HH). Plan by United States Bureau of Reclamation, 1905. Scale, 1:12,000. Contour interval, 5 feet. Topography, 100 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report entitled "Malheur and Owyhee projects, irrigation and drainage," 1916, on a scale of 1:64,000, contour interval 10 feet, topography 100 feet above water surface at dam site. Dam site is shown on a scale of 1:2,400, contour interval 5 feet, topography 180 feet above water surface.

(c) North Fork of Malheur River, Agency Valley reservoir site, from sec. 22, T. 19 S., R. 37 E., to sec. 4, T. 19 S., R. 37 E., about 4 miles (12HH). Plan by United States Bureau of Reclamation, 1909. Scale, 1:12,000. Contour intervals, 10 feet on land and 5 feet on water. Topography, about 75 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report entitled "Malheur and Owyhee projects, irrigation and drainage," 1916, on a scale of 1:63,360, contour interval 10 feet, topography 90 feet above water surface at dam site. Dam site is shown on a scale of 1:2,400 feet, contour interval 10 feet, topography 100 feet above water surface.

(a) John Day River, Dayville reservoir site, from sec. 20, T. 12 S., R. 26 E., to sec. 3, T. 13 S., R. 27 E. (12MD). Plan by United States Bureau of Reclamation and State of Oregon, 1915. Scale, 1:63,360. Contour intervals, 10 and 50 feet. Topography, 175 feet above water surface at dam site. Dam site is shown on a scale of 1:4,800, contour interval 25 feet, topography 200 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on John Day irrigation project, 1916.

(a) John Day River and North Fork, Spray reservoir site, from sec. 24, T. 9 S., R. 25 E., to sec. 30, T. 10 S., R. 26 E., on John Day River, and to sec. 3, T. 9 S., R. 27 E., on North Fork of John Day River (12MD, 12ME). Plan by

United States Bureau of Reclamation and State of Oregon, 1910. Scale, 1:126,720. Contour interval, 50 feet. Topography, 150 feet above water surface. Dam site is shown on a scale of 1:24,000, contour interval 50 feet, topography 150 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on the John Day irrigation project, 1916.

(a) John Day River, Twickenham reservoir site, from sec. 11, T. 10 S., R. 20 E., to sec. 8, T. 9 S., R. 23 E. (12MF). Plan by United States Bureau of Reclamation and State of Oregon, 1908. Scale, 1:173,000. Contour interval, 50 feet. Topography, 150 feet above water surface at dam site. Dam site is shown on a scale of 1:17,150, contour interval 10 feet, topography 150 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on the John Day irrigation project, 1916.

(a) John Day River, Clarno reservoir site, from sec. 34, T. 9 S., R. 20 E., to sec. 18, T. 7 S., R. 19 E. (12MF). Plan by United States Bureau of Reclamation and State of Oregon, 1914. Scale, 1:96,000. Contour intervals, 10 and 50 feet. Topography, 225 feet above water surface at dam site. Dam site is shown on a scale of 1:14,750, contour interval 5 feet, topography 225 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on the John Day irrigation project, 1916.

(a) John Day River, Bull Basin dam site, in sec. 27, T. 3 S., R. 18 E. (12MF). Plan by United States Bureau of Reclamation, and State of Oregon, 1914. Scale, 1:4,800. Contour interval, 5 feet. Topography, 260 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on the John Day irrigation project, 1916.

(a) John Day River, Jack Knife dam site, in secs. 14, 15, 22, 23, T. 3 S., R. 18 E. (12MF). Plan by United States Bureau of Reclamation and State of Oregon, 1914. Scale, 1:4,800. Contour intervals, 5 and 25 feet. Topography, 325 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on the John Day irrigation project, 1916.

(a) John Day River, Tenmile Falls power site, in secs. 1, 12, and 13, T. 2 N., R. 18 E., and secs. 6, 7, and 18, T. 2 N., R. 19 E. (12MF). Plan by United States Bureau of Reclamation and State of Oregon, 1915. Scale, 1:24,000. Contour interval, 20 feet. Topography for area between John Day River and Columbia River, 800 feet above water surface of John Day River. Published by United States Bureau of Reclamation and State of Oregon in a report on the John Day irrigation project, 1916.

(a) John Day River from mouth, in sec. 23, T. 3 N., R. 17 E., to sec. 30, T. 9 S., R. 26 E. (mouth of Middle Fork) 180 miles (12MF). Plan and profile by United States Geological Survey, 1909. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 75 feet above water surface. Published in Water-Supply Paper 377.

(b) Rock Creek, Devils Gap reservoir site, from sec. 15 to sec. 35, T. 3 S., R. 22 E. (12MF). Plan by United States Bureau of Reclamation and State of Oregon, 1911. Scale, 1:24,000. Contour intervals, 20 and 25 feet. Topography, 150 feet above water surface at dam site. Published by United States Bureau of Reclamation and State of Oregon in a report on the John Day irrigation project, 1916.

(a) Deschutes River and West Fork from mouth, in sec. 23, T. 2 N., R. 15 E., to sec. 23, T. 21 S., R. 9 E. (Pringle Falls), 217 miles (12MH, 12MK). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 700 feet above water surface. Published in Water-Supply Paper 344.

(b) East Fork of Deschutes River from mouth, in sec. 7, T. 20 S., R. 10 E., to sec. 9, T. 22 S., R. 10 E., 31 miles (12MH). Plan and profile by United States

Geological Survey, 1911. Scale, 1:31,680. Contour interval, 5 feet. Topography, about 50 feet above water surface. Published in Water-Supply Paper 344.

(c) Paulina Creek from sec. 18, T. 21 S., R. 11 E., to sec. 12, T. 21 S., R. 10 E., 1 mile (12MH). Plan by United States Geological Survey, 1911. Scale 1:31,680. Contour interval, 5 feet. Very little topography. Published in Water-Supply Paper 344.

(b) Fall Creek from mouth, in sec. 3, T. 21 S., R. 10 E., to sec. 32, T. 20 S., R. 10 E., 5 miles (12MH). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour interval, 5 feet. Topography, about 50 feet above water surface. Published in Water-Supply Paper 344.

(b) Crooked River from mouth to trail crossing, in sec. 33, T. 13 S., R. 13 E., about 20 miles (12MJ). Plan and profile by United States Geological Survey, 1925. Scale, 1:12,000. Contour intervals, 25 feet on land and 5 feet on water surface. Topography, 100 to 500 feet above water surface. Maps in preparation.

(c) Ochoco Creek from mouth to sec. 6, T. 15 S., R. 17 E., 9 miles (12MJ). Plan by United States Bureau of Reclamation and State of Oregon, 1914. Scale, 1:63,360. Contour intervals, 20 and 100 feet. Detailed topography. Published by United States Bureau of Reclamation and State of Oregon in a report on Ochoco irrigation project and Crooked River investigation, 1915.

(c) Ochoco Creek reservoir site, from sec. 5, T. 15 S., R. 17 E., to sec. 36, T. 14 S., R. 17 E. (12MJ). Plan by United States Bureau of Reclamation and State of Oregon, 1914. Scale, 1:24,000. Contour interval, 10 feet. Topography, 150 feet above water surface at dam site. The dam site is shown on a scale of 1:3,600, contour interval 5 feet, topography 130 feet above water surface. Published by United States Bureau of Reclamation and State of Oregon in a report on Ochoco irrigation project and Crooked River investigation, 1915.

(b) Metolius River from mouth in sec. 22, T. 11 S., R. 12 E., to sec. 22, T. 13 S., R. 9 E., 41 miles (12MK). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,690. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 200 feet above water surface. Published in Water-Supply Paper 344.

(c) Lake Creek from mouth, in sec. 10, T. 13 S., R. 9 E., to sec. 34, T. 13 S., R. 8 E. (Blue Lake), 8 miles (12MK). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 150 feet above water surface. Published in Water-Supply Paper 344. The survey of Lake Creek includes Suttles Lake and Blue Lake.

(b) Shitike Creek from mouth, in sec. 30, T. 9 S., R. 13 E., to sec. 30, T. 9 S., R. 10 E., 20 miles (12 MK). Plan and profile by Office of Indian Affairs, 1912. Scale, 1:24,000. No contours, but a little topography is indicated by shading. The profile extends to Harvey Lake, 32 miles above the mouth.

(b) Shitike Creek from mouth, in sec. 30, T. 9 S., R. 13 E., to sec. 18, T. 9 S., R. 12 E., 7 miles (12 MK). Plan and profile by Office of Indian Affairs, 1912. Scale, 1:24,000. Contour interval, 25 feet. Detailed topography.

(b) Warm Springs River from mouth, in sec. 21, T. 8 S., R. 14 E., to sec. 4, T. 7 S., R. 9 E., 41 miles (12 MK). Unpublished plan and profile by Office of Indian Affairs, 1912. Scale, 1:24,000. No contours, but a little topography is indicated by shading.

(c) Badger Creek from mouth, in sec. 21, T. 7 S., R. 11 E., to sec. 31, T. 7 S., R. 10 E., 9 miles (12 MK). Unpublished plan and profile by Office of Indian Affairs, 1912. Scale, 1:24,000. No contours, but a little topography is indicated by shading.

(c) Mill Creek from mouth, in sec. 13, T. 8 S., R. 11 E., to sec. 12, T. 9 S., R. 8 E., 22 miles (12 MK). Unpublished plan and profile by office of Indian

Affairs, 1912. Scale, 1:24,000. No contours, but a little topography is indicated by shading.

(c) Beaver Creek from mouth, in sec. 18, T. 8 S., R. 12 E., to sec. 36, T. 6 S., R. 10 E., 13 miles (12MK). Plan and profile by Office of Indian Affairs, 1912. Scale, 1:24,000. No contours, but a little topography is indicated by shading.

(c) White River from mouth, in sec. 9, T. 4 S., R. 14 E., to sec. 20, T. 4 S., R. 13 E., 9 miles (12MK). Plan and profile by United States Geological Survey, 1914. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 100 feet above water surface. Published in Water-Supply Paper 378.

(a) Hood River from mouth, in sec. 25, T. 3 N., R. 10 E., to sec. 18, T. 1 N., R. 10 E. (East Fork), 14 miles (12MN). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, mostly 25 and 50 feet but in places 200 feet above water surface. Published in Water-Supply Paper 348.

(b) East Fork of Hood River from mouth in sec. 18, T. 1 N., R. 10 E., to sec. 4, T. 1 S., R. 10 E., 6 miles (12MN). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, mostly 25 feet above water surface. Published in Water-Supply Paper 348.

(b) Middle Fork of Hood River from mouth, in sec. 18, T. 1 N., R. 10 E., to sec. 25, T. 1 N., R. 9 E., 2 miles (12MN). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 100 feet above water surface. Published in Water-Supply Paper 348.

(b) West Fork of Hood River from mouth, in sec. 1, T. 1 N., R. 9 E., to sec. 14, T. 1 N., R. 9 E. 2.5 miles (12 MN). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 100 feet above water surface. Published in Water-Supply Paper 348.

(a) Sandy River from sec. 17, T. 2 S. R. 8 E., to sec. 18, T. 2 S., R. 6 E., 18 miles (12MO). Plan and profile by United States Geological Survey, 1913. scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 75 feet above water surface. Published in Water-Supply Paper 348.

(b) Zigzag River from sec. 33, T. 2 S., R. 7 E., to sec. 17, T. 3 S., R. 8 E., 6 miles (12MO). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 75 feet above water surface. Published in Water-Supply Paper 348.

(c) Camp Creek from sec. 13, T. 3 S., R. 7 E., to sec. 17, T. 3 S., R. 8 E., 2 miles (12MO). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography.

Published in Water-Supply Paper 348.

(c) Still Creek from sec. 2, T. 3 S., R. 7 E., to sec. 29, T. 3 S., R. 8 E., 5 miles (12MO). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 348.

(a) Willamette River (12N).

(b) Middle Fork of Willamette River from sec. 12, T. 21 S., R. 2 E., to sec. 28, T. 24 S., R. 5 E., 39 miles (12NB). Plan and profile by United States Geological Survey, 1913-14. Scale, 1:31,680. Contour intervals, 25 feet on land

and 5 feet on water. Topography, 25 to 150 feet above water surface. Published in Water-Supply Papers 349 and 378.

(c) Salt Creek from sec. 22, T. 21 S., R. 3 E., to the falls, 22 miles (12NB). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 feet above water surface. Published in Water-Supply Paper 349.

(c) Salmon Creek from sec. 16, T. 21 S., R. 3 E., upstream 18 miles (12NB). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 150 feet above water surface. Published in Water-Supply Paper 349.

(d) Black Creek from mouth upstream 4 miles (12NB). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 150 feet above water surface. Published in Water-Supply Paper 349.

(c) North Fork of Middle Fork of Willamette River from sec. 12, T. 21 S., R. 2 E., upstream 18 miles (12NB). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 150 feet above water surface. Published in Water-Supply Paper 349.

(b) McKenzie River from mouth to Clear Lake, about 80 miles (12ND). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 60 to 200 feet above water surface. In preparation.

Clear Lake reservoir site, in secs. 5, 8, and 9, T. 14 S., R. 7 E., (12ND). Plan by United States Geological Survey, 1925. Scale, 1:31,680. Contour interval, 10 feet. Topography, 50 feet above water surface. In preparation.

Martins Rapids dam site, in sec. 36, T. 16 S., R. 2 E. (12ND). Plan by United States Geological Survey, 1925. Scale, 1:4,800. Contour interval, 10 feet. Topography, 150 feet above water surface. Maps in preparation. A survey of the land that would be overflowed by such a dam was also made on a scale of 1:31,680 and contour interval of 10 feet.

(c) Lost Creek from mouth upstream 4 miles (12ND). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface.

(c) Horse Creek from mouth upstream 10 miles (12ND). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 on water. Topography, 200 feet above water surface. In preparation.

(c) South Fork of McKenzie River from mouth upstream 20 miles (12ND). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. In preparation.

(c) Blue River from mouth upstream 8 miles (12ND). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. In preparation.

(b) Santiam River.

(c) North Fork of Santiam River from sec. 18, T. 9 S., R. 2 E. to sec. 15, T. 11 S., R. 7 E., 47 miles (12NE.). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 150 feet above water surface. Published in Water Supply Paper 349.

(b) Marion Fork from sec. 15, T. 11 S., R. 7 E., to sec. 26, T. 11 S., R. 7 E., 2 miles (12NE). Plan and profile by United States Geological Survey, 1913.

Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 feet above water surface. Published in Water-Supply Paper 349.

(d) North Fork of North Fork of Santiam River from sec. 15, T. 11 S., R. 7 E., to sec. 21, T. 11 S., R. 7 E.,  $1\frac{1}{2}$  miles (12NE). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 feet above water surface. Published in Water-Supply Paper 349.

(d) Pamela Creek from sec. 33, T. 10 S., R. 7 E., to sec. 36, T. 10 S., R. 7 E., 3 miles (12NE). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 500 feet above water surface. Published in Water-Supply Paper 349.

(d) Whitewater Creek from sec. 20, T. 10 S., R. 7 E., to sec. 24, T. 10 S., R. 7 E., 4 miles (12NE). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 150 feet above water surface. Published in Water-Supply Paper 349.

(d) Breitenbush River from sec. 15, T. 10 S., R. 5 E., to sec. 20, T. 9 S., R. 7 E., 14 miles (12NE). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 150 feet above water surface. Published in Water-Supply Paper 349.

(b) Clackamas River from sec. 34, T. 3 S., R. 4 E., to sec. 7, T. 7 S., R. 8 E., 41 miles (12NG). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 150 feet above water surface. Published in Water-Supply Paper 349.

(c) Collawash River from sec. 22, T. 6 S., R. 6 E., to sec. 23, T. 7 S., R. 6 E., 8 miles (12NG). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 150 feet above water surface. Published in Water-Supply Paper 349.

Rogue River from sec. 17, T. 36 S., R. 14 W., near the mouth to Haymaker dam site 2 miles above National Creek, sec. 20, T. 29 S., R. 4 E., 198 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. Published by United States Geological Survey, in 11 sheets, 6 plans and 5 profiles.

Lost Creek reservoir site, with a dam in sec. 26, T. 33 S., R. 1 E. (12RD). Plan by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 240 feet above water surface at dam site. Published by United States Geological Survey, on two sheets, part of the map of Rogue River.

Haymaker reservoir site, with a dam at mile 198, 2 miles above mouth of National Creek (12RD). Plan by United States Geological Survey, 1923. Scale, 1:12,000. Contour interval, 20 feet. Topography, 160 feet above water surface at dam site. In preparation.

The following dam sites on Rogue River were surveyed in 1923: Scale, 1:2,400; contour interval, 10 feet. The maps are in preparation.

Copper Canyon site, in sec. 11, T. 35 S., R. 12 W., at mile 20.5; topography, 180 feet above water surface.

Devils Stairs site, in sec. 17, T. 33 S., R. 10 W., at mile 43; topography, 160 feet above water surface.



Horseshoe Bend site, in secs. 23 and 26, T. 33 S., R. 9 W., at mile 54; topography 150 feet above water surface.

Taylor Creek site, in sec. 5, T. 35 S., R. 7 W., at mile 75.3; topography, 190 feet above water surface.

Hell Gate site, in sec. 10, T. 35 S., R. 7 W., at mile 78; topography, 160 feet above water surface.

Trail Creek site, in sec. 10, T. 34 S., R. 1 W., at mile 143.5; topography, 100 feet above water surface.

Lost Creek site, in sec. 26, T. 33 S., R. 1 E., at mile 154.7; topography, 175 feet above water surface.

Hamaker site, in sec. 20, T. 29 S., R. 4 E., at mile 198; topography, 140 feet above water surface.

(a) Mill Creek from mouth, in sec. 32, T. 32 S., R. 3 E., upstream 5 miles (12RD). Plan by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Detailed topography. Published by United States Geological Survey on part of one sheet of the map of Rogue River.

(a) Bar Creek from mouth, in sec. 32, T. 32 S., R. 3 E., upstream 5 miles (12RD). Plan by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Detailed topography. Published by United States Geological Survey on part of one sheet of the map of Rogue River.

(b) Red Blanket Creek from mouth, in sec. 4, T. 33 S., R. 3 E., upstream 4 miles (12RD). Plan by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Detailed topography. Published by United States Geological Survey on part of one sheet of the map of Rogue River.

(a) South Fork of Rogue River from mouth, in sec. 11, T. 33 S., R. 2 E., to sec. 12, T. 33 S., R. 3 E., 9 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 to 500 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Middle Fork of Rogue River from mouth, in sec. 9, T. 33 S., R. 3 E., to sec. 36, T. 32 S., R. 3 E., 5 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 500 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Lost Creek from mouth, in sec. 23, T. 33 S., R. 1 E., upstream 1 mile (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Big Butte Creek from mouth, in sec. 34, T. 33 S., R. 1 E., to sec. 17, T. 35 S., R. 3 E., 18 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. Published by United States Geological Survey on parts of three sheets of the map of Rogue River.

(b) McNeil Creek from mouth, in sec. 14, T. 34 S., R. 1 E., upstream 2 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 80 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Neil Creek from mouth, in sec. 14, T. 34 S., R. 1 E., upstream 2 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water

surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Elk Creek from mouth, in sec. 31, T. 33 S., R. 1 E., to sec. 20, T. 33 S., R. 1 E., 3 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Trail Creek from mouth, in sec. 3, T. 34 S., R. 1 W., upstream 2 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Little Butte Creek from mouth, in sec. 12, T. 36 S., R. 2 W., upstream 1 mile (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Topography, 100 feet above water surface. Contour interval, 20 feet. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Applegate River from mouth, in sec. 20, T. 36 S., R. 6 W., upstream 3 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Very little topography. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

A dam-site survey (scale, 1:2,400) was made in T. 37 S., R. 6 W., to an elevation 115 feet above the water surface. Map in preparation.

(a) Dutcher Creek from mouth, in sec. 14, T. 36 S., R. 7 W., upstream 1 mile (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Topography, 20 to 60 feet above water surface. Contour interval, 20 feet. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Jumpoff Joe Creek from mouth, in sec. 14, T. 35 S., R. 7 W., to sec. 16, T. 35 S., R. 6 W., 5 miles (12RD). Surveyed by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Taylor Creek from mouth, in sec. 5, T. 35 S., R. 7 W., upstream 1 mile (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Grave Creek from mouth, in sec. 1, T. 34 S., R. 8 W., upstream 3 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Topography, 60 to 200 feet above water surface. Contour interval, 20 feet. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Mule Creek from mouth, in sec. 9, T. 33 S., R. 10 W., upstream 1 mile (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Foster Creek from mouth, in sec. 17, T. 34 S., R. 11 W., upstream 1 mile (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 60 to 140 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Shasta Costa Creek from mouth, in sec. 6, T. 35 S., R. 11 W., upstream 2 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 100 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(a) Illinois River from mouth, in sec. 18, T. 35 S., R. 11 W., to sec. 5, T. 40 S., R. 8 W., 60 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. Published by United States Geological Survey in four sheets; two plans and two profiles.

Kerby reservoir, with dam in sec. 29, T. 38 S., R. 8 W., was mapped to a scale of 1:31,680; contour interval, 10 feet; topography, 120 feet above water surface at dam site. It is shown as part of the map of Illinois River on one sheet.

The following dam-site surveys were made on Illinois River to a scale of 1:4,800 except Kerby site, where the scale was 1:2,400. Contour interval for all sites, 10 feet. The maps are in preparation.

Kerby site, in sec. 29, T. 38 S., R. 8 W., at mile 50.1; topography, 130 feet above water surface.

Josephine Creek site, as an alternative to Kerby site, in sec. 29, T. 38 S., R. 8 W., at mile 50; topography, 160 feet above water surface.

Fall Creek site, about in sec. 33, T. 37 S., R. 9 W., at mile 39.7; topography, 150 feet above water surface.

Collier Bar site, in T. 36 S., R. 11 W., 1.5 miles below the mouth of Collier Creek, at mile 11.9; topography, 200 feet above the water surface.

(b) East Fork of Illinois River from mouth, in sec. 21, T. 39 S., R. 8 W., upstream 3 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Topography, 10 to 50 feet above water surface. Contour interval, 10 feet. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Reeves Creek from mouth, in sec. 28, T. 38 S., R. 8 W., upstream 2 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Topography, 10 to 110 feet above water surface. Contour interval, 10 feet. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Josephine Creek from mouth to sec. 11, T. 39 S., R. 9 W., 4 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Deer Creek from mouth, in sec. 18, T. 38 S., R. 8 W., upstream 1 mile (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Topography, 160 to 200 feet above water surface. Contour interval, 20 feet. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Briggs Creek from mouth, in T. 37 S., R. 9 W., upstream 1 mile (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Klondyke Creek from mouth, in T. 36 S., R. 10 W., upstream 1 mile (12RD). Plan by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on part of one sheet of the map of Rogue River.

(b) Collier Creek from mouth upstream  $1\frac{1}{2}$  miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Silver Creek from mouth upstream 2 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Indigo Creek from mouth upstream 2 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

(b) Lawson Creek from sec. 29, T. 35 S., R. 11 W., to sec. 1, T. 36 S., R. 12 W., 3 miles (12RD). Plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey on parts of two sheets of the map of Rogue River.

Coquille River (12RC).

(a) South Fork of Coquille River from Ash Swamp dam site, in sec. 23, T. 32 S., R. 11 W., to Woodward Creek in sec. 12, T. 31 S., R. 12 W., 25 miles (12RC). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour interval, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. In preparation.

Ash Swamp reservoir with proposed dam in sec. 22, T. 32 S., R. 11 W., was surveyed by the United States Geological Survey in 1924 to an elevation 200 feet above water level. The reservoir area is about 800 acres. Topography on the river survey was carried to sufficient height on the north (right) bank to show location for a conduit from Ash Swamp dam site to Billings Creek, and from Boulder Creek to Kelley Creek. A topographic survey was made of lands inside the bend in South Fork of Coquille River below Ash Swamp reservoir site. Maps in preparation.

(a) North Fork of Coquille River, Fairview dam site, in NE.  $\frac{1}{4}$  sec. 23, T. 28 S., R. 12 W. (12RC). Plan by United States Geological Survey, 1925. Scale, 1:4,800. Contour interval, 10 feet. Topography, 200 feet above water surface. In preparation.

(b) East Fork of Coquille River, Brewster Valley dam site, in SE.  $\frac{1}{4}$  sec. 9, T. 28 S., R. 10 W. (12RC). Plan by United States Geological Survey, 1925. Scale, 1:4,800. Contour interval, 10 feet. Topography, 150 feet above water surface. Also plan and profile for a conduit from Brewster Valley dam site to a point on Cherry Creek in NW.  $\frac{1}{4}$  sec. 3, T. 28 S., R. 11 W. Scale, 1:12,000. Maps in preparation.

Umpqua River from sec. 30, T. 22 S., R. 7 W. (Elkton), to sec. 31, T. 26 S., R. 6 W. (Forks), 62 miles (12RB). Plan and profile by United States Geological Survey, 1914. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 150 feet above water surface. Published in Water-Supply Paper 379.

Umpqua River from Scottsburg to Elkton, 21 miles (12RB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 100 feet above water surface. In preparation.

The following dam sites on Umpqua River were surveyed in 1924, and the maps are in preparation:

Scottsburg site, in sec. 18, T. 22 S., R. 9 W.; topography, 75 feet above water surface.

Sawyer Rapids site, in sec. 9, T. 22 S., R. 8 W.; topography, 100 feet above water surface.

Kelley's Smith Ferry site, in sec. 8, T. 23 S., R. 7 W., at mile 8.5 (sheet A, Water-Supply Paper 379); topography, 100 feet above water surface.

Smith Ferry site, in sec. 30, T. 23 S., R. 7 W., at mile 23.3 (sheet A, Water-Supply Paper 379); topography, 150 feet above water surface.

Kellogg site, in sec. 11, T. 24 S., R. 7 W., at about mile 28.8 (sheet B, Water-Supply Paper 379).

Coles Valley site, in sec. 16, T. 25 S., R. 7 W., at mile 47.9 (sheet C, Water-Supply Paper 379); topography, 400 feet above sea level, equivalent to about 100 feet above water surface at dam site.

A topographic survey (scale, 1:31,680) was made of the area across the neck of the bend in secs. 18, 19, and 30, T. 23 S., R. 7 W., and secs. 12, 13, and 24, T. 23 S., R. 8 W.

A reservoir survey was made of the land that would be overflowed by the backwater from a dam at the Coles Valley site, assuming that the water level will be raised to the 400-foot contour.

(a) North Umpqua River from sec. 31, T. 26 S., R. 6 W., to Boulder Creek, 68 miles (12RB). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 feet above water surface. Published in Water-Supply Paper 379.

(a) North Umpqua River from Boulder Creek to Bradley Creek, 32 miles (12RB). Plan and profile by United States Geological Survey, 1914. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in Water-Supply Paper 379.

The following dam sites on North Umpqua River were surveyed in 1924. The location is referred to the mileage above Elkton, as given in Water-Supply Paper 379. The maps are in preparation.

Winchester site, in sec. 23, T. 26 S., R. 6 W., about mile 66 (sheet D, Water-Supply Paper 379).

Oak Creek site, in sec. 15, T. 26 S., R. 5 W., about mile 75.5 (sheet E, Water-Supply Paper 379); topography, 75 feet above water level.

Horseshoe Bend site, in sec. 17, T. 26 S., R. 4 W., at mile 85 (sheet E, Water-Supply Paper 379); topography, 75 feet above water level. The neck of the bend was surveyed on a scale of 1:31,680, with 10-foot contour interval.

Glide site, in sec. 19, T. 26 S., R. 3 W., at mile 90.7, just below the mouth of Little River; topography, 100 feet above water level. A topographic survey for a conduit location from the Glide site to the Horseshoe Bend site was made along the 720-foot contour.

Clark ranch site, in sec. 21, T. 26 S., R. 2 W., at mile 101.7 (sheet F, Water-Supply Paper 379); topography, 100 feet above water level.

Steamboat site, in about sec. 9, T. 26 S., R. 1 E., at mile 116.8 (sheet G, Water-Supply Paper 379); topography, 225 feet above water level.

Copeland Creek site, in about sec. 21, T. 26 S., R. 2 E., at mile 124.7 (sheet G, Water-Supply Paper 379); topography, 200 feet above water level.

Soda Springs site, in sec. 17 or 20, T. 26 S., R. 3 E., at 130.8 miles above Elkton (mile 2, Pl. XII, Water-Supply, Paper 379); topography, 225 feet above water level.

(b) Lake Creek from mouth to Diamond Lake, 12 miles (12RB). Plan and profile by United States Geological Survey, 1914. Scale, 1:48,000. Very little topography. Contour intervals, 25 feet on land and 5 feet on water. Published in Water-Supply Paper 379.

A dam-site survey was made at the outlet of Diamond Lake in 1924; topography, 50 feet above the lake level. In preparation.

(b) Clearwater River from mouth to Lava Creek, 12 miles (12RB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. In preparation.

A topographic survey for a conduit location was run from the point where the 3,700-foot contour crosses Clearwater River, at about sec. 1, T. 27 S., R. 4 E., to its mouth.

(b) Fish Creek from mouth to Rough Can Creek, 8 miles (12RB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. In preparation.

(b) Steamboat Creek from mouth upstream 10 miles (12RB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. In preparation.

(a) Mill Creek from mouth, in sec. 20, T. 22 S., R. 10 W., to Loon Lake, 8 miles (12RB). Plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 50 to 200 feet above water surface. In preparation. Topography was carried to the elevation of the water surface in Loon Lake. A dam site at the outlet of Loon Lake was mapped to an elevation 50 feet above the water surface, and Loon Lake was mapped to the same elevation as a possible reservoir site.

(b) Loon Lake, 2 miles (12RB). Plan by United States Geological Survey, 1924. Scale, 1:31,680. Contour interval, 10 feet. Topography, 50 feet above water surface. In preparation.

(b) Smith River from tidewater to Gunter post office, 40 miles (12RB). Unpublished plan and profile by United States Geological Survey, 1923. Plan compiled from other maps. Profile based on aneroid readings. Scale, 1:86,700. No contours.

Siletz River from tidewater, in sec. 7, T. 9 S., R. 10 W., to forks, in sec. 18, T. 8 S., R. 8 W., about 40 miles (12RA). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 200 feet above water surface. In preparation.

Siletz River, reservoir and dam-site surveys in sec. 18, T. 8 S., R. 8 W. (12RA). Plan by United States Geological Survey, 1925. Scale, dam site 1:4,800, reservoir 1:31,680. Contour interval, 10 feet. Topography, 150 feet above water surface at dam site. In preparation.

Siletz River, neck of bend in secs. 4 and 9, T. 10 S., R. 10 W. (12RA). Plan by United States Geological Survey, 1925. Scale, 1:31,680. Contour interval, 20 feet. Detailed topography. In preparation.

Nehalem River from Mohler to Timber, 99 miles (12RA). Unpublished plan and profile by United States Geological Survey, 1923. Plan compiled from other maps. Profile based on aneroid readings. Scale, 1:86,700. No contours.

(a) Salmonberry River from mouth to source, 31 miles (12RA). Unpublished plan and profile by United States Geological Survey, 1923. Plan compiled from other maps. Profile based on aneroid readings and railroad profile. Scale, 1:86,700. No contours.

Wilson River from mouth to source, 40 miles (12RA). Unpublished plan and profile by United States Geological Survey, 1923. Plan compiled from other maps. Profile based on aneroid readings. Scale, 1:86,700. No contours.

Trask River, including North Fork, from Tillamook to sec. 27, T. 1 S., R. 7 W., 21 miles (12RA). Unpublished plan and profile by United States Geological

Survey, 1923. Plan compiled from other maps. Profile based on aneroid readings. Scale, 1:86,700. No contours.

Nestucca River from mouth of Beaver Creek to Meadow Lake, 26 miles (12RA). Unpublished plan and profile by United States Geological Survey, 1923. Plan compiled from other maps. Profile based on aneroid readings. Scale, 1:86,700. No contours.

For areas in Oregon covered by standard United States Geological Survey topographic maps see Plate 1.

## PENNSYLVANIA

Susquehanna River from mouth to Athens, 298 miles (1PH, 1PG, 1PF, 1PE, 1PA, 1NN, 1NM, 1NL, 1NK). Profile by United States Geological Survey. Scale, 1 inch=3 miles. Published in Water-Supply Paper 109.<sup>1</sup>

(a) West Branch of Susquehanna River from mouth to Keating, 105 miles (1OD, 1OF, 1OG, 1OH). Profile by United States Geological Survey. Scale, 1 inch=14 miles. Published in Water-Supply Paper 109.<sup>1</sup>

(a) Juniata River (including Frankstown Branch) from mouth to Hollidaysburg dam, 126 miles (1PB, 1PC, 1PD). Profile by United States Geological Survey. Scale, 1 inch=14 miles. Published in Water-Supply Paper 109.<sup>1</sup>

(b) Raystown Branch of Juniata River from mouth to Mount Dallas, 79 miles (1PC). Profile by United States Geological Survey. Scale, 1 inch=14 miles. Published in Water-Supply Paper 109.<sup>1</sup>

Mississippi River.

(a) Allegheny River (head of Ohio River), reservoir site No. 3, from a point 12 miles below Irvineton to point 2 miles above, 14 miles (3AD). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(a) Allegheny River, reservoir site No. 2, from point half a mile below Tubbs Run to point 2 miles above Tidioute, 16 miles (3AD). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(b) Allegheny River, reservoir site No. 1, from point 15 miles below Tionesta to point 1 mile above, 16 miles (3AD). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(b) Allegheny River from mouth upstream 8 miles (3AM). Plan and profile by Flood Commission of Pittsburgh, 1909. Scale, 1:2,400. Contour interval, 2 feet. Detailed topography. Published in seven sheets in report of Flood Commission of Pittsburgh, 1911.

(b) Allegheny River from mouth upstream 7 miles (3AM). Plan by Corps of Engineers, United States Army, 1906-7. Scale, 1:62,500. No topography. The Corps of Engineers has maps covering the navigable portions of the stream.

(c) Kinzua Creek, reservoir site, from point 2.7 miles above mouth upstream 7 miles (3AB). Plan and profile by the Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Tionesta River, reservoir site, from point 1.2 miles above mouth to Kellestville, 16 miles (3AD). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

<sup>1</sup> These profiles are on a small scale but may be of some value. They are accompanied by a table of elevations at town and distances.

(c) French Creek, reservoir site, from point 1 mile below Sugar Creek to point  $4\frac{1}{2}$  miles above Cochranton, 19 miles (3AE). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(d) North Branch of French Creek, reservoir site, from point 1.2 miles above mouth upstream 10 miles (3AE). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(d) Cussawago Creek, reservoir site, from point 2.1 miles above mouth upstream  $7\frac{1}{2}$  miles, disregarding bends; actual length of meandering channel, 17 miles (3AE). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) East Sandy Creek, reservoir sites Nos. 1 and 2, from point 0.6 mile above mouth upstream  $3\frac{1}{2}$  miles (3AF). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Clarion River, reservoir site No. 4, from point 5 miles below Millstone to Hallton, 14 miles (3AF). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Clarion River, reservoir site No. 3, from Mill Creek to point  $1\frac{1}{2}$  miles above Clarington, 23 miles (3AF). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Clarion River, reservoir site No. 1, from mouth to Piney Creek, 23 miles (3AF). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Red Bank Creek.

(d) Little Sandy Creek, reservoir site, from mouth upstream 7 miles (3AH). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh 1911.

(c) Mahoning Creek, reservoir site No. 2, from point 1 mile below Glade Run and  $5\frac{1}{2}$  miles below Milton upstream 14 miles (3AJ). This reservoir site includes  $4\frac{1}{2}$  miles of Little Mahoning Creek. Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Mahoning Creek, reservoir site No. 1, from point  $1\frac{1}{2}$  miles below Putneyville to point 2 miles above Eddyville, 7 miles (3AJ). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Crooked Creek, reservoir site, from mouth upstream 14 miles (3AJ). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Kiskiminetas River.

(d) Black Lick Creek, reservoir site, from point one-fourth mile above mouth upstream  $10\frac{1}{2}$  miles (3AL). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(d) Loyalhanna Creek, reservoir site, from point 1.3 miles above mouth upstream 19 miles (3AL). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.



(c) Buffalo Creek, reservoir site, from point 11.7 miles above mouth upstream 6 miles (3AM). Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(b) Beaver Creek from mouth to junction of Shenango and Mahoning rivers, 25 miles (3CD). Plan and profile by Water-Supply Commission of Pennsylvania, 1912. Scale, 1:100,000. No contours. Published by State Water-Supply Commission in Pymatuning reservoir report, 1912.

(c) Shenango River, Pymatuning Swamp reservoir site, from point near Shermansville to Turnersville, 16 miles (3CC). Plan and profile by Water-Supply Commission of Pennsylvania, 1912. Scale, 1:48,000. Contour interval, 10 feet. Topography, 40 feet above water surface. Published by Water-Supply Commission of Pennsylvania in Pymatuning reservoir report, 1912.

(c) Shenango River from mouth to source, 66 miles (3CC). Plan and profile by Water-Supply Commission of Pennsylvania, 1912. Scale, 1:100,000. No contours. Published by Water-Supply Commission of Pennsylvania in Pymatuning reservoir report, 1912.

(a) Ohio River from Pittsburgh to Cairo, Ill., 967 miles. Plan by Corps of Engineers, United States Army. Surveyed at different dates to obtain data for navigation. The maps are on file in the district offices of the Corps of Engineers that are concerned with Ohio River.

(a) Ohio River at Pittsburgh, from junction of Allegheny and Monongahela Rivers downstream 5 miles (3CA). Plan and profile by Flood Commission of Pittsburgh, 1909. Scale, 1:2,400. Contour interval, 2 feet. Detailed topography. Published in five sheets in report of Flood Commission of Pittsburgh, 1911.

(b) Monongahela River from Pittsburgh to West Fork, W. Va., 128 miles (3BD, 3BH, 3BG). Unpublished plan and profile by Corps of Engineers, United States Army. Compiled in 1906-7. Scale, 1:62,500. No topography. Original map is in files of Corps of Engineers. A table of elevations is given on the same sheet as the plan.

(b) Monongahela River from mouth upstream  $6\frac{1}{2}$  miles (3BH). Plan and profile by Flood Commission of Pittsburgh, 1909. Scale, 1:2,400. Contour interval, 2 feet. Detailed topography. Published in six sheets in report of Flood Commission of Pittsburgh, 1911.

(c) Youghiogheny River, reservoir site No. 1, from point 1.1 miles above confluence upstream 7 miles (3BJ). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Youghiogheny River from mouth to West Newton, 19 miles (3BK). Plan and profile by Corps of Engineers, United States Army, 1873 and 1899. Scale, 1:25,340. No topography. The maps were prepared for use in connection with navigation and show little except plan and profile.

(d) Casselman River reservoir sites Nos. 1-5, from point 4.2 miles above mouth upstream 9 miles (3BJ). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(e) Laurel Hill Creek, reservoir site, from point 5.2 miles above mouth upstream 3 miles (3BJ). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

For areas in Pennsylvania covered by topographic maps see Plate 1.

**RHODE ISLAND**

Rhode Island is covered by standard United States Geological Survey topographic maps; scale, 1:62,500; contour interval, 20 feet. (See pl. 1.)

**SOUTH CAROLINA**

Chattooga River (head of Savannah River). (See Georgia.)

Tugaloo River (continuation of Chattooga River). (See Georgia.)

Savannah River. (See Georgia.)

(a) Broad River. (See North Carolina.)

Black River from Kingstree to Fords Ferry, below Mingo Creek, 102 miles (2FO). Unpublished plan by Corps of Engineers, United States Army, 1880. Scale, 1:12,672. Map in three sheets, showing only the river. Of little value except for navigation.

(a) Mingo Creek, from mouth to point above Williams Landing, 15 miles (2FO). Unpublished plan by Corps of Engineers, United States Army, 1890. Scale, 1:36,000. The map also shows Black River from its mouth to the mouth of Mingo Creek. Prepared for navigation.

Wateree River (lower part of Catawba River) from Catawba River (head of Santee River) to Santee River, 105 miles (2GD). Unpublished plan by Corps of Engineers, United States Army, 1879. Scale, 1:12,672. A map in two sheets, showing only the river channel. Surveyed for navigation.

Catawba River. (See North Carolina.)

For areas in South Carolina covered by standard United States Geological Survey topographic maps see Plate 1.

**SOUTH DAKOTA**

Nelson River and Lake Winnepeg.

(a) Red River from international boundary to Lake Traverse, 455 miles (5O, 5P). Plan and profile by Bureau of Public Roads, United States Department of Agriculture. Scale, plan 1:53,000; profile, 1 inch=10 miles. No topography, but many elevations are given on the plan, which was prepared in connection with drainage investigations. Published in Bulletin 1017 of the Department of Agriculture, entitled, "Report on drainage and prevention of overflow in the valley of the Red River of the North."

Mississippi River.

(a) Missouri River from Iowa line at Sioux City to Montana-North Dakota line, 947 miles in North and South Dakota (6E, 6J, 6L). Plan by Corps of Engineers, United States Army, 1892. Scale, 1:12,000. Contour interval, 20 feet. Height to which topography is carried varies. This was a survey for navigation and the maps were published by the Missouri River Commission. Missouri River has been surveyed by the Corps of Engineers, United States Army, from the mouth to Three Forks, Mont., 2,551 miles. Scale, 1:63,360. No contours; topography indicated by hachures. Published in 84 sheets and 9 index sheets by the Missouri River Commission, St. Louis, Mo.

For areas in South Dakota covered by standard United States Geological Survey topographic maps see Plate 1.

**TENNESSEE**

Mississippi River.

(a) Ohio River.

(b) Cumberland River.

(c) Harpeth River, reservoir site  $1\frac{3}{4}$  miles below Bellevue (3SD). Scale 1:10,560. Contour interval, 10 feet. Topography, 70 feet above water surface at dam site. Location of a proposed tunnel to Cumberland River is also shown. Published by Tennessee Geological Survey in Bulletin 30, 1923.

(b) Tennessee River.

(c) Nolichucky River from Embreeville upstream 6 miles (3TJ). Plan and profile by Tennessee Geological Survey, 1912. Scale, 1:18,600. Contour interval, 10 feet. Topography, 50 to 140 feet above water surface. Published by Tennessee Geological Survey in Bulletin 30, 1923.

(c) Holston River.

(d) Watauga River from Watauga to Valle Cruces, N. C., 51 miles (3TC). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. No topography. Map in one sheet.

(e) Elk Creek from mouth to Bear Pen Falls, 12 miles (3TC). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. No topography. Map in one large sheet.

(e) Roane Creek from mouth, at Butler, upstream  $8\frac{1}{2}$  miles (3TC). Unpublished plan and profile by United States Geological Survey, 1902. Scale, 1:63,360. No topography. Map in one sheet.

(e) Doe River from mouth to Shell Creek, 21 miles (3TC). Unpublished plan and profile by United States Geological Survey, 1911. Scale, 1:12,000. Contour intervals, 5, 10, and 25 feet. Topography, 75 feet above water surface.

(c) Clinch River.

(d) Emery River.

(e) Obed River from mouth upstream 6 miles (3UH). Plan and profile by Tennessee Geological Survey, 1921. Scale, 1:31,680. Contour interval, 50 feet. Topography, 100 to 150 feet above water surface. Published by Tennessee Geological Survey in Bulletin 30, 1923.

(c) Piney River from point three-fourths mile below Soak Creek upstream 2 miles (3UA). Plan and profile by Tennessee Geological Survey, 1921. Scale, 1:18,630. Contour interval, 25 feet. Topography, 75 feet above water surface at dam site. Published by Tennessee Geological Survey in Bulletin 30, 1923.

(c) Hiwassee River. (See Georgia.)

(c) Soddy Creek from Cincinnati, New Orleans & Texas Pacific Railway bridge near Rathburn, upstream 3.8 miles (3VA). Plan and profile by Tennessee Geological Survey, 1921. Scale, 1:19,800. Contour interval, 50 feet. Topography, 50 to 450 feet above water surface. Published by Tennessee Geological Survey in Bulletin 30, 1923.

(c) Duck River.

(d) Buffalo River from Little Opossum Creek to Standing Rock Creek, 41 miles (3WF). Plan and profile by United States Geological Survey, 1903. Scale, 1:23,760. Contour interval, 10 feet. Topography, 10 to 70 feet above water surface. Plan and profile each on one sheet. Profile published in Water-Supply Paper 115.

(d) Buffalo River from point three-fourths mile below Little Opossum Creek, near Flatwoods, upstream 2 miles (3WF). Plan by Tennessee Geological Survey. Scale, 1:37,270. Contour interval, 20 feet. Topography, 60 feet above water surface. A proposed tunnel location is also shown. Published by Tennessee Geological Survey in Bulletin 30, 1923.

Most of western Tennessee is shown on standard United States Geological Survey topographic maps; scales, 1:62,500 and 1:125,000; contour intervals, 20, 50, and 100 feet. (See pl. 1.)

## TEXAS

The maps of rivers in Texas are almost entirely maps of reservoir sites and are partly in preparation. Most of the work was done by the United States Geological Survey in cooperation with the Board of Water Engineers of Texas.

Sabine River near Mineola, 20 miles (80). Plan by United States Geological Survey and Corps of Engineers, United States Army, 1915. Scale, 1:12,000.

Contour interval, 2 feet. Detailed topography. Published by United States Geological Survey. Map in three sheets, surveyed for War Department. Out of stock.

Trinity River near Ferris, 10 miles (8N). Plan by United States Geological Survey and Corps of Engineers, United States Army, 1915. Scale, 1:12,000. Contour interval, 2 feet. Detailed topography. Map in three sheets, published by United States Geological Survey. Out of stock.

(a) West Fork of Trinity River, Fort Worth reservoir site No. 2, from point about 5 miles above Newark, upstream 40 miles (8N). Plan by United States Geological Survey, 1924. Scale, 1:48,000. Contour intervals, 10 and 20 feet. Topography, 130 feet above water surface at dam site. Published by United States Geological Survey in one sheet.

(a) Clear Fork of Trinity River, Fort Worth reservoir site, extending from Brooklyn Heights upstream 20 miles (8N). Plan by United States Geological Survey, 1924. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Topography, 60 feet above water surface at dam site. Published by United States Geological Survey in one sheet. The dam site is shown on a separate sheet, scale, 1:2,400; contour interval, 5 feet.

Brazos River, Cordova Bend reservoir site, extending from latitude 32° 22' 30" and longitude 97° 38' upstream 50 miles (8M). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Topography, 70 feet above water surface at dam site. Published by United States Geological Survey in one large sheet.

Brazos River, Rainbow reservoir site, extending from latitude 32° 15', longitude 97° 42' 30", upstream 35 miles (8M). Plan by United States Geological Survey, 1924. Scale, 1:24,000. Contour interval, 10 feet. Topography, 60 feet above water surface at dam site. Published by United States Geological Survey in one sheet.

Brazos River, Whitney reservoir site, from Rocky Creek to Nolan River, 30 miles (8M). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Topography, 30 to 60 feet above water surface. Published by United States Geological Survey in one sheet.

Brazos River, Breckinridge reservoir site, 25 miles (8M). Plan by United States Geological Survey, 1923. Scale, 1:24,000. Contour interval, 5 feet. Topography, 125 feet above water surface at dam site. Published by United States Geological Survey.

(a) Clear Fork of Brazos River, Breckinridge reservoir site, from point about 4 miles below mouth of Ranger Creek, upstream about 7 miles (8M). Plan by United States Geological Survey, 1923. Scale, 1:24,000. Contour interval, 5 feet. Topography, 30 to 50 feet above water surface. Published by United States Geological Survey. The dam site is mapped on a scale of 1:2,400. Contour interval, 5 feet.

(b) Paint Creek, Breckinridge reservoir site, 13 miles (8M). Plan by United States Geological Survey, 1923. Scale, 1:24,000. Contour interval, 5 feet. Topography, 5 to 100 feet above water surface. Published by United States Geological Survey. Mapped in connection with Breckinridge reservoir site, shown on map of that site.

(a) Bosque River.

(b) North Fork of Bosque River at Waco reservoir site, 25 miles (8M). Plan by United States Geological Survey, 1924. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Detailed topography. Published by United States Geological Survey in one sheet. Included in map of Waco reservoir site above Waco.

(b) South Fork of Bosque River at Waco reservoir site, from mouth upstream 15 miles (8M). Plan by United States Geological Survey, 1924. Scale, 1:24,000.

Contour interval, 10 feet. Topography, 10 to 120 feet above water surface. Published by United States Geological Survey on map of Waco reservoir site.

(a) Little River.

(b) Leon River, reservoir site, from point about 5 miles below mouth of Cowhouse Creek, in latitude  $31^{\circ} 6'$  and longitude  $97^{\circ} 27'$ , upstream 40 miles (8M). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour intervals, 10 and 20 feet. Topography, 150 feet above water surface at dam site. Published by United States Geological Survey on one sheet. The mileage given is that of the valley and does not follow the windings of the river.

(b) Leon River at Belton reservoir site, near Belton, 15 miles (8M). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour intervals, 10 and 20 feet. Detailed topography. Published by United States Geological Survey. A short section of Lampasas River and Salada Creek are also shown.

(c) Cowhouse Creek at Leon River reservoir site, 15 miles (8M). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour intervals, 10 and 20 feet. Topography, 10 to 150 feet above water surface. Published by United States Geological Survey. Surveyed in connection with Leon River reservoir site and shown on same map.

(b) Lampasas River, reservoir site, 30 miles (8M). Plan by United States Geological Survey, 1924. Scale, 1:24,000. Contour intervals, 10 and 20 feet. Topography, 150 feet above water surface at dam site. Published by United States Geological Survey in one sheet.

(b) Lampasas River from mouth upstream 10 miles (8M). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour intervals, 10 and 20 feet. Topography, 30 to 90 feet above water surface. Published by United States Geological Survey. Mapped as part of Belton reservoir site on Leon River.

(c) Salado Creek from mouth upstream 5 miles (8M). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour intervals, 10 and 20 feet. Topography, 20 to 70 feet above water surface. Published by United States Geological Survey. Mapped as part of Belton reservoir site.

Colorado River, Bronte reservoir site, from point near mouth of Doublebarrel Creek, in latitude  $31^{\circ} 51'$ , longitude  $100^{\circ} 21'$ , upstream 20 miles (8L). Plan by United States Geological Survey, 1921. Scale, 1:24,000. Contour interval, 5 feet. Topography, 100 feet above water surface at dam site. Published by United States Geological Survey in one sheet. The dam site is shown on a separate sheet, scale, 1:1,200, contour interval, 5 feet.

(a) Concho River.

(b) Middle Concho River at San Angelo reservoir site, 15 miles (8L). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour interval, 5 feet. Detailed topography. Published by United States Geological Survey on part of one sheet.

(c) Spring Creek at San Angelo reservoir site, 10 miles (8L). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour interval, 5 feet. Detailed topography. Published by United States Geological Survey on part of one sheet.

(c) South Concho River at San Angelo reservoir site, 10 miles (8L). Plan by United States Geological Survey, 1923-24. Scale, 1:24,000. Contour interval, 5 feet. Detailed topography. Published by United States Geological Survey on part of one sheet.

(a) Pecan Bayou at Brownwood reservoir site, from point just below mouth of Jim Ned Creek upstream 15 miles (8L). Plan by United States Geological

Survey, 1924. Scale, 1:48,000. Contour intervals, 10 and 20 feet. Detailed topography. Published by United States Geological Survey.

(b) Jim Ned Creek at Brownwood reservoir site, from mouth upstream 20 miles (8L). Plan by United States Geological Survey, 1924. Scale, 1:48,000. Contour intervals, 10 and 20 feet. Detailed topography. Published by United States Geological Survey.

(a) San Saba River, reservoir and dam site, from point  $1\frac{1}{2}$  miles below mouth of Brady Creek, in latitude  $31^{\circ} 7' 30''$ , longitude  $98^{\circ} 57'$ , upstream 10 miles (8L). Plan by United States Geological Survey, 1920. Scale, 1:12,000. Contour interval, 5 feet. Topography, 100 feet above water surface at dam site. Published by United States Geological Survey in one sheet. The dam site is surveyed on a scale of 1:1,200; contour interval, 2 feet; topography, 100 feet above water surface.

(a) San Saba River, near San Saba, 20 miles (8L). Plan by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 5 feet. Topography, 100 feet above water surface. Published by United States Geological Survey.

(b) Brady Creek at San Saba River reservoir site, from mouth upstream 5 miles (8L). Plan and profile by United States Geological Survey, 1920. Scale, 1:12,000. Contour interval, 5 feet. Topography, 5 to 90 feet above water surface. Published by United States Geological Survey. Surveyed as part of San Saba River reservoir site and shown on the same sheet.

Nueces River, Cotulla reservoir site, from point in latitude  $28^{\circ} 25'$ , longitude  $99^{\circ} 17'$ , upstream 30 miles (8K). Scale, 1:48,000. Contour interval, 10 feet. Detailed topography. On one sheet.

For areas in Texas covered by standard United States Geological Survey topographic maps see Plate 1.

## UTAH

Colorado River from mouth of Green River to Grand Junction, Colo., 133 miles in Utah, 40 miles in Colorado (9DM). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 200 to 1,200 feet above water surface. Published in Water-Supply Paper 396.

Colorado River from Lees Ferry, Ariz., to mouth of Green River, 188 miles in Utah, 28 miles in Arizona (9FA, 9FC, 9FE). Plan and profile by United States Geological Survey in cooperation with Southern California Edison Co., 1921. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 400 to 800 feet above water-surface. Map is in 16 sheets, 12 plans, and 4 profiles.

Colorado River, Dewey dam site, just below mouth of Dolores River. Plan and four cross sections by United States Bureau of Reclamation. Scale, 1:13,333 (0.9 inch=1,000 feet). Contour interval, 25 feet. Published in Senate Document 142, Sixty-seventh Congress, second session, "Problems of Imperial Valley and vicinity."

Dolores River from mouth to Utah-Colorado line, 18 miles (9DK). Unpublished plan and profile by United States Geological Survey, 1924. Scale, 1:31,680. Contour interval, 50 feet. Topography, 350 to 800 feet above water surface. This is part of a plan and profile of the river from its mouth, in Utah, to Paradox Valley, in Colorado, in two sheets.

(a) Green River from Green River, Utah, in sec. 15, T. 21 S., R. 16 E., to Green River, Wyo., 279 miles in Utah, 65 miles in Wyoming, (9AK, 9BA, 9BJ). Plan and profile by United States Bureau of Reclamation and United States

Geological Survey in cooperation with Utah Power & Light Co., 1904, 1913-14, 1918, 1922. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 20 to 400 feet above water surface. Published by United States Geological Survey in 16 sheets, 10 plans and 6 profiles.

(a) Green River, Flaming Gorge dam site, about mile 313.5 above Green River, Utah. Plan and two cross sections by United States Bureau of Reclamation. Scales, 1:3,430 (1.4 inches=400 feet) and 1:13,600 (1.06 inches=1,200 feet). Contour intervals, 10 and 50 feet. Published in Senate Document 142 Sixty-seventh Congress, second session, "Problems of Imperial Valley and vicinity."

(a) Green River from Colorado-Utah line to sec. 7, T. 6 S., R. 22 E., 46 miles, (12BA). Plan and profile by United States Geological Survey, 1909. Scale, 1:31,680. Published in Water-Supply Paper 396. This map is in three sheets and does not show topography. The same section is covered on the sheets listed above, which show topography.

(a) Green River from sec. 7, T. 6 S., R. 22 E., to sec. 32, T. 9 S., R. 19 E., 54 miles (9BA, 9BJ). Plan and profile by United States Geological Survey, 1913-14. Scale, 1:31,680. Contour interval, 25 feet on land and 5 feet on water. Published in Water-Supply Paper 396. This map shows little topography, but later maps listed above cover the same section and show topography.

(a) Green River from mouth to Gunnison Butte, about sec. 10, T. 20 S., R. 16 E., 128 miles (9BL, 9BJ). Plan and profile by United States Bureau of Reclamation, 1914. Scale, 1:31,680. Contour interval, 25 feet. Topography, 100 to 200 feet above water surface. Published in Water-Supply Paper 396.

(b) Ashley Creek from south line of sec. 12, T. 3 S., R. 20 E., upstream 11½ miles (9BA). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour intervals, 20 and 50 feet. Topography, 200 to 1,300 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) Dry Fork from east line of sec. 16, T. 3 S., R. 20 E., upstream 15 miles (9BA). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Topography, 80 to 800 feet above water surface. Contour intervals, 20 and 100 feet. Published by United States Geological Survey on parts of two sheets.

(b) Duchesne River from NE. ¼ sec. 30, T. 1 N., R. 8 W., to sec. 14, T. 3 N., R. 9 W., 15 miles (9BB). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Topography, 200 to 1,100 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(b) Duchesne River, dam site A, just below mouth of Hades Creek (9BB). Plan by United States Geological Survey, 1924. Scale, 1:3,168. Contour interval, 5 feet. Topography, 120 feet above water surface. Published by United States Geological Survey on part of one sheet.

(b) Duchesne River from mouth in sec. 32, T. 4 S., R. 3 E., to sec. 28, T. 3 S., R. 1 W., 41 miles (9BD). Plan and profile by United States Geological Survey, 1913-14. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 396.

(c) Hades Creek from mouth, in sec. 26, T. 2 N., R. 9 W., upstream 4½ miles (9BB). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Topography, 100 to 1,100 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) West Fork of Duchesne River from mouth, in sec. 19, T. 1 N., R. 8 W., to sec. 30, T. 1 N., R. 9 W., 6½ miles (9BB). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Topog-

raphy, 200 to 500 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(d) Wolf Creek from mouth, in sec. 26, T. 1 N., R. 9 W., upstream 2 miles (9BB). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Topography, 200 to 300 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(e) Rock Creek from south line of sec. 9, T. 1 N., R. 6 W., to sec. 8, T. 3 N., R. 7 W.,  $16\frac{1}{2}$  miles (9BB). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Topography, 200 to 300 feet above water surface. Contour interval, 20 feet. Published by United States Geological Survey on parts of two sheets.

(c) Rock Creek, dam site B, in sec. 9, T. 1 N., R. 6 W. (9BB). Plan by United States Geological Survey, 1923. Scale, 1:3,168. Topography, 150 feet above water surface. Contour interval, 5 feet. Published by United States Geological Survey on part of one sheet.

(d) West Fork of Rock Creek from mouth, in sec. 5, T. 2 N., R. 7 W., upstream  $2\frac{1}{2}$  miles (9BB). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Topography, 100 to 600 feet above water surface. Contour intervals, 20 and 100 feet. Published by United States Geological Survey on parts of two sheets.

(c) Strawberry River, Starvation reservoir site, Tps. 3 and 4 S., Rs. 5 and 6 W. (9BB). Plan by United States Bureau of Reclamation, 1920. Scale, 1:6,000. Contour interval, 10 feet. Topography, 150 feet above water surface.

(c) Strawberry River, Three Forks reservoir site, from sec. 14, T. 4 S., R. 8 W., to sec. 17, T. 4 S., R. 7 W. (9BB). Unpublished plan by United States Bureau of Reclamation, 1920. Scale, 1:6,000. Contour interval, 10 feet.

(c) Strawberry River from Indian Creek to Duchesne River, 43 miles (9BB). Profile from Denver, Northwestern & Pacific (now Denver & Salt Lake) Railroad survey.

(d) Lower Currant Creek, reservoir site, from sec. 27, T. 3 S., R. 9 W., to sec. 30, T. 3 S., R. 8 W. (9BB). Unpublished plan by United States Bureau of Reclamation, 1920. Scale, 1:6,000. Contour interval, 10 feet.

(c) West Fork of Lake Fork (head of Lake Fork) from forks, in sec. 32, T. 1 N., R. 4 W., to sec. 9, T. 3 N., R. 6 W.,  $20\frac{1}{2}$  miles (9BC). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Topography, 60 to 700 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(d) Spring Branch from mouth, in sec. 13, T. 2 N., R. 6 W., to sec. 11, T. 2 N., R. 6 W., 2 miles (9BC). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 700 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(d) East Fork of Lake Fork from forks, in sec. 32, T. 1 N., R. 4 W., to sec. 10, T. 3 N., R. 5 W., 20 miles (9BC). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Topography, 100 to 300 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(e) Swift Creek from mouth in sec. 4, T. 2 N., R. 4 W., to sec. 33, T. 3 N., R. 4 W.,  $1\frac{1}{2}$  miles (9BC). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour intervals, 20 and 100 feet. Topography, 20 to 600 feet above water surface. Published by United States Geological Survey on parts of two sheets.



(c) Uinta River from east line of sec. 5, T. 1 N., R. 1 W., to north line of sec. 26, T. 4 N., R. 3 W., 20 miles (9BE). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour intervals, 20 and 100 feet. Topography, 20 to 400 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) Uinta River from mouth in sec. 17, T. 3 S., R. 2 E., to sec. 20, T. 1 S., R. 1 E., 22 miles (9BE). Plan and profile by United States Geological Survey, 1913-14. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 396.

(d) Pole Creek from mouth to north line of sec. 23, T. 2 N., R. 2 W.,  $2\frac{1}{2}$  miles (9BE). Plan by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Topography, 20 to 100 feet above water surface. Published by United States Geological Survey on part of one sheet.

(d) Whiterocks Creek from south line of sec. 19, T. 2 N., R. 1 E., to sec. 13, T. 4 N., R. 1 W., 13 miles (9BE). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour intervals, 20 and 100 feet. Topography, 200 to 600 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(d) Deep Creek.

(e) Mosby Creek from point near south line of sec. 6, T. 3 S., R. 19 E., upstream 2 miles (9BE). Plan and profile by United States Geological Survey, 1923-24. Scale, 1:31,680. Contour interval, 20 feet. Detailed topography on right or west side; very little on east side. Published by United States Geological Survey on parts of two sheets.

(b) White River from mouth, in sec. 4, T. 9 S., R. 20 E., to sec. 1, T. 9 S., R. 1 E., 17 miles (9BH). Plan and profile by United States Geological Survey, 1913-14. Scale, 1:48,000. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 396.

San Rafael River from T. 24 S., R. 16 E., to south line of T. 19 S., R. 9 E. (9BK). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. In preparation.

(b) San Rafael River from mouth, in sec. 25, T. 23 S., R. 16 E., to sec. 4, T. 24 S., R. 16 E., 4 miles (9BK). Plan by United States Geological Survey, 1914. Scale, 1:31,680. Contour interval, 25 feet. Topography, 150 feet above water surface. Published in Water-Supply Paper 396 as part of map of Green River from mouth to Gunnison Butte.

The following plans were made by United States Geographical Survey in cooperation with Southern California Edison Co., 1921. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Detailed topography. Published by United States Geological Survey on map of Colorado River from Lees Ferry to mouth of Green River except as indicated.

- (a) Fremont River from mouth to 3,900-foot contour, 30 miles (9FB).
- (a) Trachyte Creek from mouth to 3,900-foot contour, 6 miles (9FC).
- (a) Twomile Creek from mouth to 3,900-foot contour, 2 miles (9FC).
- (a) Fourmile Creek from mouth to 3,900-foot contour, 3 miles (9FC).
- (a) Sevenmile Creek from mouth to 3,900-foot contour, 3 miles (9FC).
- (a) Smith Fork from mouth to 3,900-foot contour, 4 miles (9FC).
- (a) Hansen Creek from mouth to 3,900-foot contour, 8 miles (9FC).
- (a) Moki Creek from mouth to 3,900-foot contour, 8 miles (9FC).
- (a) Bullfrog Creek from mouth to 3,900-foot contour, 18 miles (9FC).
- (a) Halls Creek from mouth to 3,900-foot contour, 15 miles (9FC).
- (a) Escalante River from mouth to 3,900-foot contour, 30 miles (9FD).

(a) San Juan River from mouth to Chinle Creek, 133 miles (9GH). Plan and profile. Topography, 200 to 600 feet above water surface. Published by United States Geological Survey in five sheets; three plans, two profiles.

(b) Piute Creek from mouth to 3,900-foot contour, 6 miles (9GH).

(b) Wilson Creek from mouth to 3,900-foot contour, 2 miles (9GH).

(a) Aztec Creek from mouth to 3,900-foot contour, 6 miles (9FE).

(a) Rock Creek from mouth to 3,900-foot contour, 9 miles (9FE).

(a) West Canyon Creek from mouth to 3,900-foot contour, 8 miles (9FE).

(a) Last Chance Creek from mouth to 3,900-foot contour, 15 miles (9FE).

(a) Kane Creek from mouth to 3,900-foot contour, 4 miles (9FE).

(a) Warm Creek from mouth, near southeast corner of sec. 1, T. 44 S., R. 4 E., to 3,900-foot contour, 16 miles (9FE).

(a) Wahweap Creek from mouth, in Arizona, to sec. 11, T. 43 S., R. 2 E., 15 miles (9FE).

Great Salt Lake Basin.

(a) Bear River (10 HC).

(b) Logan River from sec. 36, T. 12 N., R. 1 E., to Tony Grove Creek, 22 miles (10HC). Plan and profile by United States Geological Survey, 1914. Scale, 1:48,000. Contour interval, 25 feet. Topography, 300 to 400 feet above water surface. Published in Water-Supply Paper 420.

A topographic map of the State reservoir, in sec. 36, T. 12 N., R. 1 E., is in the files of the Geological Survey. The reservoir is used in connection with the generation of power for State institutions, and the original map is probably in the State engineer's files. Scale, 1:720. Contour interval, 1 foot.

(c) Blacksmith Fork from sec. 2, T. 10 N., R. 1 E., to sec. 14, T. 10 N., R. 3 E., 15 miles (10HC). Plan and profile by United States Geological Survey, 1914. Scale, 1:48,000. Contour interval, 25 feet. Topography, 300 to 400 feet above water surface. Published in Water-Supply Paper 420.

(a) Weber River from sec. 17, T. 1 N., R. 5 E., to sec. 26, T. 1 N., R. 8 E., 31 miles (10HE). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 25 to 400 feet above water surface. Published by United States Geological Survey in five sheets, three plans and two profiles.

(a) Weber River from sec. 30, T. 3 N., R. 5 E., to sec. 8, T. 2 N., R. 5 E., 4 miles (10HE). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 25 to 400 feet above water surface. Published by United States Geological Survey. (See above.)

(a) Weber River, Echo reservoir site, from Echo City, in sec. 24, T. 3 N., R. 4 E., to Coalville, 5 miles (10HE). Plan by Utah Water Storage Association, 1919. Scale, 1:42,240. Topography, 100 feet above water surface at dam site. Contour interval, 10 feet. Published in Water-Supply Paper 517.

(b) Smith and Morehouse Creek from mouth, in sec. 28, T. 1 N., R. 7 E., to sec. 12, T. 1 S., R. 7 E., 6 miles (10HE). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 400 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(b) South Fork of Weber River from mouth, in sec. 12, T. 1 S., R. 6 E., 2 to sec. 8, T. 1 S., R. 6 E., 2 miles (10HE). Plan by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 300 feet above water surface. Mapped in connection with Weber River. Published by United States Geological Survey.

(b) Beaver Creek: from mouth, in sec. 26, T. 1 S., R. 5 E., to sec. 25, T. 2 S., R. 6 E., 11 miles (10HE). Plan and profile by United States Geological Survey,

1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 200 feet above water surface. Published by United States Geological Survey.

(b) Beaver Creek, Beaver Creek reservoir site, in secs. 25 and 36, T. 1 S., R. 5 E., sec. 1, T. 2 S., R. 5 E., and sec. 6, T. 2 S., R. 6 E. (10HE). Plan by Utah Water Storage Association, 1919. Scale, 1:24,000. Topography, 55 feet above water surface at dam site. Contour interval, 5 feet. Published in Water-Supply Paper 517.

(b) Chalk Creek: from mouth, in sec. 8, T. 2 N., R. 5 E., to sec. 26, T. 3 N., R. 6 E., 12 miles (10HE). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 300 feet above water surface. Published by United States Geological Survey on parts of two sheets in connection with Weber River.

(b) Lost Creek, Lost Creek reservoir site, in secs. 4, 5, and 8, T. 5 N., R. 5 E.,  $1\frac{1}{2}$  miles (10HE). Plan by Utah Water Storage Association, 1920. Scale, 1:15,840. Contour interval, 10 feet. Topography, 100 feet above water surface at dam site. Published in Water-Supply Paper 517.

(c) South Fork of Chalk Creek from mouth, in sec. 5, T. 2 N., R. 6 E., to sec., 10, T. 2 N., R. 6 E., 2 miles (10HE). Plan by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 200 feet above water surface. Published by United States Geological Survey on parts of two sheets in connection with Weber River.

(b) East Canyon Creek from mouth, in sec. 27, T. 4 N., R. 2 E., to sec. 23, T. 2 N., R. 3 E., 18 miles (10HE). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 25 to 200 feet above water surface. Published by United States Geological Survey on two sheets, one plan and one profile.

(b) Ogden River, Magpie and Cobble Creek reservoir sites, from east line of sec. 12, T. 6 N., R. 2 E., to sec. 33, T. 7 N., R. 3 E., 3 miles (10HE). Plan by City Engineering Department of Ogden, 1908. Scale, 1:18,000. Contour interval, 20 feet. Topography, 160 feet above water surface. Published in Water-Supply Paper 517.

(c) Righthand Fork, reservoir site, in secs. 34, 35, and 36, T. 7 N., R. 3 E., and secs. 1, 2, and 3, T. 6 N., R. 3 E.,  $1\frac{1}{2}$  miles (10HE). Plan by City Engineering Department of Ogden, 1908. Scale, 1:18,000. Contour interval, 20 feet. Topography, 180 feet above water surface at dam site. Published in Water-Supply Paper 517.

(a) Jordan River (10HH).

(b) Utah Lake Basin (10HF).

(c) Salt Creek from sec. 1, T. 13 S., R. 1 E., to sec. 28, T. 12 S., R. 2 E., 5 miles (10HF). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 400 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) Santaquin Creek from sec. 13, T. 10 S., R. 1 E., to sec. 33, T. 10 S., R. 2 E., 5 miles (10HF). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 100 to 400 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) Payson Creek from sec. 16, T. 9 S., R. 2 E., to sec. 10, T. 10 S., R. 2 E., 6 miles (10HF). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 100 to 400 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) Spanish Fork (10HF).

(d) Diamond Creek from mouth, in sec. 17, T. 9 S., R. 4 E., to sec. 36, T. 7 S., R. 5 E., 17 miles (10HF). Plan and profile by United States Geological Survey and United States Bureau of Reclamation, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 100 to 400 feet above water surface. Plan on parts of two sheets and profile on one sheet. Published by United States Geological Survey.

(e) Sixth Water Creek from mouth, in sec. 27, T. 8 S., R. 5 E., to sec. 34, T. 7 S., R. 6 E., 10 miles (10HF). Plan and profile by United States Geological Survey and United States Bureau of Reclamation, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 100 to 400 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) Hobble Creek from Springville, in sec. 33, T. 7 S., R. 3 E. to sec. 33, T. 7 S., R. 4 E., 7 miles (10HF). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 25 to 300 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) American Fork from sec. 36, T. 4 S., R. 1 E., to 9,500-foot contour, 17 miles (10HF). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 400 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(d) South Fork of American Fork from mouth upstream 1 mile (10HF). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 400 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) Provo River from sec. 36, T. 3 S., R. 4 E., to sec. 1, T. 3 S., R. 7 E., 30 miles (10HG). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 200 to 400 feet above water surface. Published by United States Geological Survey in three sheets, two plans and one profile.

(c) Provo River, Bates reservoir site, about 11 miles above city of Heber, in sec. 26, T. 2 S., R. 5 E. (10HG). Plan by Utah Water Storage Association, 1919. Scale, 1:2,640. Topography, 120 feet above water surface at dam site, Contour interval, 10 feet. Published in Water-Supply Paper 517.

(c) Provo River from sec. 7, T. 5 S., R. 4 E., to sec. 15, T. 4 S., R. 4 E., 7 miles (10HG). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 100 feet above water surface. Published by United States Geological Survey on parts of two sheets.

(c) Provo River, Deer Creek reservoir site, from sec. 7, T. 5 S., R. 4 E., to sec. 15, T. 4 S., R. 4 E., 7 miles (10HG). Plan by Utah Water Storage Association, 1919. Scale, 1:46,000. Contour interval, 25 feet. Topography, 110 feet above water surface at dam site. Published in Water-Supply Paper 517.

(d) North Fork of Provo River from mouth, in sec. 24, T. 5 S., R. 3 E., to sec. 10, T. 5 S., R. 3 E., 4 miles (10HG). Plan and profile by United States Geological Survey and United States Bureau of Reclamation, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 400 to 700 feet above water surface. Published by United States Geological Survey as part of one of the Provo River sheets.

(e) South Fork of North Fork of Provo River from mouth, in sec. 11, T. 5 S., R. 3 E., to east boundary of Wasatch National Forest, 1 mile (10HG). Plan by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval 25 feet. Topography, 25 to 500 feet above water surface. Published by United States Geological Survey on part of one of the Provo River sheets.

(d) Round Valley Creek from mouth, in sec. 4, T. 5 S., R. 4 E., to sec. 3, T. 5 S., R. 4 E., 2 miles (10HG). Plan by United States Geological Survey, 1920.

Scale, 1:31,680. Contour interval, 25 feet. Topography, 150 feet above water surface. Published by United States Geological Survey. Mapped in connection with Provo River and shown on one of the Provo River sheets.

(b) Little Cottonwood Creek from sec. 34, T. 2 S., R. 1 E., to Alta, 8,700-foot contour, 12 miles (10HG). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 500 to 1,000 feet above water surface. Published by United States Geological Survey in two sheets, one plan and one profile.

(c) South Mahogany Fork of Little Cottonwood Creek from mouth to 8,800-foot contour, 2 miles (10HH). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 500 feet above water surface. Published by United States Geological Survey. Mapped in connection with Little Cottonwood Creek and shown on one of the Little Cottonwood Creek sheets.

(a) Cottonwood Creek from sec. 15, T. 2 S., R. 1 E., to sec. 21, T. 2 S., R. 3 E., 14 miles (10HH). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Topography, 400 to 600 feet above water surface. Contour interval, 25 feet. Published by United States Geological Survey in two sheets, one plan and one profile.

(b) Mill B South Fork from mouth upstream 1 mile (10HH). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 600 feet above water surface. Mapped in connection with Cottonwood Creek and shown on the maps of that creek.

(a) Mill Creek from sec. 36, T. 1 S., R. 1 E., to sec. 32, T. 1 S., R. 3 E., 9 miles (10HH). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour interval, 25 feet. Topography, 400 to 800 feet above water surface. Shown on same sheet as Little Cottonwood Creek.

For areas in Utah covered by standard United States Geological Survey topographic maps see Plate 1.

## VERMONT

St. Lawrence River basin.

(a) Lake Champlain.

(b) Winooski River from Richmond to line between Cabot and Marchfield Townships, 51 miles (4PG). Plan by United States Geological Survey in cooperation with State of Vermont, 1910. Scale, 1:24,000. Contour intervals, 10 feet on land and 1 foot on water. Topography, about 20 feet above water surface. Published in Water-Supply Paper 424.

(c) Mad River from mouth to Mill Brook, 1 mile above Waitsfield, 15 miles (4PG). Plan by United States Geological Survey in cooperation with State of Vermont, 1910. Scale, 1:24,000. Contour intervals, 10 feet on land and 1 foot on water. Published in Water-Supply Paper 424.

(c) Waterbury River from mouth upstream 11 miles (4PG). Plan by United States Geological Survey in cooperation with State of Vermont, 1910. Scale, 1:24,000. Contour intervals, 10 feet on land and 1 foot on water. Topography, 20 to 30 feet above water surface. Published in Water-Supply Paper 424.

Mollys Pond, Cabot Township (4PG); Nelsons Pond, Woodbury and Calais Townships (4PG); Niggerhead Pond, Marshfield Township (4PG); Peacham Pond, Peacham Township (4PG); Wheelock Pond, Calais Township (4PG). Plans by United States Geological Survey in cooperation with State of Vermont, 1910. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Topography, 10 feet above water surface. Published on one sheet of Winooski River survey in Water-Supply Paper 424.

(c) Huntington River, From mouth to Richmond electric-light plant, 2 miles (4PG). Plan by United States Geological Survey in cooperation with State of

Vermont, 1910. Scale, 1:24,000. Contour intervals, 10 feet on land and 1 foot on water. Topography, 10 to 50 feet above water surface. Published in Water-Supply Paper 424.

For areas in Vermont covered by standard United States Geological Survey topographic maps see Plate 1.

## VIRGINIA

Potomac River from Great Falls upstream to Lock No. 10, 6 miles (1TC). Plan by United States Geological Survey, 1910. Scale, 1:12,000. Topography, 125 feet above water surface. Contour intervals, 25 feet on land and 5 feet on water. Map in one sheet; out of stock.

Potomac River from Chain Bridge to Great Falls, 10 miles (1TC). Plan by Corps of Engineers United States Army, 1920. Scale, 1:27,250. Contour interval, 10 feet. Published in Senate Document 403, Sixty-sixth Congress, third session. Topography, 100 to 150 feet above water surface. Covers area affected by a proposed dam at Chain Bridge. There is an unpublished profile of this section by United States Geological Survey; scale, 2 inches=1 mile.

Great Falls dam site Plan by Corps of Engineers, United States Army, 1920. Scale, 1:10,800. Contour interval, 5 feet. Published in Senate Document 403, Sixty-sixth Congress, third session, "Development of Great Falls for water power."

Potomac River from Aqueduct Bridge to Cumberland, 186 miles (1SB, 1SD, 1SE, 1SF, 1TA, 1TB, 1TC). Profile by United States Geological Survey. Scale, 1 inch=4 miles. Published in Water-Supply Paper 192.

Potomac River from Aqueduct Bridge to Harpers Ferry, 59 miles (1TA, 1TB, 1TC). Profile by Corps of Engineers, United States Army. Scale, 1 inch=4 miles. Published in Senate Document 403, Sixty-sixth Congress, third session, "Development of Great Falls for water power."

Potomac River from Georgetown, D. C., to Cumberland, Md., 186 miles (1T, 1S). Plan and profile. Scale, 1:253,440. No contours. Published by Virginia Geological Survey in Geological series, Bulletin 3, "Hydrography of Virginia," 1906.

(a) South Branch of Potomac River, reservoir site, shown in Senate Document 403, Sixty-sixth Congress, third session, "Development of Great Falls for water power." The map is traced from United States Geological Survey topographic maps, but there is a map of a dam site on South Branch just above the mouth. Scale, 1:6,600; contour interval, 5 feet; topography, 150 feet above water surface.

South Fork of Shenandoah River (head of Shenandoah River) from Port Republic to Riverton, 101 miles (1SH). Unpublished plan and profile by United States Geological Survey, 1899. Scale, 1:63,360. On two sheets. Profile published on a small scale in Twenty-second Annual Report of the Director, United States Geological Survey, Part IV.

(a) Shenandoah River from Harpers Ferry to Port Republic, 154 miles (1SK, 1SH). Profile. Scale, 1 inch=2 miles. Published by Virginia Geological Survey in Geological series, Bulletin 3, "Hydrography of Virginia," 1906.

(a) Shenandoah River, reservoir site, shown on a small scale in Senate Document 403, Sixty-sixth Congress, third session, "Development of Great Falls for water power." The map is traced from United States Geological Survey topographic maps, but there is a map of two dam sites, the lower one  $1\frac{1}{2}$  miles below Bloomery, W. Va. Scale, 1:6,600; contour interval, 5 feet; topography, 125 feet above water surface.

(b) North Fork of Shenandoah River, reservoir site, shown in Senate Document 403, Sixty-sixth Congress, third session, "Development of Great Falls for

water power." The map is traced from United States Geological Survey topographic maps, but there is a map of a dam site at Brock's Gap. Scale, 1:6,600; contour interval, 5 feet; topography, 225 feet above water surface.

James River from Richmond to Clifton Forge, 230 miles (2AB, 2AD, 2AE, 2AG, 2AH). Profile by United States Geological Survey. Scale, 1 inch=9 miles. Published in Nineteenth Annual Report of the Director, United States Geological Survey, Part IV. Published on a scale of 1 inch=6 miles by Virginia Geological Survey in Geological series, Bulletin 3, "Hydrography of Virginia," 1906.

(a) North River from mouth to Lexington, 20 miles. Profile by United States Geological Survey. Scale, 1 inch=9 miles. Published in Nineteenth Annual Report of the Director, United States Geological Survey, Part IV. Published on a scale of 1 inch=6 miles by Virginia Geological Survey in Geological series, Bulletin 3, "Hydrography of Virginia," 1906.

Roanoke River from Roanoke, Va., to Weldon, N. C., 202 miles in Virginia, 32 miles in North Carolina (2CA, 2CB, 2CF). Plan and profile by United States Geological Survey, 1905. Scale, 1:24,000. No topography. Published by United States Geological Survey in 11 sheets, with plan and profile on each. Section of river in Virginia is shown on 10 sheets; other sheet shows section in North Carolina. Sheets out of stock. Published on a scale of 1 inch=12 miles by Virginia Geological Survey in Geological series, Bulletin 3, "Hydrography of Virginia," 1906. The profile is shown on a scale of 1 inch=2 miles.

For areas in Virginia covered by standard United States Geological Survey topographic maps see Plate 1.

## WASHINGTON

North Fork of Skokomish River (head of Skokomish River) from mouth to north line of T. 21 N., R. 4 W., 2 miles, and from Lake Cushman reservoir to south boundary of Olympic National Monument, 10 miles (12PM). Unpublished plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour interval, 50 feet. Topography, 200 to 300 feet above water surface.

Skokomish River, including South Fork, from mouth to sec. 28, T. 23 N., R. 6 W., 33½ miles (12PM). Unpublished plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour interval, 50 feet. Topography, 200 to 300 feet above water surface.

Nisqually River from sec. 29, T. 19 N., R. 1 E., to point 2 miles above Paradise River, 81 miles (12PK). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1910. Scale, 1:31,680. Contour intervals, 5 and 100 feet. Topography, 5 to 650 feet above water surface. Published in Water-Supply Paper 313. The contour interval is too small for the nature of the country. There is little topography given on this plan.

Puyallup River from sec. 6, T. 19 N., R. 5 E., to boundary of Mount Rainier National Park, 34 miles (12PH). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1910. Scale, 1:31,680. Contour intervals, 5 and 100 feet. Topography, 5 to 500 feet above water surface. Published in Water-Supply Paper 313.

(a) Puget Sound Power Co.'s canal from sec. 3, T. 16 N., R. 6 E., to sec. 4, T. 17 N., R. 5 E., 9 miles (12PH). Plan and profile by United States Geological Survey, 1910. Scale, 1:31,680. Contour intervals, 5 and 100 feet. Topography, 100 to 500 feet above water surface. Published in Water-Supply Paper 313.

(a) Carbon River from mouth, in sec. 13, T. 19 N. R. 4 E., to Fairfax, in sec. 35, T. 18 N., R. 6 E., 17 miles (12PH). Plan and profile by United States

Geological Survey in cooperation with Washington Geological Survey, 1910. Scale, 1:31,680. Contour intervals, 5 and 100 feet. Topography, 100 to 600 feet above water surface. Published in Water-Supply Paper 313.

(a) White River from Buckley, sec. 35, T. 20 N., R. 6 E., to Inner Fork, 53 miles (12PJ). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1910. Scale, 1:31,680. Contour intervals, 5 and 25 feet. Topography, 25 to 100 feet above water surface. Published in Water-Supply Paper 313.

(b) Green River from sec. 26, T. 21 N., R. 6 E., to sec. 22, T. 20 N., R. 10 E., 34 miles (12PG). Plan and profile by United States Geological Survey. Scale, 1:96,000. Contour interval, 100 feet. Topography, about 300 feet above water surface. Published in Water-Supply Paper 313.

Duwamish River (12PG).

(a) Cedar River from sec. 9, T. 22 N., R. 6 E., to sec. 12, T. 22 N., R. 8 E., 20 miles (12PG). Plan and profile by United States Geological Survey. Scale, 1:96,000. Contour interval, 100 feet. Very little topography. Published in Water-Supply Paper 313. The map also gives the outline of Cedar Lake, but only the 1,612-foot contour, that being the flowage line of a proposed reservoir.

(a) Skykomish River, including South Fork, from sec. 6, T. 27 N., R. 9 E., to sec. 31, T. 26 N., R. 12 E., 29 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 366.

(b) Foss River, including West Fork, from mouth, in sec. 31, T. 26 N., R. 12 E., to Trout Lake, 8 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 100 feet above water surface. Published in Water-Supply Paper 366.

(c) East Fork of Foss River from mouth to Alturas Lake, 3 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 100 feet above water surface. Published in Water-Supply Paper 366.

(b) Miller Creek, including East Fork, from mouth, in sec. 28, T. 26 N., R. 11 E., to Lake Dorothy, 12 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 100 feet above water surface. Published in Water-Supply Paper 366.

(c) West Fork of Miller Creek from mouth upstream 2 miles (12PF). Plan and profile by United States Geological Survey, 1913. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in Water-Supply Paper 366.

(b) North Fork of Skykomish River from mouth, in sec. 19, T. 27 N., R. 10 E., to Troublesome Creek, in T. 28 N., R. 11 E., 12 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 366.

(b) Sultan River from mouth, in sec. 5, T. 27 N., R. 8 E., to sec. 25, T. 29 N., R. 9 E., 23 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 150 feet above water surface. Published in Water-Supply Paper 366. No topography is shown for the first 3 miles of Sultan River. A reservoir site with dam site in the NW  $\frac{1}{4}$  sec. 29, T. 29 N., R. 9 E., is mapped to the 1,450-foot contour, 200 feet above water surface at dam site. Survey made by the Washington Railroad & Electric Co.



(c) Williamson Creek in sec. 24, T. 29 N., R. 9 E., 1 mile (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 100 feet above water surface. Published in Water-Supply Paper 366.

(c) South Fork of Sultan River from mouth, in sec. 28, T. 29 N., R. 9 E., to sec. 34, T. 29 N., R. 9 E., 2 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in Water-Supply Paper 366.

(a) Snoqualmie River from sec. 15, T. 24 N., R. 7 E., to forks, in sec. 33, T. 24 N., R. 8 E., 8 miles (12PF). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 600 feet above water surface. Published in Water-Supply Paper 366.

(b) North Fork of Snoqualmie River from sec. 34, T. 24 N., R. 8 E., to sec. 15, T. 25 N., R. 9 E., 17 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 500 feet above water surface. Published in Water-Supply Paper 366.

(c) Calligan Creek and Calligan Lake from mouth, in sec. 31, T. 25 N., R. 9 E., to sec. 33, T. 25 N., R. 9 E., 3 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 100 feet above water surface. Published in Water-Supply Paper 366.

(c) Hancock Creek and Hancock Lake from mouth, in sec. 7, T. 24 N., R. 9 E., to sec. 15, T. 24 N., R. 9 E., 3 miles (12PF). Plan and profile by United States Geological Survey, 1911. Scale 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 200 to 500 feet above water surface. Published in Water-Supply Paper 366.

(b) Middle Fork of Snoqualmie River from sec. 34, T. 24 N., R. 8 E., to sec. 22, T. 24 N., R. 10 E., 20 miles (12PF). Plan and profile by United States Geological Survey, 1913. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 366.

(b) South Fork of Snoqualmie River from sec. 33, T. 24 N., R. 8 E., to sec. 8, T. 22 N., R. 10 E., 19 miles (12PF). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 300 feet above water surface. Published in Water-Supply Paper 366.

(b) Tokul Creek from mouth, in sec. 19, T. 24 N., R. 8 E., to sec. 9, T. 24 N., R. 8 E., 3 miles (12PF). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 to 500 feet above water surface. Published in Water-Supply Paper 366.

(a) Pilchuck Creek (12PE).

(b) Lake Creek from elevation 950 feet to mouth of Cavanaugh Lake, 2 miles (12PE). Plan and profile by United States Geological Survey 1925. Scale, 1:15,840. Contour interval, 10 feet. Topography, to elevation 1,150 feet. In preparation.

Cavanaugh Lake reservoir site, T. 33 N., R. 6 E. (12PE). Plan by United States Geological Survey, 1925. Scale, 1:31,680. Contour interval, 20 feet. Topography, to elevation 1,140 feet. In preparation.

South Fork of Stilaguamish River (head of Stilaguamish River) from west line of T. 31 N., R. 6 E., to Silverton, in sec. 19, T. 30 N., R. 10 E., about 34 miles (12PE).

Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water except at dam and reservoir sites. This stretch includes the Robe reservoir site. In preparation.

Dam site in sec. 7, T. 31 N., R. 6 E. (12PE). Plan by United States Geological Survey, 1925. In preparation.

Jordan dam site, sec. 20, T. 31 N., R. 6 E. (12PE). Plan by United States Geological Survey, 1925. Scale, 1:15,840. Contour interval, 10 feet. Topography, to elevation 275 feet above sea level. In preparation.

Robe dam site and reservoir site, from dam site in NE.  $\frac{1}{4}$  SE.  $\frac{1}{4}$  sec. 11, T. 30 N., R. 7 E., to sec. 14, T. 30 N., R. 8 E. (12PE). Plan by United States Geological Survey, 1925. Scale of dam-site survey, 1:5,000. Contour interval, 10 feet. Topography, to elevation 1,030 feet above sea level. Reservoir site mapped to same scale as the river survey with contour interval, 10 feet. In preparation.

(a) Canyon Creek (12PE). To determine the feasibility of diverting Canyon Creek into South Fork of Stilaquamish River the 1,000-foot and 1,025-foot contours were run from Canyon Creek across the divide to Robe reservoir site. Plan by United States Geological Survey, 1925. Scale, 1:31,680. A plan and profile of Canyon Creek from the west line of T. 30 N., R. 8 E., upstream to the 1,050-foot contour was also made. In preparation.

(a) North Fork of Stilaquamish River from north line of T. 31 N., R. 5 E., to about sec. 8, T. 32 N., R. 8 E., 20 miles (12PE). Plan and profile by United States Geological Survey, 1925. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, to elevation 175 feet to west line of T. 32 N., R. 6 E., and to elevation 225 feet above that point. The portion surveyed to elevation 225 feet constitutes the Oso reservoir site. In preparation.

Oso dam site, near west line of T. 32 N., R. 6 E. (12PE). Plan by United States Geological Survey, 1925. Scale, 1:15,840. Contour interval, 10 feet. Topography, to elevation 225 feet above sea level. In preparation.

Skagit River from Concrete, in sec. 11, T. 35 N., R. 8 E., to Canadian boundary, 80 miles (12PD, 12PC). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 200 feet above water surface. Published in Water-Supply Paper 419.

Skagit River from mouth to Sedro Woolley, 23 miles (12PD). Unpublished plan and profile in three sheets by Corps of Engineers, United States Army. Scale, 1:24,000. Contour interval, 50 feet. Very little topography. To accompany report on preliminary examination with view to control of floods. Profile for high and low water.

(a) Beaver Creek from mouth upstream 8 miles (12PC). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 150 feet above water surface. Published in Water-Supply Paper 419.

(a) Ruby Creek from mouth upstream 2 miles. (12PC). Plan by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 150 feet above water surface. Published in Water-Supply Paper 419.

(a) Cascade River from mouth, sec. 18, T. 35 N., R. 11 E., to sec. 34, T. 35 N., R. 12 E., 15 miles (12PC). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 100 feet above water surface. Published in Water-Supply Paper 419.

(a) Sauk River from sec. 35, T. 35 N., R. 9 E., to sec. 9, T. 30 N., R. 11 E. 41 miles (12PC). Plan and profile by United States Geological Survey, 1915.

Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 419.

(b) North Fork of Sauk River from mouth, in sec. 9, T. 30 N., R. 11 E., upstream 3 miles (12PC). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 75 feet above water surface. Published in Water-Supply Paper 419.

(b) South Fork of Sauk River from mouth, in sec. 9, T. 30 N., R. 11 E., upstream 3 miles (12PC). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 50 feet above water surface. Published in Water-Supply Paper 419.

(b) Whitechuck River from mouth, in sec. 14, T. 31 N., R. 10 E., to Camp Creek 11 miles (12PC). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 419.

(b) Suitttle River from mouth, in sec. 20, T. 33 N., R. 10 E., to Milk Creek, 33 miles (12PC). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Very little topography. Published in Water-Supply Paper 419.

(a) Baker River from sec. 11, T. 35 N., R. 8 E., to sec. 36, T. 38 N., R. 9 E., 23 miles (12PD). Plan and profile by United States Geological Survey, 1915. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 150 feet above water surface. Published in Water-Supply Paper 419.

Noosack River from Glacier, in sec. 6, T. 39 N., R. 7 E., to Tenmile Camp, 10 miles (12PB). Plan and profile by United States Geological Survey, 1919. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 100 feet above water surface. To be published in two sheets; one plan and one profile.

Columbia River from international boundary to Wenatchee, 283 miles (12E, 12F). Unpublished plan and profile by Corps of Engineers, United States Army, 1891. Scale, 1:24,000. Contour interval, 25 feet. Topography, 25 to about 150 feet above water surface.

Columbia River, Grand Coulee dam site (12FC). Plan by Columbia Basin Survey Commission, 1920. Scale, 1:10,700. Contour interval, 10 feet. Topography, 550 feet above water surface. Published in a report on Columbia Basin project by Columbia Basin Survey Commission, State of Washington, 1920.

Columbia River from Snake River to T. 2 N., R. 14 E. Willamette meridian, 127 miles (12M). Unpublished plan and profile by Corps of Engineers, United States Army, 1906. Scale, 1:10,000. No topography.

Columbia River has been surveyed from the mouth to the international boundary by the Corps of Engineers. Correspondence regarding the Columbia River maps should be addressed to the district office of the Corps of Engineers, United States Army, Portland, Oreg. These surveys by the Corps of Engineers were made primarily for navigation, and some of the maps do not show elevations of water surface. Contours are usually given only in a general way, to show the nature of the country near the river. The Geological Survey has on file in Washington, D. C., a copy of a plan and profile of the river from Wenatchee, Wash., to the international boundary, and from Celilo, on the Washington-Oregon boundary to the mouth of Snake River, both maps by the Corps of Engineers. Water-surface elevations are given at short intervals, and on the map of the section above Wenatchee contours are sketched for about 150 feet above the water. The contour interval is 25 feet, but the datum of the contours is simply the

water surface of the river. No contours are given for the section below the mouth of Snake River.

(a) Clark Fork from Priest River, Idaho, to Canadian boundary, 72 miles in Washington and 7 miles in Idaho (12DM, 12DN). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 300 feet above water surface. Published in Water-Supply Paper 346.

(a) Spokane River from mouth, in sec. 25, T. 28 N., R. 35 E., to sec. 10, T. 27 N., R. 39 E., 35 miles (12EK). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 200 feet above water surface. Published in Water-Supply Paper 377.

(a) Nespelem River from mouth to sec. 36, T. 32 N., R. 30 E., 9 miles (12FC). Unpublished plan and profile, 1911. Scale, 1:31,680. Contour interval, 25 feet. Topography, about 200 feet above water surface.

(a) Okanogan River.

(b) Similkameen River from sec. 33, T. 40 N., R. 27 E., to sec. 4, T. 40 N., R. 25 E., 23 miles (12FD). Unpublished plan and profile by United States Geological Survey and Great Northern Railway. Scale, 1:31,680. No topography.

(a) Methow River from mouth, in sec. 36, T. 30 N., R. 23 E., to sec. 16, T. 31 N., R. 22 E., 21 miles (12FG). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 50 to 200 feet above water surface. Published in Water-Supply Paper 376.

(b) Chewack Creek from mouth, in sec. 2, T. 34 N., R. 21 E., to sec. 2, T. 35 N., R. 21 E., 7 miles (12FF). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 50 feet above water surface. Published in Water-Supply Paper 376.

(c) Lake Creek from mouth, in sec. 35, T. 35 N., R. 21 E., to sec. 36, T. 35 N., R. 21 E., 1 mile (12FF). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour interval, 10 feet. Topography, about 100 feet above water surface. Published in Water-Supply Paper 376.

(d) Pearygin Lake, 3 miles (12FF). Plan by United States Geological Survey, 1912. Scale, 1:31,680. Contour interval, 10 feet. Topography, 100 feet above water surface. Published in Water-Supply Paper 376.

(a) Stehekin River (head of Chelan River) from mouth, in sec. 36, T. 33 N., R. 17 E., to Bridge Creek, 17 miles (12FH). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 100 feet above water surface. Published in Water-Supply Paper 376.

(a) Chelan River from mouth, in sec. 29, T. 27 N., R. 23 E., to sec. 13, T. 27 N., R. 22 E., 5 miles (12FH). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in Water-Supply Paper 376.

(d) Bridge Creek from mouth upstream 1 mile (12FH). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 200 feet above water surface. Published in Water-Supply Paper 376.

(c) Railroad Creek from mouth upstream 4 miles (12FH). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 and 100 feet on land and 25 feet on water. Topography, about 150 feet above water surface. Published in Water-Supply Paper 376.

(c) Domke Creek and Domke Lake from mouth to upper end of lake, 3 miles (12FH). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 5, 10, and 25 feet. Topography, about 150 feet above water surface. Published in Water-Supply Paper 376.

(a) Wenatchee River and Wenatchee Lake from mouth, in sec. 27, T. 23 N., R. 20 E., to Lake Creek, 74 miles (12FL). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 150 feet above water surface. Published in Water-Supply Papers 368 and 486.

(b) White River from mouth, in sec. 14, T. 27 N., R. 16 E., to Indian Creek, 20 miles (12FL). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 10 feet for 15½ miles above the mouth, 25 feet on land and 5 feet on water for remaining distance. Topography, about 100 feet above water surface. Published in Water-Supply Papers 368 and 486.

(c) North Fork of White River from mouth upstream 1 mile (12FL). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour interval, 10 feet. Topography, 100 feet above water surface. Published in Water-Supply Papers 368 and 486.

(b) Nason Creek from mouth, in sec. 28, T. 27 N., R. 17 E., to sec. 8, T. 26 N., R. 17 E., 6 miles (12FL). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour interval, 10 feet. Topography, 50 feet above water surface. Published in Water-Supply Papers 368 and 486.

(b) Chiwawa Creek from mouth, in sec. 1, T. 26 N., R. 17 E., to point 4 miles above Rock Creek, 27 miles (12FL). Plan and profile by United States Geological Survey, 1911-12. Scale, 1:31,680. Contour interval, 10 feet. Topography, 100 feet above water surface. Published in Water-Supply Papers 368 and 486.

(b) Icele Creek from mouth, in sec. 12, T. 24 N., R. 17 E., to point above Jack Creek, 19 miles (12FL). Plan and profile by United States Geological Survey, 1912. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 150 feet above water surface. Published in Water-Supply Papers 368 and 486.

(a) Keechelus Lake, 4 miles (12FN). Map drawn in 1915 based on previous survey by United States Bureau of Reclamation. Scale, 1:24,000. Contour interval, 10 feet. Topography, 70 feet above water surface. Published in Water-Supply Paper 369.

(a) Yakima River from sec. 17, T. 12 N., R. 19 E., to sec. 15, T. 21 N., R. 12 E., 103 miles (12FN, 12FP). Plan and profile by United States Bureau of Reclamation and United States Geological Survey. Scale, 1:63,360. No topography. Published in Water-Supply Paper 369.

(b) Kachess Lake, 10 miles (12FN). Map drawn in 1915 based on previous survey by United States Bureau of Reclamation. Scale, 1:24,000. Contour interval, 10 feet. Topography, 30 feet above water surface. Published in Water-Supply Paper 369. This map includes also Little Kachess Lake and the area in the vicinity of the outlet of the lake.

(b) Cle Elum River, including North Fork, from mouth, in sec. 32, T. 20 N., R. 15 E., to Hyas Lake, 37 miles (12FN). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 5, 10, and 25 feet. Topography, 25 to 75 feet above water surface. Published in Water-Supply Paper 369.

(c) Middle Fork of Cle Elum River from mouth, in sec. 4, T. 22 N., R. 14 E., to Waptus Lake, 10 miles (12FN). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 5, 10, and 25 feet. Topography, about 75 feet above water surface. Published in Water-Supply Paper 369.

(d) Waptus Lake (see Middle Fork of Cle Elum River) (12FN). Plan by United States Geological Survey, 1911. Scale, 1:31,680. Contour interval, 10 feet. Topography, 60 feet above water surface. Published in Water-Supply Paper 369.

(c) West Fork of Cle Elum River from mouth, in sec. 16, T. 22 N., R. 14 E., upstream 9 miles (12FN). Plan and profile by United States Geological Survey 1911. Scale, 1:31,680. Contour intervals, 5, 10, and 25 feet. Topography, 75 feet above water surface. Published in Water-Supply Paper 369.

(c) Cle Elum Lake, 4 miles (12FN). Map drawn in 1915, based on previous survey by United States Bureau of Reclamation. Scale, 1:24,000. Contour interval, 10 feet. Topography, about 100 feet above water surface. Published in Water-Supply Paper 369.

(b) Naches River from sec. 35, T. 15 N., R. 16 E., to point above Bumping River, 38 miles (12FO). Plan and profile by United States Geological Survey, 1910. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 100 feet above water surface. Published in Water-Supply Paper 369.

(c) Bumping River from mouth to Bumping Lake, 16 miles (12FO). Plan and profile by United States Geological Survey, 1910. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 100 feet above water surface. Published in Water-Supply Paper 369.

(d) Bumping Lake, 3 miles (12FO). Map drawn in 1915 based on previous survey by United States Bureau of Reclamation. Scale, 1:24,000. Contour interval, 10 feet. Topography, 100 feet above water surface. Published in Water-Supply Paper 369.

(d) American River from mouth to Copper Creek, 11 miles (12FO). Plan and profile by United States Geological Survey, 1910. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water surface. Topography, 100 feet above water surface. Published in Water-Supply Paper 369.

(c) Tieton River from mouth, in sec. 35, T. 15 N., R. 16 E., to sec. 6, T. 13 N., R. 14 E., 22 miles (12FO). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 feet above water surface. Published in Water-Supply Paper 369.

McAllister Meadows reservoir site, dam site in sec. 31, T. 14 N., R. 14 E. (12FO). Map drawn in 1915 from previous surveys by United States Bureau of Reclamation. Scale, 1:24,000. Contour interval, 10 feet. Topography, 100 feet above water surface at dam site. Published in Water-Supply Paper 369.

(a) Snake River from mouth to State boundary, 139 miles (12LA, 12LD). Unpublished plan and partial profile by Corps of Engineers, United States Army, 1897 and 1901. Scale, 1:24,000. The survey from Riparia to the mouth was made in 1897, for navigation only. The map shows depths of water but does not give water-surface elevations. From Lewiston, at the Idaho-Washington State boundary, to Riparia the river was surveyed by the Corps of Engineers, United States Army, in 1900. This map is accompanied by a profile giving elevations above sea level. Contours are given, but they are not continuous and are referred to the water surface. Contour interval, 40 feet.

(a) Snake River from Lewiston, Idaho, to Idaho-Washington-Oregon boundary, 37 miles (12HR, 12HN). Plan and profile by United States Geological Survey, 1920. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 25 to 300 feet above water surface. Published by United States Geological Survey as part of a map of Snake River from Lewiston,

Idaho, to Huntington, Oreg., 187 miles, in 17 sheets, 10 plans and 7 profiles. (See Idaho.)

(a) Snake River from mouth to source. Unpublished profile. Scale, 1 inch=40 miles. Prepared by Oregon Short Line Railroad.

(a) Klickitat River from mouth, in sec. 3, T. 2 N., R. 12 E., to sec. 5, T. 11 N., R. 13 E., 73 miles (12ML). Plan and profile by United States Geological Survey, in cooperation with Washington Geological Survey, 1909. Scale, 1:24,000. Contour interval, 50 feet. Topography, 350 to 500 feet above water surface; no topography on first 17 miles. Published in Water-Supply Paper 253.

(b) West Fork of Klickitat River from mouth, in sec. 30, T. 9 N., R. 13 E., to sec. 9, T. 9 N., R. 12 E., 5 miles (12ML). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 50 feet. Topography, about 100 feet above water surface. Published in Water-Supply Paper 253.

(c) Fish Lake Stream from sec. 9, T. 9 N., R. 12 E., to sec. 5, T. 9 N., R. 12 E., 2 miles (12ML). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 50 feet. Topography, 100 feet above water surface. Published in Water-Supply Paper 253.

(b) Big Muddy Creek from mouth, in sec. 3, T. 7 N., R. 12 E., upstream 2 miles (12ML). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 50 feet. Topography, 300 feet above water surface. Published in Water-Supply Paper 253.

(b) Outlet Creek from mouth, in sec. 11, T. 6 N., R. 12 E., to sec. 10, T. 6 N., R. 12 E., 1 mile (12ML). Plan by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 50 feet. Topography, about 300 feet above water surface. Published in Water-Supply Paper 253.

(a) White Salmon River from mouth, in sec. 17, T. 3 N., R. 10 E., to T. 7 N., R. 10 E., 32 miles (12MM). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 100 to 200 feet above water surface. Published in Water-Supply Paper 253.

(b) Trout Creek from mouth, in sec. 24, T. 6 N., R. 10 E., to sec. 15, T. 6 N., R. 10 E., 2 miles (12MM). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 100 feet above water surface. Published in Water-Supply Paper 253.

(a) Little White Salmon River from mouth, in sec. 35, T. 3 N., R. 9 E., to sec. 26, T. 4 N., R. 9 E., 8 miles (12MG). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1909. Scale, 1:24,000. Contour interval, 100 feet. Topography, 100 to 1,000 feet above water surface. Published in Water-Supply Paper 253.

(a) Lewis River (12NJ).

(b) North Fork of Lewis River from sec. 24, T. 6 N., R. 2 E., to the falls, 51 miles (12NJ). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 200 feet above water surface. Published in Water-Supply Paper 253.

(c) Muddy River from mouth, in sec. 24, T. 7 N., R. 6 E., to sec. 23, T. 8 N., R. 6 E., 9 miles (12NJ). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 50 to 150 feet above water surface. Published in Water-Supply Paper 253.

(c) Pine Creek from sec. 23, T. 7 N., R. 6 E., to sec. 14, T. 7 N., R. 6 E., 1 mile (12NJ). Plan and profile by United States Geological Survey, 1909. Scale,

1:24,000. Contour interval, 20 feet. Topography, about 100 feet above water surface. Published in Water-Supply Paper 253.

(c) Swift Creek from sec. 28, T. 7 N., R. 5 E., to sec. 21, T. 7 N., R. 5 E., 1 mile (12 NJ). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, about 100 feet above water surface. Published in Water-Supply Paper 253.

(c) Cougar Creek from mouth in sec. 34, T. 7 N., R. 4 E., to sec. 27, T. 7 N., R. 4 E., 1 mile (12 NJ). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 80 feet above water surface. Published in Water-Supply Paper 253.

(a) Cowlitz River from sec. 21, T. 12 N., R. 2 E., to sec. 31, T. 14 N., R. 10 E., 77 miles (12 NK). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1910. Scale, 1:31,680. Contour interval, 5 feet. Almost no topography. Published in Water-Supply Paper 313.

(b) Cispus River from sec. 31, T. 12 N., R. 6 E., to point near Lake Creek, 45 miles (12 NK). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1910-11. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, 100 to 300 feet above water surface. Published in Water-Supply Paper 313.

(c) Lake Creek from mouth to Walupt Lake, 2 miles (12 NK). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 200 feet above water surface. Published in Water-Supply Paper 313.

(d) Walupt Lake, 1 mile (12 NK). Plan by United States Geological Survey, 1911. Scale, 1:31,680. Contour interval, 25 feet. Topography, 50 feet above water surface. Published in Water-Supply Paper 313.

(c) Muddy Fork from mouth, upstream 2 miles (12 NK). Plan and profile by United States Geological Survey, 1911. Scale, 1:31,680. Contour intervals, 25 feet on land and 5 feet on water. Topography, about 200 feet above water surface. Published in Water-Supply Paper 313.

(b) Toutle River, including North Fork from sec. 34, T. 10 N., R. 2 W., to Spirit Lake, in sec. 15, T. 9 N., R. 5 E., 54 miles (12 NK). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published in Water-Supply Paper 253.

(c) Green River from sec. 8, T. 10 N., R. 2 E., to sec. 4, T. 10 N., R. 2 E., 1 mile (12 NK). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 60 feet above water surface. Published in Water-Supply Paper 253.

(c) South Fork of Toutle River from sec. 29, T. 10 N., R. 1 E., to sec. 28, T. 10 N., R. 1 E., 1 mile (12 NK). Plan and profile by United States Geological Survey in cooperation with Washington Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 20 to 200 feet above water surface. Published in Water-Supply Paper 253.

(c) Outlet Creek from mouth, in sec. 19, T. 10 N., R. 1 E., to sec. 30, T. 10 N., R. 1 E., 2 miles (12 NK). Plan and profile by United States Geological Survey, 1909. Scale, 1:24,000. Contour interval, 20 feet. Topography, 20 to 80 feet above water surface. Published in Water-Supply Paper 253.

For areas in Washington covered by standard United States Geological Survey topographic maps see Plate 1.



## WEST VIRGINIA

## Potomac River.

(a) Cacapon River, Edes Fort reservoir site, from mouth upstream 25 miles (1SD). Plan by Corps of Engineers, United States Army, 1920. Scale, 1:171,000. Contour interval, 100 feet, with 20-foot contours sketched in places. Topography, 200 feet above water surface at dam site. The dam site is shown on a scale of 1:6,600. Contour interval, 20 feet. Published in Senate Document 403, Sixty-sixth Congress, third session.

## Mississippi River.

(a) Ohio River from Cairo, Ill., to Pittsburgh, Pa., 967 miles, has been surveyed at different dates by the Corps of Engineers, United States Army. The maps have been prepared for navigation and are on file in the district offices of the Corps of Engineers that are concerned with Ohio River.

(b) Tygart River (head of Monongahela River).

(c) Buckhannon River, reservoir site, from point 1 mile above Hall and 8.2 miles above mouth upstream 20 miles (3BA). Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Teter Creek, reservoir site, from point 1.2 miles above mouth upstream 2½ miles (3BB). Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Sandy Creek, reservoir site, from point 2.1 miles above mouth and 3 miles below Claude, upstream 6 miles (3BB). Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(b) Monongahela River from Pittsburgh, Pa., to West Fork, W. Va., 128 miles (3BD, 3BH, 3BG). Unpublished plan and profile by Corps of Engineers, United States Army, 1906-7. Scale, 1:62,500. No topography. A table of elevations is given on the same sheets as the plan.

(c) Middle Fork River, reservoir sites Nos. 1 and 2, from point 4 miles below Barbour-Randolph County line upstream 8 miles, also a 3-mile section a few miles downstream (3BA). Plan and profile developed from United States Geological Survey maps by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) West Fork River, reservoir site, from point 7.4 miles above Clarksburg to Weston, 29 miles (3BC). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) West Fork River from mouth to Clarksburg, 169 miles (3BC). Unpublished plan and profile by Corps of Engineers, United States Army. Scale, 1:25,340. Contour interval, 10 feet. Topography, 50 feet above water surface. Map in seven sheets; plan and profile on each.

(d) Elk Creek, reservoir site, from point 2 miles below Quiet Dell and 6 miles from Clarksburg upstream 10 miles (3BC). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Cheat River, reservoir site No. 2, from point 1 mile above Rowlesburg upstream 20 miles (3BE). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(c) Cheat River, reservoir site No. 1, from Pennsylvania-West Virginia line upstream 15 miles (3BF). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

(d) Shavers Fork, reservoir sites Nos. 1 and 2, from point 7.4 miles above Parsons upstream 12 miles (3BE). Plan and profile by Flood Commission of Pittsburgh, 1910. Scale, 1:50,000. No topography. Published in report of Flood Commission of Pittsburgh, 1911.

West Virginia is covered by standard United States Geological Survey topographic maps. Scale, 1:62,500. Contour intervals, 20 and 50 feet. (See pl. 1.)

## WISCONSIN

### Lake Michigan.

(a) Peshtigo River from Peshtigo, in sec. 30, T. 30 N., R. 23 E., to Copper Rapids, in sec. 10, T. 35 N., R. 17 E., 82 miles (4CM). Plan and profile by United States Geological Survey, 1906. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Topography, 10 to 150 feet above water surface. Published in Water-Supply Paper 417.

(a) Fox River from mouth to Portage, 163 miles (4DC, 4DG). Profile by Corps of Engineers, United States Army, 1916-1921. Scale, 1 inch=7.5 miles. Plan from Lake Winnebago to Portage, 107 miles. Scale, as published, 1:48,000; scale of original survey, 1:4,800. Contour intervals, 1, 2, 5, and 10 feet. Topography, detailed in some places; practically none in others. Published in House Document 146, Sixty-seventh Congress, second session, entitled "Fox River."

(b) Wolf River from mouth to Shiocton, 71 miles (4DE, 4DF). Profile compiled by Corps of Engineers, United States Army, 1916-1921. Scale, 1 inch=7.5 miles. Plan from mouth to Embarrass River, 46 miles. Scale, 1:48,000 as published; scale of original survey, 1:4,800. Contour intervals, 1, 2, 5, and 10 feet. Topography, detailed in some places; in others practically none. Published in House Document 146, Sixty-seventh Congress, second session, entitled "Fox River."

Mississippi River has been surveyed by the Mississippi River Commission for navigation and flood protection from the source to the mouth. The surveys were made at different dates, and the amount of topography shown varies. For copies of the maps application should be made to the Mississippi River Commission, St. Louis, Mo.

(a) Chippewa River from Chippewa Falls, in sec. 6, T. 28 N., R. 8 W., to Flambeau, in sec. 33, T. 33 N., R. 7 W., 45 miles (5CJ). Plan and profile by United States Geological Survey, 1903. Scale, 1:24,000. Contour interval, 10 feet. Topography, 10 to 70 feet above water surface. Published in Water-Supply Paper 417.

(a) Chippewa River from mouth to Chippewa Falls, 63 miles (5CK, 5CM). Profile by United States Geological Survey, 1903. Scale, 1:63,360. Published in Water-Supply Paper 417.

(b) Flambeau River from mouth to Turtle River, T. 42 N., R. 2 E., 115 miles (5CH). Plan and profile by United States Geological Survey, 1906. Scale, 1:24,000. Contour intervals, 5 and 10 feet. Topography, 10 to 100 feet above water surface. Published in Water-Supply Paper 417.

(d) Black River from Black River Falls, in sec. 22, T. 21 N., R. 4 W., to point near Owen, in sec. 33, T. 29 N., R. 2 W., 63 miles (5CP, 5CR). Plan and profile by United States Geological Survey, 1906. Scale, 1:24,000. Contour intervals, 1 foot and 10 feet. Topography, about 50 feet above water surface. Published in Water-Supply Paper 417.

(a) Wisconsin River from Kilbourn, in sec. 14, T. 13 N., R. 6 E., to Tomahawk, in sec. 10, T. 34 N., R. 6 E., 194 miles (5EB, 5EC, 5ED, 5EE). Plan and profile

by United States Geological Survey, 1906. Scale, 1:24,000. Contour intervals 1 foot and 10 feet. Topography, 10 to 100 feet above water surface. Published in Water-Supply Paper 417.

(a) Wisconsin River from mouth to Portage, 118 miles (5EG, 5EF). Unpublished profile by Corps of Engineers, United States Army, 1867. Scale 1, inch=half a mile.

(b) Eau Claire River from mouth to The Dells, in sec. 7, T. 29 N., R. 10 E., 23 miles (5EB). Plan and profile by United States Geological Survey, 1906. Scale, 1:24,000. Contour intervals, 1 foot and 5 feet. Topography, about 50 feet above water surface. Published in Water-Supply Paper 417.

Tables of elevations on the following rivers in Wisconsin are published in Bulletin 20, Wisconsin Geological and Natural History Survey, entitled "Water powers of Wisconsin," 1908.

Lake Michigan:		Mississippi River—Continued:	
	Miles		Miles
(a) Menominee River (4CJ, 4CK, 4CL)-----	102	(b) Flambeau River (5CH) -	153
(b) Brule River (4AG)-----	36	(c) Dore Flambeau River (5CH)-----	56
(a) Peshtigo River (4CM) -	140	(b) Red Cedar River (5CL, 5CM)-----	96
(a) Oconto River (4DA) -	87	(a) Black River (5CP, 5CR)	132
(a) Fox River (4DC, 4DG)	142	(a) Wisconsin River (5EA, 5EB, 5EC, 5ED, 5EE, 5EF, 5EG)-----	429
(b) Wolf River (4DD, 4DE, 4DF)-----	( <sup>1</sup> )	(b) Rib River (5EB)-----	48
(a) Milwaukee River (4EA)-----	74	(b) Eau Claire River (5EB)	36
(b) Cedar Creek (4EA)-----	31	(b) Eau Pleine River (5EC)	38
(b) Menominee River (4EA)-----	27	(b) Plover River (5EC)---	36
(a) Manitowoc River (4DJ)	( <sup>2</sup> )	(b) Yellow River (5CJ)---	( <sup>3</sup> )
(a) Sheboygan River (4DJ)	54	(b) Lemonweir River (5EE)	47
Mississippi River:		(b) Baraboo River (5EE)---	75
(a) St. Croix River (5CB, 5CC, 5CD)-----	160	(b) Kickapoo River (5EG) -	70
(b) Totogatic River (5CB) -	50	(a) Rock River (5FD, 5FE)	144
(b) Namakagon River (5CB)-----	70	(b) Oconomowoc River (5FD)-----	30
(b) Yellow River (5CB)-----	50	(b) Crawfish River (5FD).	
(b) Clam River (5CC)-----	32	(c) Beaver Dam River (5FD)-----	35
(a) Chippewa River (5CG, 5CJ, 5CK, 5CM)---	163	(b) Bark River (5FD)---	50
(b) East Branch (5CG)-----	61	(b) Yahara River (5FE)---	36
(b) West Branch (5CG)---	43	(a) Illinois River (5L).	
		(b) Fox River (5KF)-----	62

For areas in Wisconsin covered by standard United States Geological Survey topographic maps see Plate 1.

## WYOMING

Mississippi River (5, 7).

(a) Missouri River (6).

(b) Yellowstone River (6F, 6G).

(c) Big Horn River from sec. 18, T. 6 S., R. 31 E., Mont., to sec. 34, T. 57 N., R. 94 W., Wyo., 55 miles (6HO). Unpublished plan and profile. Scale, 1:126,720. No topography.

<sup>1</sup> Four elevations in 160 miles

<sup>2</sup> Three elevations in 44 miles.

<sup>3</sup> Five elevations in 71 miles.

(d) Wind River, Pilot Butte reservoir site, in secs. 20, 28, 29, 33, and 34, T. 3 N., R. 1 E. (6HD). This reservoir is not on any stream but is a natural depression. Plan by Arnold Co., filed in Carey Act department, Wyoming. Scale of published map, 1:32,000. Contour interval, 10 feet. Topography, 90 feet above bottom of reservoir. Published in House Document 1767, Sixty-fourth Congress, second session, entitled "Wind River project, Wyoming."

(d) Wind River, Lost Wells reservoir site, in secs. 17, 20, and 29, T. 2 N., R. 2 E. (6HC). This site is not on any creek, and the reservoir would be filled by a canal. Plan by Arnold Co., filed in Carey Act department, Wyoming. Scale of published map, 1:32,000. Contour interval, 10 feet. Topography, 40 feet above bottom of reservoir. Published in House Document 1767, Sixty-fourth Congress, second session, entitled "Wind River project, Wyoming."

(e) Dinwoody Creek from sec. 10, T. 5 N., R. 5 W., to sec. 10, T. 4 N., R. 6 W., 12 miles (6HC). Unpublished map showing plan with a little topography and profile, prepared by Office of Indian affairs, 1911. Scale, 1:4,800.

(e) Dinwoody Creek, Dinwoody Lake reservoir site, from sec. 16, T. 5 N., R. 5 W., to sec. 1, T. 4 N., R. 6 W. (6HC). Plan by Arnold Co., filed in Carey Act department, Wyoming. Scale of published map, 1:79,200. Contour interval, 10 feet. Topography, 40 feet above water surface at dam site. Published in House Document 1767, sixty-fourth Congress, second session, entitled "Wind River project, Wyoming."

(e) Bull Lake Creek from sec. 8, T. 3 N., R. 2 W., upstream 22 miles (6HC). Unpublished plan and profile by Office of Indian Affairs, 1911. Scale, 1:11,300. Topography shown in places. Map shows Bull Lake and 3 miles of creek below and 13 miles above the lake.

(e) Bull Lake Creek, Bull Lake reservoir site, from sec. 30, T. 3 N., R. 2 W., to sec. 6, T. 2 N., R. 3 W. (6HC). Plan by Arnold Co., filed in Carey Act department, Wyoming. Scale of published map, 1:79,200. Contour interval, 10 feet. Topography, 40 feet above water surface at dam site. Dam site shown on a scale of 1:32,000; contour interval, 5 feet; topography, 50 feet above water surface. Published in House Document 1767, Sixty-fourth Congress, second session, entitled "Wind River project, Wyoming."

(e) Little Wind River (or South Fork) from mouth of North Fork to T. 2 S., R. 5 W., 33 miles (6HA). Unpublished plan and profile by Office of Indian Affairs. Scale, 1:4,800. Contour interval, 50 feet. Topography, 50 to 900 feet above water surface.

(f) North Fork of Little Wind River from mouth in T. 1 S., R. 1 W., upstream 30 miles (6HA). Unpublished plan with a few contours and profile by Office of Indian Affairs, 1911. Scale, 1:4,800. Contour interval, 50 feet. Topography, 50 to 100 feet above water surface.

(g) Raft Lake (6HA). A small unpublished blue-print map by Office of Indian Affairs. Scale, 1:9,600. Contour interval, 50 feet. Topography, 200 feet above water surface.

(d) Shoshone River, Shoshone reservoir site, from sec. 34, T. 52 N., R. 103 W., to sec. 7, T. 52 N., R. 102 W., 5 miles (6HL). Unpublished map by United States Geological Survey, 1903. Scale, 1:18,000. Contour interval, 10 feet. Detailed topography.

(e) Carter Creek from mouth to sec. 34, T. 52 N., R. 103 W., 5 miles (6HL). Plan is shown on unpublished topographic map of Shoshone reservoir site. Surveyed by United States Geological Survey, 1903. Scale, 1:18,000. Contour interval, 10 feet. Detailed topography.

(e) North Fork of Shoshone River from mouth, in sec. 12, T. 52 N., R. 103 W., to sec. 18, T. 52 N., R. 103 W., 8 miles (6HL). Plan is on unpublished topographic

map of Shoshone reservoir site. Surveyed by United States Geological Survey, 1903. Scale, 1:18,000. Contour interval, 10 feet. Detailed topography.

(b) North Platte River (head of Platte River) from sec. 10, T. 26 N., R. 65 W., Wyo., to sec. 20, T. 19 N., R. 48 W., Nebr., 45 miles in Wyoming and 75 miles in Nebraska (6N). Surveyed by United States Bureau of Reclamation, 1911. Plan only. Scale, 1:31,680. Contour intervals, 10 and 20 feet. Detailed topography. Published by United States Bureau of Reclamation in five sheets. Covers North Platte irrigation project.

(b) North Platte River, Pathfinder reservoir site, from sec. 23, T. 29 N., R. 84 W. to sec. 9, T. 26 N., R. 84 W. (6NF, 6NG). Unpublished plan by United States Bureau of Reclamation, 1910. Scale, 1: 63,360. No contours except 5,850-foot, which is the reservoir boundary. That part of reservoir falling within Tps. 29 and 30 N., Rs. 84 and 85 W., is mapped also, scale, 1:31,680.

(b) Platte River.

(c) Encampment River from sec. 1 to sec. 36, T. 14 N., R. 84 W., 6 miles (6ND). Unpublished plan by United States Geological Survey, 1923. Scale, 1:51,800. Contour interval, 50 feet. Topography, 50 to 300 feet above water surface.

(d) Government Creek from mouth, in sec. 24, T. 14 N., R. 84 W., upstream  $3\frac{1}{2}$  miles (6ND). Unpublished plan by United States Geological Survey, 1923. Scale, 1:51,800. Contour interval, 50 feet. Topography, 50 to 300 feet above water surface.

(d) North Fork of Encampment River from mouth, in sec. 12, T. 14 N., R. 84 W., upstream  $6\frac{1}{2}$  miles (6ND). Unpublished plan by United States Geological Survey, 1923. Scale, 1:51,800. Contour interval, 50 feet. Topography, 50 to 300 feet above water surface.

(c) Sweetwater River from Pathfinder reservoir, in sec. 5, T. 29 N., R. 85 W., to sec. 4, T. 28 N., R. 102 W., 207 miles (6NG). Unpublished plan and profile by United States Geological Survey, 1923. Scale, 1:31,680. Contour interval, 50 feet. Topography, 150 to 300 feet above water surface.

Before the construction of the Pathfinder reservoir Sweetwater River entered the North Platte in sec. 28, T. 29 N., R. 84 W. The old location of the river in the reservoir is shown on the map of Pathfinder reservoir described above under North Platte River.

The following dam sites on Sweetwater River were surveyed on a scale of 1:6,000 except No. 1, which is on a scale of 1:1,200. Contour interval, 10 feet.

No. 1, secs. 21, 28, and 29, T. 28 N., R. 100 W.; topography, 150 feet above water surface.

No. 2, sec. 10, T. 28 N., R. 98 W.; topography, 150 feet above water surface.

No. 3, sec. 12, T. 29 N., R. 96 W.; topography, 140 feet above water surface.

No. 4, sec. 31, T. 30 N., R. 91 W.; topography, 220 feet above water surface.

No. 5, secs. 5 and 6, T. 29 N., R. 90 W.; topography, 240 feet above water surface.

No. 6, secs. 12 and 13, T. 29 N., R. 89 W.; topography, 140 feet above water surface.

(d) Laramie River from mouth, in sec. 27, T. 26 N., R. 64 W., to sec. 27, T. 26 N., R. 65 W., 7 miles (6NL). Surveyed in 1911 by United States Bureau of Reclamation, in connection with North Platte irrigation project, and shown on sheet 1 of that survey. Scale, 1:31,680. Contour interval, 20 feet. Detailed topography.

Colorado River (9).

(a) Green River from sec. 13, T. 24 N., R. 112 W., to sec. 20, T. 35 N., R. 111 W., 98 miles (9AA, 9AD). Plan and profile by United States Geological Survey,

1909. Scale, 1: 31,680. No topography. Published in Water-Supply Paper 396.

(a) Green River from State line to Green River, 65 miles (9AK, 9AD). Plan and profile by United States Bureau of Reclamation and United States Geological Survey, 1914. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 20 to 200 feet above water surface. Published by United States Geological Survey in four sheets—two plans and two profiles—being part of a map in 16 sheets; 10 plans and 6 profiles, showing Green River from Green River, Utah, to Green River, Wyo.

(b) Blacks Fork from mouth upstream, 28 miles (9AH, 9AJ). Plan and profile by United States Geological Survey and United States Bureau of Reclamation, 1914. Scale, 1:31,680. Contour intervals, 20 feet on land and 5 feet on water. Topography, 20 to 140 feet above water surface. Published by United States Geological Survey on parts of two Green River sheets (see above); one plan and one profile.

Great Salt Lake.

(a) Bear River, Woodruff Narrows reservoir site, from sec. 31, T. 18 N., R. 120 W., to sec. 31, T. 17 N., R. 120 W., 7 miles (not counting river bends) (10HB). Plan. Scale, 1:68,500. Contour interval, 15 feet. Topography, 85 feet above water surface at dam site. Published in Water-Supply Paper 517.

Columbia River (12).

(a) Snake River and Jackson Lake from sec. 23, T. 45 N., R. 114 W., to point about 10 miles above Jackson Lake, Wyo., 25 miles (12GA). Unpublished plan by United States Bureau of Reclamation, 1909. Scale, 1:63,360. Contour interval, 10 feet. Topography, 50 feet above water surface.

### SURVEYS NEEDED

The following table shows the mileage of available river surveys that are of some value for water-power studies, the extent of additional surveys required to provide an adequate basis for preparing an inventory of water resources of the United States, and a rough estimate of the cost of the additional surveys. Many of the older river surveys were not made in sufficient detail, and an item has been added to cover the cost of additional work on such streams. The estimated cost includes a small edition of plan and profile maps on a scale of 2 inches to 1 mile, with contour intervals of 20 feet on land and 5 feet on the water surface. The estimates of additional surveys needed are necessarily rough and may be considerably in error for individual States, but taken for the country as a whole or by regions they give a fair idea of the additional work needed to obtain suitable maps of the rivers. Stream-flow records are also needed along with the river surveys before estimates of the power resources of a stream can be made. A reconnaissance examination of each river should also be made to obtain a general idea of conditions affecting the utilization of the potential water power, to outline a possible scheme of development, and to select dam and reservoir sites.

*River surveys completed and additional surveys needed*

State	River surveys (miles)		Estimated cost of proposed additional surveys
	Now completed	Additional needed	
<b>New England:</b>			
Maine	770	1, 100	\$55, 000
New Hampshire	100	700	35, 000
Vermont	80	300	15, 000
Massachusetts	0	300	15, 000
Rhode Island	0		
Connecticut	10	100	5, 000
<b>Middle Atlantic:</b>			
New York	160	1, 000	50, 000
New Jersey	0	100	5, 000
Pennsylvania	100	2, 000	100, 000
<b>East North Central:</b>			
Ohio	270	100	5, 000
Indiana	150	100	5, 000
Illinois	1, 000	100	5, 000
Michigan	0	400	20, 000
Wisconsin	960	400	20, 000
<b>West North Central:</b>			
Minnesota	2, 800	300	15, 000
Iowa	220	200	10, 000
Missouri	330	400	20, 000
North Dakota	620	100	5, 000
South Dakota	450	300	15, 000
Nebraska	120	1, 500	75, 000
Kansas	10	500	25, 000
<b>South Atlantic:</b>			
Delaware	0	50	2, 500
Maryland and District of Columbia	20	200	10, 000
Virginia	20	1, 000	50, 000
West Virginia	370	500	25, 000
North Carolina	120	1, 600	80, 000
South Carolina	160	800	40, 000
Georgia	770	600	30, 000
Florida	0	50	2, 500
<b>East South Central:</b>			
Kentucky	400	300	15, 000
Tennessee	170	1, 600	80, 000
Alabama	40	900	45, 000
Mississippi	260	50	2, 500
<b>West South Central:</b>			
Arkansas	500	500	25, 000
Louisiana	300	50	2, 500
Oklahoma	0	500	25, 000
Texas	650	700	35, 000
<b>Mountain:</b>			
Montana	1, 530	4, 100	205, 000
Idaho	1, 500	2, 800	140, 000
Wyoming	780	1, 600	80, 000
Colorado	1, 240	1, 500	75, 000
New Mexico	580	700	35, 000
Arizona	700	700	35, 000
Utah	1, 750	600	30, 000
Nevada	100	200	10, 000
<b>Pacific:</b>			
Washington	1, 940	3, 500	175, 000
Oregon	1, 680	3, 200	160, 000
California	1, 420	5, 300	265, 000
Total	25, 130	43, 600	2, 180, 000
Additional work on rivers for which surveys are available but not in sufficient detail			500, 000
Total			2, 680, 000

\* Part of these surveys are being made by the Corps of Engineers, U. S. Army.

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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Supplemental Index  
to  
River Surveys  
made by the United States Geological Survey  
and  
Other Agencies  
By Benjamin E. Jones  
May 1934

(Supplements Water-Supply Paper 558 published in 1926)

Water-Supply Paper 558, published in 1926, contains a list by States of river surveys made by the United States Geological Survey and other agencies and available for consultation in the offices of the Geological Survey in Washington, D. C.

The present list is intended to bring that index up to date.

In a compilation of this character many maps will be overlooked, as the files of the Geological Survey, although extensive, are not complete. As this index will be republished from time to time, any information concerning errors or omissions will be welcomed.

In this compilation the surveys have been arranged by States and within the States by drainage basins. The tributary streams are indicated by letters: for example, a stream marked "(a)" is tributary to the last-named stream not marked with a letter, a stream marked "(b)" is tributary to the last-named stream marked "(a)", and so on. In the Great Basin tributaries of Great Salt Lake and other independent drainage systems are indicated by "(a)".

The index number, made up of letter and figures, in parentheses, refers to the drainage-area subdivisions shown on Plate 2 of Water-Supply Paper 558. The numbers refer to the major areas that form the great drainage basins of the country as classified by the Geological Survey in its publications on stream flow and by the Weather Bureau in its meteorologic reports.



Each major area is divided into intermediate areas conforming to its dominant drainage systems and designated 12A, 12B, etc., the number in the designation being that of the major area and the letter referring to a specific intermediate area within it. The intermediate areas are further divided into minor areas, each designated by the number of the major area, the letter of the intermediate area, and a final letter distinguishing it from adjacent minor areas, as 12FA, 12FB. Each drainage division is lettered in order from the upper reaches of the basin to the lower.

The maps published by the Geological Survey may be purchased for a small sum from the Director of the Geological Survey, Washington, D. C. Maps prepared and published by the States can usually be obtained directly from the State engineers. Many of the published maps are out of print, but copies of the Geological Survey maps may be consulted at the office of the Survey in the Interior Department Building at Washington, and many of them can be sent to any district office of the Survey for consultation, upon application to the Director.

## ARIZONA

### Colorado River.

#### (a) Gila River.

(b) Salt River from Roosevelt Reservoir to the junction of White and Black Rivers, 93-1/2 miles (9NA). Plan and profile by U. S. G. S., 1916 and 1932. Scale 1:31,680. Contour interval 20 and 25 feet on land, 5 feet on river surface. Detailed topography. Published by U. S. G. S. in 5 plan sheets and 5 profile sheets covering Salt River above Roosevelt Reservoir, Black River to Apache National Forest Boundary, White River to mouth of Diamond Creek, East Fork of White River to Seven Mile Canyon, and Carrizo dam site.

(c) Black River from the mouth to Graham - Greenlee County line, 95-1/2 miles (9NA). Plan and profile by U. S. G. S., 1931-32. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Published by U. S. G. S. on 4 sheets of set of 10 covering Salt River and tributaries above Roosevelt Reservoir.

(d) Bonita Creek in Fort Apache Indian Reservation from mouth upstream 4 miles (9NA). Plan by U. S. G. S., 1932. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on water surface. Detailed topography on lower end running

out to nothing at the upper end. Published by U. S. G. S. on 1 sheet of set of 10 covering Salt River and tributaries above Roosevelt Reservoir.

(c) White River from mouth to Diamond Creek, 28 miles (9NA). Plan and profile by U. S. G. S., 1932. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 3 sheets of set of 10 covering Salt River and tributaries above Roosevelt Reservoir.

(d) East Fork of White River from mouth upstream to sec. 30, T. 5 N., R. 23 E., Gila and Salt River meridian, Arizona, 2-1/2 miles (9NA). Plan and profile by U. S. G. S., 1932. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on water surface. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 10 covering Salt River and tributaries above Roosevelt Reservoir.

(c) Carrizo Creek from mouth upstream 12 miles (9NA). Plan by U. S. G. S., 1932. Scale 1:31,680. Contour interval 20 feet on land. Detailed topography. Published by U. S. G. S. on 1 sheet of set of 10 covering plan and profile of Salt River and tributaries above Roosevelt Reservoir.

Carrizo dam site on Salt River at Mile 82.4 above Roosevelt Reservoir and just below the mouth of Carrizo Creek (9NA). Plan and cross section by U. S. G. S., 1932. Scale 1:4,800. Contour interval 10 feet. Published by U. S. G. S. on 1 sheet of set of 10 covering Salt River and tributaries above Roosevelt Reservoir.

(c) Verde River from a point 3 miles below Camp Creek to Tangle Creek, 39 miles (9NB). A plan and profile by U. S. G. S., 1930. Scale 1:48,000. Contour interval 20 feet on land and 5 feet on water surface. Detailed topography. Published by U. S. G. S. in 1 plan and profile sheet.

(a) Little Colorado River from mouth to Tolchico dam site, 103 miles (9JE). Plan and profile by U.S.G.S., 1926. Scale 1:31,680. Contour interval 25 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. in 3 plan sheets and 2 profile sheets.

## CALIFORNIA

## Sacramento River.

(a) Deer Creek from a point 8.3 miles from the mouth upstream to sec. 26, T. 28 N., R. 5 E., Mount Diablo meridian, 46 miles (11BN). Plan and profile by U. S. G. S., 1931-32. Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published by U. S. G. S. in 2 plan sheets and 1 profile sheet.

(b) North Fork of Deer Creek from mouth to source including topography along possible location of diversion of Mill Creek to Deer Creek, 9 miles (11BN). Plan and profile by U. S. G. S. 1931-32. Scale 1:31,680. Contour interval 20 feet. Very little topography except at the upper end and near the mouth. Published by U. S. G. S. on 2 sheets of the map of Deer Creek.

Deer Creek Meadows dam site in sec. 29, T. 28 N., R. 5 E., (11BN). Plan and cross section by U. S. G. S., 1932. Scale 1:4,800. Contour interval 10 feet. Topography 200 feet above water surface. Published by U. S. G. S. on 1 sheet of set of 3 covering plan and profile of Deer Creek.

## Eel River.

(a) Middle Fork of Eel River, mouth to sec. 11, T. 23 N., R. 11 W., 34 miles (11ED). Plan and profile by U. S. G. S., 1924-25. Scale 1:31,680. Contour interval on land 25 feet, on river surface 5 feet. Detailed topography. Published by U. S. G. S. on 2 plan sheets and 1 profile sheet.

(b) Black Butte River from mouth to sec. 1, T. 22 N., R. 11 W., 4-1/2 miles (11ED). Plan and profile by U. S. G. S., 1924. Scale 1:31,680. Contour interval 25 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 3 covering Middle Fork of Eel River and tributaries.

(b) Williams Creek from mouth upstream to sec. 7, T. 23 N., R. 11 W., 4-1/2 miles (11ED). Plan and partial profile by U. S. G. S., 1924-25. Scale 1:31,680. Contour interval 25 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 3 covering Middle Fork of Eel River and tributaries.

(b) Mill Creek from mouth to sec. 15, T. 23 N., R. 13 W., 12 miles (11ED). The map also includes all of Round Valley to an elevation of 1,550 feet. Plan and partial profile by U. S. G. S., 1924-25. Scale 1:31,680. Contour interval 25 feet on land, 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 3 sheets of set of 3 covering Middle Fork of Eel River and tributaries.

(b) Elk Creek from mouth upstream to sec. 25, T. 20 N., R. 11 W., 10-1/2 miles (11ED). Plan and profile by U. S. G. S., 1924-25. Scale 1:31,680. Contour interval 25 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 1 plan sheet and 1 profile sheet of set of 3 covering Middle Fork of El River and tributaries.

## COLORADO

### Colorado River.

(a) Dolores River from the Mesa-Montrose County boundary in T. 49 N., R. 18 W., to a point 3 miles above the mouth of Disappointment Creek, 87 miles (9DK-9DL). Plan and profile by U. S. G. S., 1915-16. Scale 1:48,000. Contour interval 100 feet on land and 5 feet on river surface. Published by U. S. G. S. on 3 sheets of a set of 5 covering Dolores and San Miguel Rivers, Colo., within Paradox Valley quadrangle.

(b) San Miguel River from mouth to point in sec. 15, T. 46 N., R. 15 W., 3 miles above Naturita Creek, 27 miles (9DK). Surveyed in 1915-16 by U. S. G. S. Scale 1:48,000. Contour interval 100 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 2 sheets of a set of 5 covering Dolores and San Miguel Rivers, Colo., within Paradox Valley quadrangle.

## IDAHO

### Columbia River

(a) Kootenai River from the International Boundary to a point 1 mile below Moyie River, 54 miles (12AJ). Plan by U.S.G.S., 1928. Scale 1:12,000. Contour interval 2 feet. Detailed topography. Published by U. S. G. S. in 9 sheets.

(a) Clark Fork including Pend Oreille Lake from Horse Creek, sec. 28, T. 27 N., R. 34 W., Montana, to Albany Falls, sec. 30, T. 56 N., R. 5 W., Idaho; approximately 4 miles in Montana and 76 miles in Idaho (12DG) (12DH) (12DJ) (12DM). Plan by U. S. G. S., 1926. Scale 1:31,680. Contour interval 5 feet. Topography about 100 feet above water surface. Published by U. S. G. S., in 5 sheets.

(a) Pend Oreille Lake (12DH). Plan by U. S. G. S., 1926. Contour interval 5 feet with some under-water contours shown.

Topography shown to altitude of 2,125 feet above sea level, or 75 feet above the lake surface. Published by U. S. G. S. on 2 sheets of the map of Clark Fork from Horse Creek, Mont., to Albany Falls, Idaho.

Albany Falls dam site, Clark Fork River at Albany Falls (12DM). Scale 1:4,800. Contour interval 5 feet. Topography 150 feet above water surface. Published on 1 sheet of map of Clark Fork from Horse Creek, Mont., to Albany Falls, Idaho.

(b) Pack River from mouth to sec. 32, T. 59 N., R. 1 W., Idaho, 29 miles (12DH). Plan by U. S. G. S., 1926. Scale 1:31,680. Contour interval 5 feet. Topography about 60 feet above water surface. Published by U. S. G. S. on 2 sheets in connection with map of Clark Fork from Horse Creek, Mont., to Albany Falls, Idaho.

(a) Snake River.

(b) Boise River and Middle Fork of Boise River from backwater of Arrowrock Reservoir in sec. 29, T. 4 N., R. 6 E., to a point 2 miles above Atlanta, 63 miles (12HD). Plan and profile by U. S. G. S., 1927. Scale 1:31,680. Contour intervals, 25 and 100 feet on land and 5 feet on water. Topography 200 to 300 feet above water surface. Published by U. S. G. S. on 2 sheets of set of 7 covering Boise River and tributaries.

(c) North Fork of Boise River from mouth in sec. 4, T. 4 N., R. 7 E., upstream to sec. 3, T. 7 N., R. 10 E., 39 miles (12HD). Plan and profile by U. S. G. S., 1927. Scale 1:31,680. Contour intervals, 20, 25, and 100 feet on land and 5 feet on water. Topography 200 to 300 feet above water surface. Published on 4 sheets of set of 7 covering Boise River and tributaries.

(c) South Fork of Boise River from backwater of Arrowrock Reservoir in sec. 33, T. 3 N., R. 6 E., to 1 mile above Ross Fork, 92 miles (12HD). Plan and profile by U. S. G. S., 1927. Scale 1:31,680. Contour interval, 25 and 100 feet on land and 5 feet on water. Topography 200 to 300 feet above water surface. Published on 4 sheets of set of 7 covering Boise River and tributaries.

(d) Smoky Creek from mouth to point 5 miles upstream (12HD). Plan and profile by U. S. G. S., 1927. Scale 1:31,680. Contour interval, 100 feet on land and 5 feet on water surface. Topography 200 to 300 feet above water surface. Published by U. S. G. S. on 2 sheets of set of 7 covering Boise River and tributaries.

(e) Little Smoky Creek from mouth to a point 10 miles upstream (12HD). Plan and profile by U. S. G. S., 1927. Scale 1:31,680. Contour interval 20 and 100 feet on land and 5 feet on water. Topography 40 to 300 feet above water surface. Published on 2 sheets of set of 7 covering Boise River and tributaries.

Twin Springs dam site on Boise River, Mile 20.5 (12HD). Plan and cross section by U. S. Reclamation Service and U. S. G. S., 1927. Scale 1:4,800. Contour interval 20 feet. Topography 400 feet above river surface. Published by U. S. G. S. in 1 sheet.

Alexander Flats dam site on Middle Fork of Boise River, Mile 30.7 to Mile 31.05 (12HD). Plan and cross section by U. S. Reclamation Service and U. S. G. S., 1927. Scale 1:4,800. Contour interval 10 feet. Topography 300 feet above river surface. Published by U. S. G. S. in 1 sheet.

Upper Barber Flats dam site on North Fork of Boise River, Mile 13.6 (12HD). Plan and cross section by U. S. Reclamation Service and U. S. G. S., 1927. Scale 1:4,800. Contour interval 10 feet. Topography 300 feet above river surface. Published by U. S. G. S. in 1 sheet.

Lower Barber Flats dam site on North Fork of Boise River, Mile 13.3 (12HD). Plan and cross section by U. S. Reclamation Service and U. S. G. S., 1927. Scale 1:4,800. Contour interval 10 feet. Topography 225 feet above river surface. Published by U. S. G. S. in 1 sheet.

Raspberry dam site on South Fork of Boise River, Mile 22.2 (12HD). Plan and cross section by U. S. G. S. Scale 1:4,800. Contour interval 25 feet on land and 5 feet on water surface. Topography 300 feet above water surface. Published by U. S. G. S. in 1 sheet.

Indian Point dam site on South Fork of Boise River, Mile 36.4 (12HD). Plan and cross section by U. S. G. S. Scale 1:4,800. Contour interval 20 feet on land, 5 feet on water surface. Topography 165 feet above river surface. Published by U. S. G. S. in 1 sheet.

Anderson Ranch dam site on South Fork of Boise River, Mile 43.2 (12HD). Plan and cross section by U. S. G. S. Scale 1:4,800. Contour interval 10 feet. Topography 300 feet above river surface. Published by U. S. G. S. in 1 sheet.

Dog Creek dam site on South Fork of Boise River, Mile 61.7 (12HD). Scale 1:4,800. Contour interval 10 feet. Topography 150 feet above river surface. Published by U. S. G. S. in 1 sheet.

Bascum Ranch dam site on South Fork of Boise River, Mile 75.5 (12HD). Plan and cross section by U. S. G. S. Scale 1:4,800. Contour interval 10 feet. Topography 200 feet above river surface. Published by U. S. G. S. in 1 sheet.

(b) Payette River above Horseshoe Bend, 15-1/2 miles (12HG). Plan and profile by U. S. G. S., 1924. Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published on 2 sheets of 7 covering Payette River and tributaries above Horseshoe Bend.

(c) North Fork of Payette River from mouth to Cascade, 41 miles (12HG). Plan and profile by U. S. G. S., 1924. Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published on 2 sheets of set of 7 covering Payette River and tributaries above Horseshoe Bend.

Cabarton dam site on North Fork of Payette River at Mile 43.6 (12HG). Plan and cross section by U. S. G. S., 1924-25. Scale 1:4,800. Contour interval 10 feet. Topography 150 feet above water surface. Published on 1 sheet of map of Miscellaneous dam sites in connection with map of Payette River above Horseshoe Bend.

(c) South Fork of Payette River from mouth to point 8 miles above Canyon Creek. 70 miles (12HG). Plan and profile by U. S. G. S., 1924. Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published by U. S. G. S. on 4 sheets of set of 7 covering Payette River and tributaries above Horseshoe Bend.

Grandjean dam site, South Fork of Payette River at Mile 66.2 (12HG). Plan and cross section by U. S. G. S., 1924-25. Scale 1:4,800. Contour interval 10 feet. Topography 250 feet above river surface. Published by U. S. G. S. on 1 sheet of map of Miscellaneous dam sites in connection with map of Payette River above Horseshoe Bend, Idaho.

Garden Valley dam sites, South Fork of Payette River; No. 1 at Mile 7.65 and No. 2 at Mile 7.0 (12HG). Plan and cross sections by U. S. G. S., 1924-25. Scale 1:4,800. Contour interval 10 feet. Topography 200 feet at site No. 1 and 150 feet at site No. 2 above river surface. Published on 1 sheet of map of Miscellaneous dam sites in connection with map of Payette River above Horseshoe Bend, Idaho.

(d) Canyon Creek from mouth upstream to sec. 15, T. 10 N., R. 10 E., 2 miles (12HG). Plan by U. S. G. S., 1924. Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published by U. S. G. S. on 1 sheet of set of 7 covering Payette River and tributaries above Horseshoe Bend.

(d) Warm Springs Creek from mouth to Bush Creek in sec. 24, T. 10 N., R. 9 E., 3 miles (12HG). Plan by U. S. G. S., 1925. Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published by U. S. G. S. on 1 sheet of set of 7 covering Payette River and tributaries above Horseshoe Bend.

(d) Clear Creek from mouth to Cold Creek in sec. 1, T. 9 N., R. 7 E., 5-1/2 miles (12HG). Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published by U. S. G. S. on 1 sheet of set of 7 covering Payette River and tributaries above Horseshoe Bend.

(d) Deadwood River from mouth upstream to Deer Creek, 36 miles (12HG). Scale 1:31,680. Contour interval 20 feet. Plan and profile by U. S. G. S., 1925. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 7 covering Payette River and tributaries above Horseshoe Bend.

Lower Deadwood River dam site at Mile 24.4 (12HG). Plan and cross section by U. S. G. S., 1924-25. Scale 1:4,800. Contour interval 10 feet. Topography 150 feet above river surface. Published by U. S. G. S. on 1 sheet of map of Miscellaneous dam sites in connection with map of Payette River above Horseshoe Bend, Idaho.

(e) Deer Creek from mouth at Mile 36, Deadwood River, to Deer Creek Summit, 5 miles (12HG). Plan by U. S. G. S., 1925. Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published by U. S. G. S. on 1 sheet of set of 7 covering Payette River and tributaries above Horseshoe Bend.

(d) Middle Fork of Payette River from sec. 6, T. 10 N., R. 5 E., to a point 46-1/2 miles above the mouth, 31-1/2 miles (12HG). Plan and profile by U. S. G. S., 1929. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 3 sheets of set of 8 which cover South Fork of Salmon and certain tributaries and Middle Fork of Payette River.

(d) Middle Fork of Payette River from mouth to sec. 6, T. 10 N., R. 5 E., 15 miles (12HG). Plan and profile by U. S. G. S., 1924-25. Scale 1:31,680. Contour interval 20 feet.



Detailed topography. Published by U. S. G. S. on 2 sheets of set of 7 covering Payette River and tributaries above Horseshoe Bend.

(e) Anderson Creek from mouth to Deadwood Basin in sec. 24, T. 9 N., R. 4 E., 2-1/2 miles (12HG). Plan by U. S. G. S., 1925. Scale 1:31,680. Contour interval 20 feet. Detailed topography. Published by U. S. G. S. on 1 sheet of set of 7 covering Payette River and tributaries above Horseshoe Bend.

(e) Silver Creek from mouth to upper Peace Valley in sec. 20, T. 12 N., R. 6 E., 8 miles (12HG). Plan and profile by U. S. G. S., 1929. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Detailed topography. Published on 2 sheets of map of South Fork of Salmon River and Middle Fork of Payette River.

Peace Valley dam site at Mile 4.4 on Silver Creek (12HG). Plan and profile by U. S. G. S., 1929. Scale 1:4,800. Contour interval 10 feet. Topography 140 feet above water surface. Published by U. S. G. S. on 1 sheet of map of South Fork of Salmon River and Middle Fork of Payette River.

(b) Salmon River, Stanley Basin, Idaho, including Valley Creek and Salmon River (12JA). Plan by U. S. G. S., 1925. Scale 1:31,680. Contour interval 10 feet. Topography shown to elevation 6,550 feet above sea level. Dam site near Stanley on scale of 1:4,800. Contour interval 10 feet. Topography at dam site shown to elevation 400 feet above water surface. Published by U. S. G. S. on 2 sheets of set of 3 showing Bear Valley and Stanley Basin.

(c) South Fork of Salmon River from mouth to Tyndall Creek in sec. 1, T. 14 N., R. 6 E., 81-1/2 miles (12JF). Plan and profile by U. S. G. S., 1929. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on water surface. Detailed topography. Published by U. S. G. S. on 5 sheets of set of 8 covering South Fork of Salmon River and tributaries and Middle Fork of Payette River.

Reed dam site on South Fork of Salmon River about Mile 47.2 (12JF). Plan and cross section by U. S. G. S., 1929. Scale 1:4,800. Contour interval 10 feet. Topography 250 feet above river surface. Published by U. S. G. S. on 1 sheet of map of South Fork of Salmon River.

(c) Middle Fork of Salmon River.

(d) Bear Valley, including Bear Valley Creek, Marsh Creek, and Elk Creek at head of Middle Fork of Salmon River (12JD). Plan by U. S. G. S., 1925. Scale 1:31,680. Contour interval, 10 feet. Topography shown to 6,550 feet above sea level. Dam site at junction of Bear Valley and Marsh Creeks. Scale 1:4,800. Contour interval 10 feet. Topography at dam site shown to 400 feet above water surface. Published by U. S. G. S. on 2 sheets of set of 3 showing Bear Valley and Stanley Basin.

(d) Tyndall Creek from mouth in sec. 1, T. 14 N., R. 6 E., upstream about 2 miles (12JF). Plan by U. S. G. S., 1929. Scale 1:31,680. Contour interval 20 feet. Topography about 100 feet above water surface. Published by U. S. G. S. on 1 sheet of map of South Fork of Salmon River.

(d) East Fork of South Fork of Salmon River from mouth to Meadow Creek, 29 miles (12JF). Plan and profile by U. S. G. S., 1929. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on water surface. Detailed topography. Published by U. S. G. S. on 2 sheets of map of South Fork of Salmon River.

(e) Johnson Creek from mouth to Pen Basin, 30 miles (12JF). Plan and profile by U. S. G. S., 1929. Scale 1:31,680. Contour interval 20 feet on land 5 feet on water surface. Detailed topography. Published by U. S. G. S. on 2 sheets of map of South Fork of Salmon River.

(d) Secesh River from mouth upstream to Benton, 25 miles (12JF). Plan and profile by U. S. G. S., 1929. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on water surface. Detailed topography. Published by U. S. G. S. on 2 sheets of map of South Fork of Salmon River.

Secesh dam site on Secesh River about Mile 18.8 (12JF). Plan and cross section by U. S. G. S., 1929. Scale 1:4,800. Contour interval 10 feet. Topography 200 feet above river surface. Published by U. S. G. S. on 1 sheet of map of South Fork of Salmon River.

MAINE

St. John River from St. Francis River to Hamlin, 66 miles (1AC). Plan by International Boundary Commission. Scale 1:12,000. Contour interval 20 feet. Topography 0 to 500 feet above water surface. Published by International Boundary Commission on 13 sheets of set of 61.

(a) Southwest Branch of St. John River from Little St. John Lake to boundary between Montmagny and Bellechasse Provincial Districts, Quebec, Canada (1AA). Plan by International Boundary Commission. Scale 1:12,000. Contour interval 20 feet. Topography mostly to 50 feet above water surface. Published by International Boundary Commission on 11 sheets of set of 61.

(a) St. Francis River from mouth to Lake Pohenagamuk, 45 miles (1AC). Plan by International Boundary Commission. Scale 1:12,000. Contour interval, 20 feet. Topography 80 to 800 feet above water surface. Published by International Boundary Commission on 6 sheets of set of 61. The commission also has an unpublished profile of the river; scale, vertical, 1 inch = 40 feet and horizontal, 1 inch = 4 miles.

St. Croix River from source to Calais, 124 miles (1BA). Plan by International Boundary Commission. Scale 1:6,000, 1:12,000, and 1:24,000. Contour interval 10 feet. Topography 0 to 1,000 feet above water surface. Published in 13 sheets by International Boundary Commission.

(a) Monument Brook from source to mouth 12 miles (1BA). Plan by International Boundary Commission. Scale 1:6,000. Contour interval 10 feet. Topography 0 to 50 feet above water surface. Published by International Boundary Commission on 3 sheets of set of 18.

(a) Grand Lake, Spednik Lake, and North Lake (1BA). Surveyed by International Boundary Commission. Scale 1:24,000. Contour interval 10 feet. Topography 0 to 500 feet above water surface. Published by International Boundary Commission on 4 sheets of set of 18.

## MINNESOTA

St. Croix River (See under Wisconsin.)

## MISSOURI

Mississippi River.

(a) White River

(b) Current River from Jacks Fork to Van Buren, 33 miles (7HC). Plan and profile by State of Missouri Bureau of Geology and Mines in cooperation with U. S. G. S., 1924-25.

Scale 1:12,000. Contour interval 20 feet. Detailed topography. Published by State of Missouri Bureau of Geology and Mines and U. S. G. S. in 5 plan sheets and 1 profile sheet.

# MONTANA

Mississippi River.

(a) Missouri River.

(b) Sun River.

(c) North Fork of Sun River.

(d) North Fork of North Fork of Sun River from South Fork of North Fork upstream 7 1/2 miles (6BK). Reservoir No. 3. Plan by U. S. G. S., 1905. Scale 1:12,000. Contour interval 10 feet. Out of print.

(b) Judith River from mouth to Big Spring Creek, 64 miles (6CD). Plan and profile by U. S. G. S., 1931. Scale 1:31,680. Contour interval 20 feet on land, 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 3 sheets of set of 4 covering Judith River, Warm Spring Creek, and Big Spring Creek.

(c) Warm Spring Creek from mouth to Warm Springs, in sec. 19, T. 17 N., R. 18 E., 25 miles (6CD). Plan and profile by U. S. G. S., 1931. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Published by U. S. G. S. on 3 sheets of set of 4 covering Judith River, Warm Spring Creek, and Big Spring Creek.

(c) Big Spring Creek from mouth to Big Springs, in sec. 5, T. 14 N., R. 19 E., 31 miles (6CC). Plan and profile by U. S. G. S., 1931. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Published by U. S. G. S. on 2 sheets of set of 4 covering Judith River, Warm Spring Creek and Big Spring Creek.

Hanover dam site on Big Spring Creek near the town of Hanover, in sec. 27, T. 16 N., R. 17 E. (6CC). Plan and cross section by U. S. G. S., 1931. Scale 1:4,800 feet. Contour interval 10 feet on land and 5 feet on water surface. Published by U. S. G. S. on 1 sheet of set of 4 covering Judith River, Warm Spring Creek, and Big Spring Creek.

## Columbia River.

(a) Kootenai River from a point 4 miles below Troy to a point 3 miles above Libby, 26 miles (12AD and 12AE). Plan and profile by U. S. G. S., 1927 and 1929. Scale 1:48,000. Contour interval 20 feet on land and 5 feet on the river surface. Detailed topography. Published by U. S. G. S. in 1 sheet.

(a) Clark Fork including Pend Oreille Lake from Horse Creek, sec. 28, T. 27 N., R. 34 W., Montana, to Albany Falls, sec. 30, T. 56 N., R. 5 W., Idaho, approximately 4 miles in Montana and 76 miles in Idaho (12DG) (12DH) (12DJ) (12DM). Plan by U. S. G. S., 1926. Scale 1:31,680. Contour interval 5 feet. Topography about 100 feet above water surface. Published by U. S. G. S. in 5 sheets.

Swan River from Flathead Lake to Lion Creek (46 miles) (12CF). Plan and profile by U. S. G. S., 1916. Scale 1:48,000. Contour interval 25 feet on land and 5 feet on river surface. Topography 25 feet to 200 feet above water surface. Published by U. S. G. S. in 1 plan sheet and 1 profile sheet.

Flathead Lake. Plan by Rocky Mountain Power Co. submitted to the Federal Power Commission (12CF). Approved, 1932. Scale 1:12,000. Contour interval 2 feet and 5 feet. Topography about 20 feet above water surface. Published in 10 sheets by Rocky Mountain Power Co., Butte, Mont.

## NEW MEXICO

## Colorado River.

(a) Gila River from sec. 19, T. 19 S., R. 19 W., to sec. 29, T. 18 S., R. 18 W., New Mexico Principal meridian, New Mexico, 10 miles (9MA). This is Red Rock Reservoir site. Plan by U. S. G. S., 1920. Scale 1:24,000. Contour interval 10 feet. Topography 150 feet above the river surface. Published by U. S. G. S. on 1 sheet together with Alma Reservoir site on San Francisco River.

(b) San Francisco River from sec. 9, T. 11 S., R. 20 W., to sec. 4, T. 10 S., R. 20 W., New Mexico Principal meridian, New Mexico, 10 miles. (9MD). Plan by U. S. G. S., 1920. Scale 1:24,000. Contour interval 10 feet. Topography 200 feet above river surface. This section is Alma Reservoir site. Published by U. S. G. S. on 1 sheet together with Red Rock Reservoir site.

## NORTH DAKOTA

Nelson River.

(a) Winnipeg River.

(b) Red River.

(c) Assiniboine River.

(d) Souris (Mouse) River, portion in North Dakota, 352 miles (5R). Plan and profile by U. S. G. S., 1925, 1927, and 1929. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. in 12 plan sheets and 3 profile sheets.

## OREGON

Columbia River.

(a) Snake River.

(b) Grande Ronde River from mouth in Washington to the mouth of Wallowa River in Oregon, 37 miles in Washington and 44 1/2 miles in Oregon (12HP). Plan and profile by U. S. G. S., 1930. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. in 3 plan sheets and 3 profile sheets with 1 additional sheet of dam-site surveys.

(c) Catherine Creek Reservoir site on Catherine Creek in T. 5 S., R. 41 E. (12HP). Plan by U. S. G. S., 1933. Scale 1:31,680. Contour interval 20 feet. Topography 300 feet above water surface. Published by U. S. G. S. in 1 sheet.

(c) Catherine Creek dam sites in sec. 7, T. 5 S., R. 41 E., (12HP). Plan and cross sections of 3 dam sites by U. S. G. S., 1933. Scale 1:4,800. Contour interval 10 feet. Topography 200 feet above water surface. Published by U. S. G. S. on 1 sheet with plan of Catherine Creek Reservoir site.

(c) Wallowa River from mouth to Wallowa, 22 1/2 miles (12HO). Plan and profile by U. S. G. S., 1930. Scale of 1:31,680. Contour interval 20 feet on land and 5 feet on water surface. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 7 covering Grande Ronde River below Wallowa River, Minam River, and Miscellaneous dam sites.

(d) Minam River from mouth to sec. 10, T. 1 S., R. 41 E., 11 miles (12HO). Plan and profile by U. S. G. S., 1930. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 7 covering Grande Ronde River from mouth to Wallowa River, Minam River, and Miscellaneous dam sites.

(a) Walla Walla River from Freewater, Oreg. to the junction of North and South Forks in sec. 22, T. 5 N., R. 36 E., 6 1/2 miles (12MB). Plan and profile by U. S. G. S., 1931-32. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Published by U. S. G. S. on 2 sheets of set of 3 covering Walla Walla River above Freewater, Oreg., and North and South Forks.

(a) Rock dam site on Walla Walla River in sec. 18, T. 5 N., R. 36 E. (12MB). Plan and cross section by U. S. G. S., 1932. Scale 1:4,800. Contour interval 10 feet. Published by U. S. G. S. on 1 sheet of set of 4 covering Walla Walla River above Freewater, Oreg., North and South Forks, and Miscellaneous dam sites.

(b) North Fork of Walla Walla River from mouth to sec. 6, T. 5 N., R. 39 E., 18 miles (12MB). Plan and profile by U. S. G. S. 1931-32. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Published by U. S. G. S. on 3 sheets of a map covering Walla Walla River above Freewater and North and South Forks.

(b) South Fork of Walla Walla River from mouth to the north boundary of T. 5 N., R. 39 E., 32 Miles (12MB). Plan and profile by U. S. G. S., 1931-32. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Published by U. S. G. S. on 3 sheets of map covering Walla Walla River above Freewater and North and South Forks.

Three dam sites, at Mile 15.4, Mile 16.5, and Mile 17.3, on South Fork of Walla Walla River (12MB). Mileage is from Freewater, Oreg. on Walla Walla River. Plan and cross section by U. S. G. S., 1932. Scale 1:4,800. Contour interval 10 feet. Published by U. S. G. S. on 1 sheet of set of 4 covering Walla Walla River above Freewater, Oreg., including North and South Forks and Miscellaneous dam sites.

(a) Deschutes River.

(b) White River from mouth to Mount Hood Loop Highway, 45 1/2 miles (12MK). Plan and profile by U. S. G. S., 1914, and 1932. Scale 1:31,680. Contour interval 20 and 25 feet on land, changing at Mile 6. Contour interval on river surface 5 feet. Detailed topography. Published by U. S. G. S. in 2 plan sheets and 1 profile sheet.

(a) Sandy River from mouth in sec. 19, T. 1 N., R. 4 E., to Marmot, sec. 18, T. 2 S., R. 6 E., about 30 miles (12MD). Plan and profile by U. S. G. S., 1926. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Topography 150 feet above the water surface. One dam-site survey. Published in 1 plan and 1 profile sheet by U. S. G. S.

(b) Bull Run River from mouth on north line of sec. 31, T. 1 S., R. 5 E., upstream about 2 miles to town of Bull Run, 2 miles (12MO). Plan and profile by U. S. G. S., 1926. Scale 1:31,680. Contour interval 20 feet. Topography 100 feet above water surface. Published by U. S. G. S. on 2 sheets of set of 2 covering Sandy River from mouth to Marmot.

(a) Willamette River.

(b) Middle Fork of Willamette River from Coast Fork, sec. 11, T. 18 S., R. 3 W., to mouth of North Fork, sec. 12, T. 21 S., R. 2 E., 40 miles (12NB). Plan and profile by U. S. G. S., 1926. Scale 1:31,680. Contour interval 20 feet. Topography 100 feet or more above the water surface. Published by U. S. G. S. in 1 plan sheet and 1 profile sheet.

(b) Coast Fork.

(c) Row River from sec. 19, T. 21 S., R. 1 W., to sec. 29, T. 21 S., R. 1 E., 10 miles (12NA). Reconnaissance survey. Plan and profile by U. S. G. S., 1926. Scale 1:31,680. Contour interval 25 feet. Topography 50 to 200 feet above water surface. Two dam-site surveys. Not published.

Siletz River and South Fork of Siletz River from head of Tidewater, sec. 12, T. 9 S., R. 11 W., to a point 5 miles above Valsetz, 57 miles (12RA). Plan and profile by U. S. G. S., 1925. Scale 1:31,680. Contour interval on land 20 feet, on water 5 feet. Detailed topography. Published by U. S. G. S. in 2 plan sheets and 1 profile sheet.

(b) North Fork of Siletz River from junction with the South Fork in sec. 18, T. 8 S., R. 8 W., upstream 3 miles (12RA). Plan and profile by U. S. G. S., 1925. Scale 1:31,680. Contour



interval 20 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 3 covering Siletz River, Oreg.

(b) Gravel Creek from mouth in sec. 18, T. 8 S., R. 8 W., upstream  $2\frac{1}{2}$  miles (12RA). Plan and profile by U. S. G. 1925. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 3 covering Siletz River, Oreg.

# TEXAS

Mississippi River.

(a) Red River.

In Texas opposite Ranges 13 and 14 W., Oklahoma (7KC). Plan by Reclamation Department, State of Texas, 1920-21. Scale 1:6,000. Contour interval 2 feet. Detailed topography. Published by the State of Texas in 4 sheets.

(b) Bois D' Arc Creek from Red River to Freemans Bridge, latitude  $33^{\circ} 29'$ , longitude  $96^{\circ} 12'$  (7LA). Plan by Reclamation Department, State of Texas, 1914-15. Scale 1:12,000. Contour interval 2 feet. Detailed topography. Published by Reclamation Department, State of Texas, in 7 sheets.

(b) Bois D' Arc Creek from Freemans Bridge upstream to longitude  $96^{\circ} 16'$  W. Plan by Reclamation Department, State of Texas. Date of survey not shown. Scale 1:12,000. Contour interval 2 feet. Detailed topography. Unpublished plan in 1 sheet.

(b) Sulphur River from a point about 2 miles below the mouth of Cuthand Creek, longitude  $94^{\circ} 52'$ , to junction of North and South Forks near the boundary of Hopkins and Franklin Counties (7MC). Plan by Reclamation Department, State of Texas, 1917. Scale 1:12,000. Contour interval 2 feet. Detailed topography. Unpublished plan in 5 sheets.

(b) Sulphur River from longitude  $94^{\circ} 45'$ , upstream  $17\frac{1}{2}$  miles (7MC). Plan by U. S. G. S. and Reclamation Department, State of Texas, 1928. Scale 1:48,000. Contour interval 5 feet. Published by U. S. G. S. and Reclamation Department, State of Texas, in 1 sheet.

(c) South Sulphur River from the junction of the North and South Forks near the corner common to Hopkins, Franklin,

Lamar, and Red River Counties upstream to a point about 1 mile upstream from the Hunt-Delta County boundary (7MC). Plan by Reclamation Department, State of Texas, 1925. Scale 1:12,000. Contour interval 2 feet. Detailed topography. Unpublished plan in 7 sheets.

(c) North Sulphur River from the junction of North and South Forks near the corner common to Hopkins, Franklin, Lamar, and Red River Counties upstream to Allen Creek, longitude  $96^{\circ} 4'$  (7MC). Plan by Reclamation Department, State of Texas, 1917, 1918, 1923, 1924, 1927, and 1928. Detailed topography. Unpublished plan in 7 sheets.

(d) Middle Sulphur River from the junction with South Sulphur River to a point 2 miles above the Hunt-Delta County line (7MC). Plan by Reclamation Department, State of Texas, 1924-25. Scale 1:12,000. Contour interval 2 feet. Detailed topography. Unpublished plan in 2 sheets.

(c) Cuthand Creek from mouth upstream to longitude  $95^{\circ} 3'$ . Plan by Reclamation Department, State of Texas, 1922. Scale 1:12,000. Contour interval 2 feet. Detailed topography. Unpublished map in 3 sheets.

#### UTAH

Colorado River.

(a) Green River.

(b) San Rafael River from mouth to Castle Dale, in sec. 33, T. 18 S., R. 8 E., 121 miles (9BK). Plan and profile by U. S. G. S., 1925. Scale 1:31,680. Contour interval on land 25 feet and on water 5 feet. Detailed topography. Published by U. S. G. S. in 2 plan and 2 profile sheets.

(c) Buckhorn Wash from San Rafael River upstream 3 miles (9BK). Plan and profile by U. S. G. S., 1925. Scale 1:31,680. Contour interval 25 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 2 sheets of plan and profile of San Rafael River below Castle Dale, Utah.

#### VERMONT

Connecticut River

(a) Passumpsic River from mouth to Center Pond, Vt., 38-1/2

miles (1GC). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. in 2 plan sheets and 1 profile sheet.

(b) West Branch of Passumpsic River from mouth to West Burke, 8-1/2 miles (1GC). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 4 covering Passumpsic River and tributaries.

(c) Calendar Brook from mouth upstream 2-1/2 miles (1GC). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 4 covering Passumpsic River and tributaries.

(b) Millers Run from mouth to Sheffield, 10 miles (1GC). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 4 covering Passumpsic River and tributaries.

(b) Moose River from mouth to Victory, 17; miles (1GC). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 4 covering Passumpsic River and tributaries.

(b) Kirby Brook from mouth upstream 2-1/4 miles (1GC). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 4 covering Passumpsic River and tributaries.

(c) Knapp Brook from mouth upstream 1-1/2 miles (1GC). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 4 covering Passumpsic River and tributaries.

(b) Sleepers River from mouth upstream 5-1/2 miles (1GC). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 4 covering Passumpsic River and tributaries.

(a) White River, from a point 3 miles above West Hartford to the Royalton town line, 6-1/2 miles (1GS). Plan by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. in 1 plan and profile sheet, which also includes First Branch from South Tunbridge to Chelsea.

(b) First Branch from South Tunbridge to Chelsea, 12 miles (1GS). Plan and profile by U. S. G. S., 1928. Scale 1:24,000. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. in 1 plan and profile sheet, together with a portion of White River.

# WASHINGTON

## Columbia River.

(a) San Poil River from south line of sec. 5, T. 30 N., R. 33 E., to sec. 25, T. 34 N., R. 32 E., 27 miles (12FB). Plan and profile by U. S. G. S. in cooperation with the Office of Indian Affairs, 1913. Scale 1:31,680. Contour interval 10 feet. Detailed topography. Published by U. S. G. S. in 1 sheet.

Ozette Lake, Wash. (120A). Map compiled from General Land Office township plats by U. S. G. S. Scale 1:63,360. No topography.

Topography along proposed tunnel location from Ozette Lake to Pacific Ocean, in sec. 12, T. 30 N., R. 16 W., and secs. 7, 8, 17, and 18, T. 30 N., R. 15 W. Scale 1:31,680. Contour interval 25 feet. Surveyed in 1928 by U. S. G. S., and published on 1 sheet of set of 5 covering Quillayute, Bogachiel, and Hoh Rivers.

Nylund dam site, Ozette River, in sec. 30, T. 31 N., R. 15 W., just below the outlet of Ozette Lake (120A). Plan and cross section by U. S. G. S., 1928. Scale 1:4,800. Contour interval 5 feet. Published by U. S. G. S. on 1 sheet of set of 5 covering Quillayute, Bogachiel, and Hoh Rivers.

Quillayute River from mouth to junction of Bogachiel and Soleduck Rivers, 6 1/4 miles (120A). Very little topography. Plan and profile by U. S. G. S., 1928. Scale 1:31,680. Contour interval 50 feet on land and 5 feet on river surface. Published by U. S. G. S. on 2 sheets of set of 5 covering Quillayute, Bogachiel, and Hoh Rivers.

(a) Soleduck River from mouth in sec. 20, T. 28 N., R. 14 W., to Seven Lakes Basin, T. 28 N., R. 8 W., 65 miles (120A). Plan and profile by U. S. G. S., 1927. Scale 1:31,680. Contour interval 50 feet. Detailed topography. Published by U. S. G. S. in 4 plan sheets and 2 profile sheets.

(b) Nameless Creek from mouth to Lake No. 1 in secs. 19 and 20, T. 28 N., R. 8 W., 3 miles (120A). Scale 1:31,680. Contour interval 50 feet. Plan and profile by U. S. G. S., 1927. Published by U. S. G. S. on 2 sheets of set of 7 covering Soleduck and Lyre Rivers.

Deer Lake Reservoir site, sec. 13, T. 28 N., R. 9 W., (120A). Scale 1:6,000. Contour interval 10 feet. Reconnaissance survey. Plan by U. S. G. S., 1927. Topography 60 feet above lake surface. Published on 1 sheet of set of 7 covering Soleduck and Lyre Rivers.

(a) Bogachiel River from mouth to North Fork, 35 miles (120A). Plan and profile by U. S. G. S., 1928. Scale 1:31,680. Contour interval 50 feet on land and 5 feet on river surface. Topography 100 to 200 feet above the river. Published by U. S. G. S. on 2 sheets of set of 5 covering Quillayute, Bogachiel, and Hoh Rivers.

(a) Hoh River from mouth to Glacier Creek, 51 miles (120A). Plan and profile by U. S. G. S., 1928. Scale 1:31,680. Contour interval 50 feet on land and 5 feet on river surface. Topography 100 to 200 feet above river surface. Published by U. S. G. S. on 4 sheets of set of 5 covering Quillayute, Bogachiel, and Hoh Rivers.

Oxbow dam site at Mile 18 1/2, Hoh River (120A). Plan and cross section by U. S. G. S., 1928. Scale 1:4,200. Contour interval 10 feet. Topography 175 feet above river surface. Published by U. S. G. S. on 1 sheet of 5 covering Quillayute, Bogachiel and Hoh Rivers.

(a) Glacier Creek from mouth to Blue and White Glacier, about 5 miles (120A). Plan and profile by U. S. G. S., 1928. Scale 1:31,680. Contour interval 100 feet on land and 5 feet on water surface. Detailed topography. Published by U. S. G. S. on 1 sheet of set of 5 covering Quillayute, Bogachiel, and Hoh Rivers.

(a) South Fork of Hoh River from mouth to a point 2 1/2 miles above the boundary of Mount Olympus National Monument, 17 1/2 miles (120A). Survey in 1928, by U. S. G. S. Scale 1:31,680. Contour interval 50 feet on land and 5 feet on water surface. Topography 100 feet to 200 feet above river surface. Published by U. S. G. S. on 3 sheets of set of 5 covering Quillayute, Bogachiel, and Hoh Rivers.

Quinault River from mouth to Rustler River, 54 miles (120B). Scale 1:31,680. Contour interval 50 feet on land and 5 feet on river surface. Reconnaissance survey by U. S. G. S., 1929. Topography 50 to 250 feet above river surface. Published

by U. S. G. S. in 1 plan sheet and 1 profile sheet.

Quinsault Lake dam site, sec. 25, T. 23 N., R. 10 W. (120A). Scale 1:4,800. Contour interval 10 feet. Plan and cross section by U. S. G. S., 1929. Topography 60 feet above river surface. Published by U. S. G. S. on 1 sheet of set of 2 covering Quinsault River to Rustler River.

Chehalis River.

(a) Wynooche River from mouth in sec. 18; T. 17 N., R. 7 W. Upstream 57 miles to sec. 24, T. 23 N., R. 7 W. (120D). Scale 1:31,680. Contour interval 50 feet. Map in 1 sheet. Not published. Reconnaissance survey by U. S. G. S., 1925.

Dungeness River from mouth upstream 25 miles (12PM). Scale 1:31,680. Contour interval 50 feet. Map in 1 sheet. Not published. Reconnaissance survey by U. S. G. S., 1926.

Quilcene River from mouth to Marmot Pass, 19 miles (12PM). Plan and profile by U. S. G. S., 1926. Scale 1:31,680. Contour interval 50 feet. Detailed topography. This was a reconnaissance survey only, and the map, which is in 1 sheet, probably will not be published.

Lyre River from mouth to Crescent Lake, 5 1/2 miles (12PN). Plan and profile by U. S. G. S. Scale 1:31,680. Contour interval 50 feet. Detailed topography. Published by U. S. G. S. on 2 sheets of set of 7 covering Soleduck and Lyre Rivers.

Crescent Lake Reservoir (12PN). Plan by U. S. G. S. Scale 1:31,680. Contour interval 50 feet. Topography 170 feet above lake surface. Published by U. S. G. S. on 1 sheet of set of 7 covering Soleduck and Lyre Rivers.

Duckabush River from mouth to a point 1 mile above Mount Olympus National Monument boundary, 18 1/2 miles (12PM). Scale 1:31,680. Contour interval 20 feet on land and 5 feet on water surface. Surveyed by U. S. G. S. in 1932. Maps in preparation.

Duckabush River from mouth upstream 11 miles (12PM). Reconnaissance survey by U. S. G. S., 1925-26. Scale 1:31,680. Contour interval 50 feet. Maps will not be published.

Cavanaugh Lake Reservoir site, T. 33 N., R. 6 E. (12PE). Plan by U. S. G. S., 1925. Scale 1:31,680. Contour interval 25 feet. Topography 135 feet above lake surface. Published by U. S. G. S.

Jordan Dam site, secs. 20, 21, and 22, T. 31 N., R. 6 E., (12PE). Plan by U. S. G. S., 1925. Scale 1:15,840. Contour interval 10 feet. Topography 200 feet above water surface. Published by U. S. G. S.

Robe dam site, sec. 11, T. 30 N., R. 7 E., on South Fork of Stilaguamish River (12PE). Plan and cross section by U. S. G. S., 1925. Scale 1:4,800. Contour interval 10 feet. Topography 200 feet above river level. Published by U. S. G. S.

Cavanaugh Lake dam site, secs. 21 and 22, T. 33 N., R. 6 E., (12PE). Plan and cross section by U. S. G. S., 1925. Scale 1:15,840. Contour interval 10 feet. Topography 200 feet above river surface. Published by U. S. G. S.

#### Stilaguamish River.

(a) South Fork of Stilaguamish River, from mouth upstream 44 1/2 miles to Silverton (12PE). Plan and profile by U. S. G. S., 1925. Scale 1:31,680. Contour interval, 25 feet on land and 5 feet on river surface. Published by U. S. G. S. in 1 plan sheet and 1 profile sheet.

(a) North Fork of Stilaguamish River from mouth to sec. 11, T. 32 N., R. 7 E., 19 miles (12PE). Plan and profile by U. S. G. S., 1925. Scale 1:31,680. Contour interval 25 feet on land and 5 feet on river surface. Published by U. S. G. S. with South Fork of Stilaguamish River on 1 plan sheet and 1 profile sheet.

### WISCONSIN

Chippewa River from Flambeau River to Chippewa Reservoir, 63 miles (50G). Plan and profile compiled by U. S. G. S., 1925. Scale 1:24,000. Contour interval 5 feet. Detailed topography. Published by U. S. G. S. in 4 plan sheets and 1 profile sheet.

(b) St. Croix River from mouth to a point 11 miles above Danbury, Wis., 131 miles (50B) (50C) (50D). Topography by Corps of Engineers, U. S. Army, and Byllesby Engineering and Management Corporation, 1923 and 1926. Scale 1:24,000. Contour interval 5 feet. Very little topography. Published by U. S. G. S. in 6 plan sheets.

### WYOMING

#### Columbia River.

(a) Snake River from Pine Creek, Idaho, to Horse Creek, Wyo., 36 miles in Idaho and 27 miles in Wyoming (12GB and 12GE).

Plan and profile by U. S. G. S., 1931. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. in 3 plan sheets, 1 profile sheet and 1 sheet showing dam sites with cross sections.

(b) Hoback River from mouth in sec. 26, T. 39 N., R. 116 W., upstream about 2 miles (12GD). Plan by U. S. G. S., 1931. Scale 1:31,680. Contour interval 20 feet on land and 5 feet on river surface. Detailed topography. Published by U. S. G. S. on 1 sheet of map of Snake River from Pine Creek, Idaho, to Horse Creek, Wyo.

The Narrows dam site, Snake River at Mile 40 above Pine Creek (12GE). Plan and cross section by U. S. G. S., 1931. Scale 1:4,800. Contour interval 10 feet. Topography 270 feet above water surface. Published by U. S. G. S., on 1 sheet of map of Snake River from Pine Creek, Idaho, to Horse Creek, Wyo.

Blind Canyon dam site, Snake River at Mile 44.4 above Pine Creek, Idaho (12GE). Plan and cross section by U. S. G. S., 1931. Scale 1:4,800. Contour interval 10 feet. Topography 180 feet above river surface. Published by U. S. G. S. on 1 sheet of map of Snake River from Pine Creek, Idaho, to Horse Creek, Wyo.

Station Creek dam site at Mile 48.3 above Pine Creek, Idaho (12GE). Plan and cross section by U. S. G. S., 1931. Scale 1:4,800. Contour interval 10 feet. Topography 180 feet above river surface. Published by U. S. G. S. on 1 sheet of map of Snake River from Pine Creek, Idaho to Horse Creek, Wyo.

Bailey Creek dam site at Mile 53.1 above Pine Creek, Idaho (12GE). Plan and cross section by U. S. G. S., 1931. Scale 1:4,800. Contour interval 10 feet. Topography 170 feet above river surface. Published by U. S. G. S. on 1 sheet of map of Snake River from Pine Creek, Idaho, to Horse Creek, Wyo.

Johnny Counts Flat dam site at Mile 59.5 above Pine Creek, Idaho (12GE). Plan and cross section by U. S. G. S., 1931. Scale 1:4,800. Contour interval 10 feet. Topography 200 feet above river surface. Published by U. S. G. S. on 1 sheet of map of Snake River from Pine Creek, Idaho to Horse Creek, Wyo.