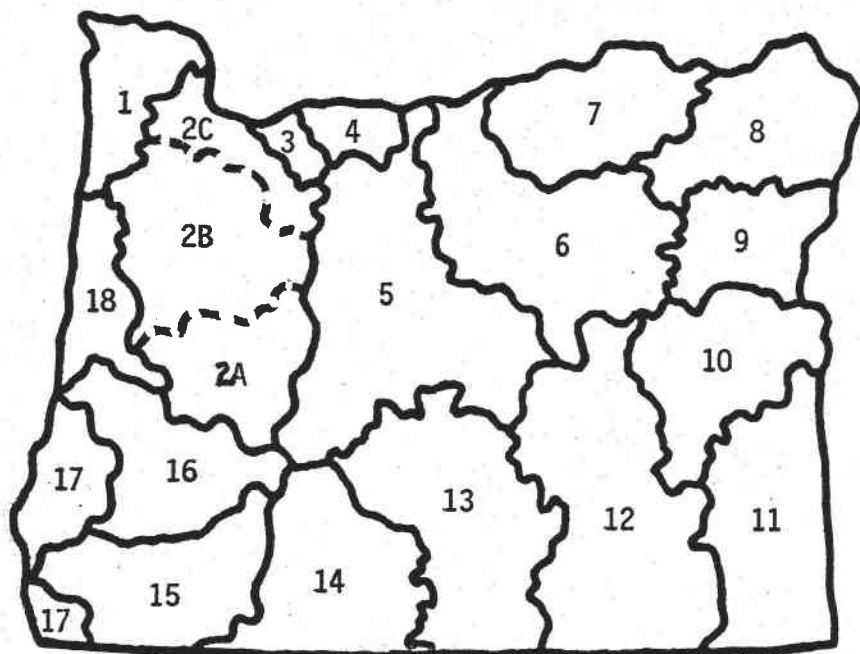


A RESOURCE SURVEY OF RIVER ENERGY
AND LOW-HEAD HYDROELECTRIC POWER POTENTIAL
IN OREGON

APPENDIX 14: KLAMATH BASIN



WATER RESOURCES RESEARCH INSTITUTE
Oregon State University
Corvallis, Oregon 97331

INDEX TO APPENDIX 14, KLAMATH BASIN

Drainage Basin Map 14-ii

Reach Hydro Potential Characteristics Sheets

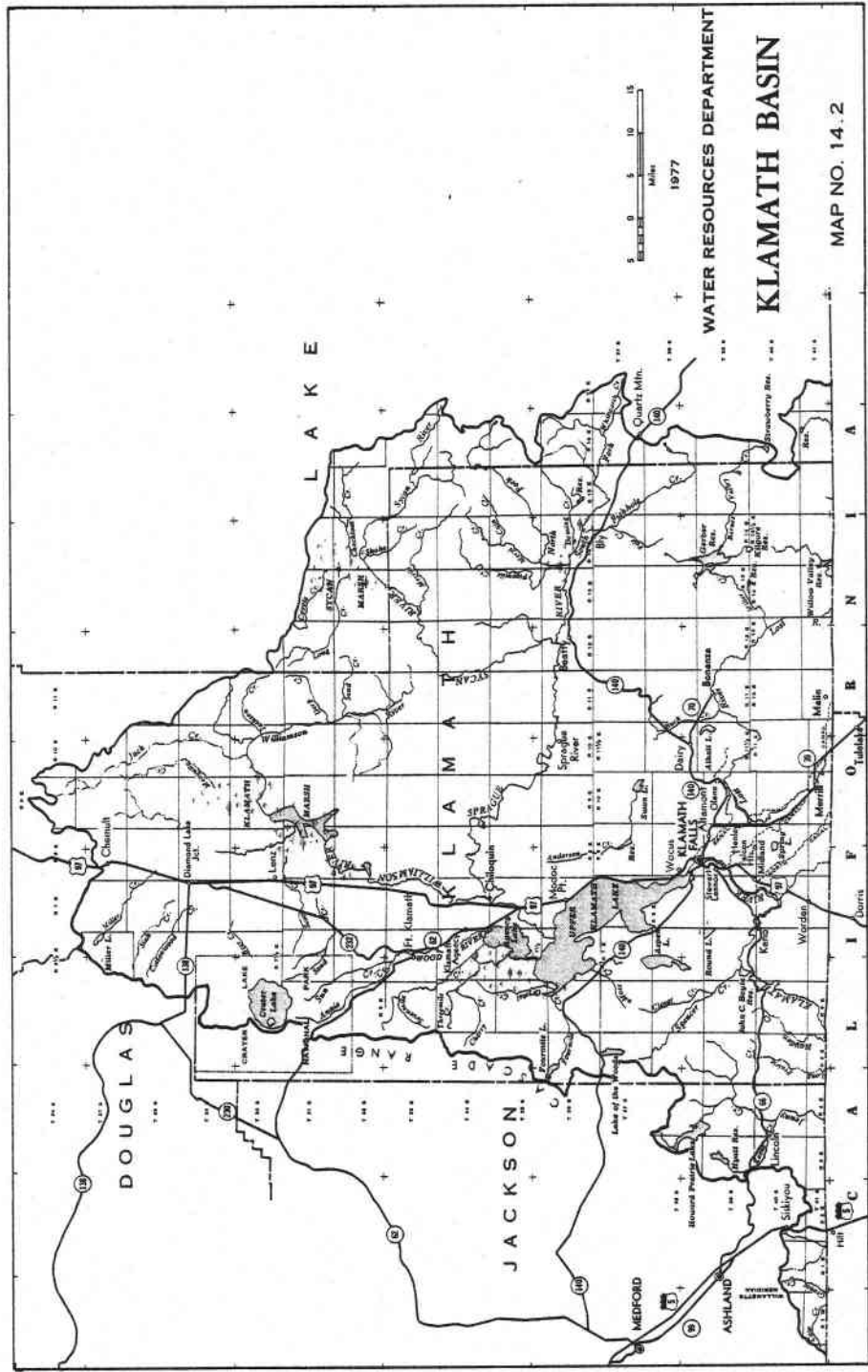
 Jenny Creek 14-1 to 14-4

 Klamath River 14-5 to 14-7

 Williamson River Main Stem 14- 8, 26-30

 Sprague River & Tribs. 14-9 to 14-25

Reach Feasibility Analysis Sheets 14-31 to 14-33



REACH HYDRO POTENTIAL CHARACTERISTICS

REACH # 02-000-014-001-000-R0001

I. LOCATION

A. State	Oregon
B. County	Jackson
C. Township, Range	Sec. 18, T40S, R4E
D. Latitude, Longitude	42°04'N, 122°21'W
E. Stream Name	Jenny Creek
F. Major Basin Name	Klamath
G. River Mile	4.0 to 11.6

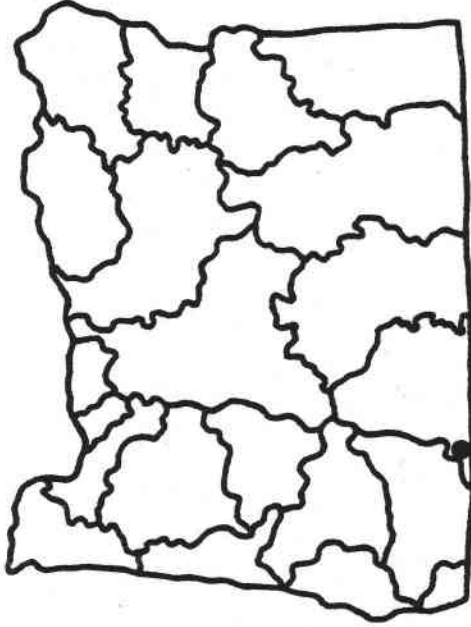
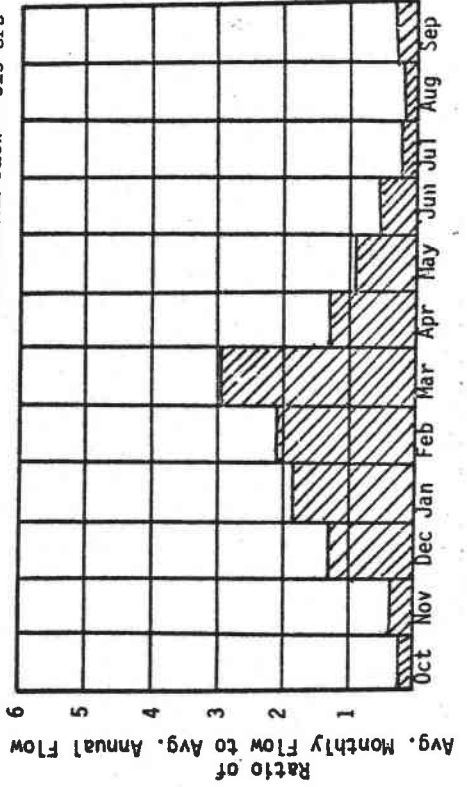
II. HYDROLOGIC AND HYDRAULIC CHARACTERISTICS

A. Upstream Elevation of Reach	3020	Ft. MSL
B. Downstream Elevation of Reach	2960	Ft. MSL
C. Total Available Head in Reach	60	Ft.
D. Average Slope in Reach	7.9	Ft./Mi.
E. Drainage Area above Reach Mouth	191	Sq. Mi.
F. Inflow Classification	Regulated	

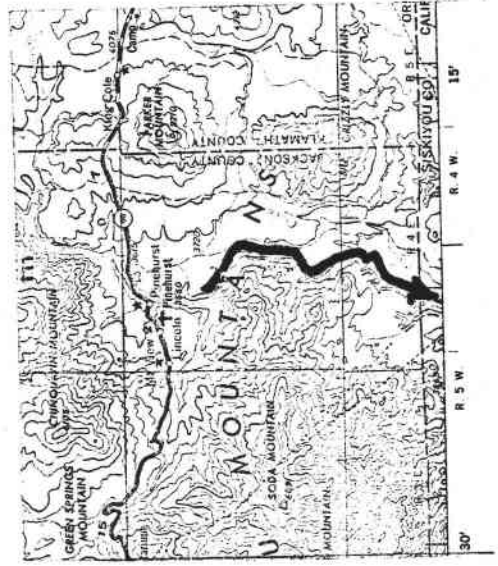
III. REACH FLOW DURATION AND THEORETICAL POTENTIAL ENERGY CHARACTERISTICS

I EXCEEDANCE I PERCENTAGE I	I DISCHARGE I CFS I	I THEORETICAL I PLANT SIZE I MM I	I ANNUAL ENERGY I AVAILABLE I GWH I	I PLANT I FACTOR I
I 95 I	I 2.3 I	I .01 I	I .10 I	I 1.000 I
I 80 I	I 82.3 I	I .42 I	I 3.22 I	I .879 I
I 50 I	I 281.6 I	I 1.43 I	I 8.99 I	I .717 I
I 30 I	I 375.5 I	I 1.91 I	I 10.66 I	I .638 I
I 10 I	I 438.1 I	I 2.23 I	I 11.22 I	I .575 I

IV. TYPICAL ANNUAL HYDROGRAPH



U.S.G.S. TOPO. SERIES
1:250,000 SCALE
MAP NAME: MEDFORD



REACH HYDRO POTENTIAL CHARACTERISTICS

REACH # 02-000-014-001-000-R0002

I. LOCATION

A. State	Oregon
B. County	Jackson
C. Township, Range	Sec. 19, T39S, R4E
D. Latitude, Longitude	42°09'N, 122°20'W
E. Stream Name	Jenny Creek
F. Major Basin Name	Klamath
G. River Mile	11.6 to 19.0

II. HYDROLOGIC AND HYDRAULIC CHARACTERISTICS

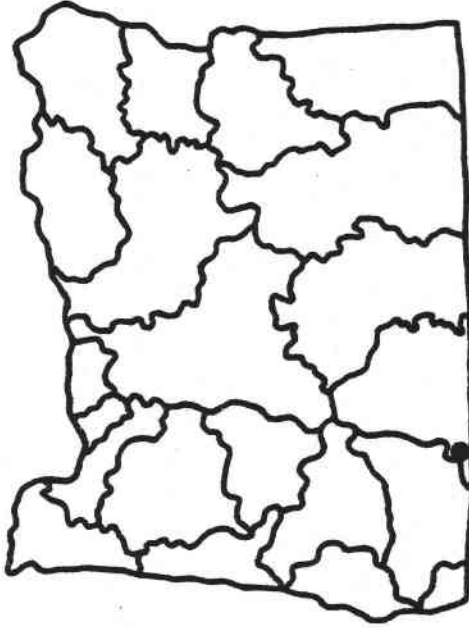
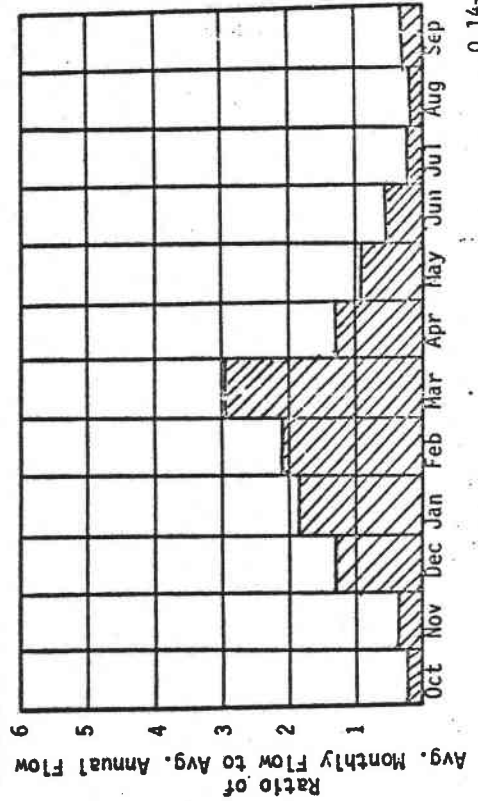
A. Upstream Elevation of Reach	3640	Ft. MSL
B. Downstream Elevation of Reach	3020	Ft. MSL
C. Total Available Head in Reach	620	Ft.
D. Average Slope in Reach	83.8	Ft./Mi.
E. Drainage Area above Reach Mouth	136	Sq. Mi.
F. Inflow Classification	Regulated	

III. REACH FLOW DURATION AND THEORETICAL POTENTIAL ENERGY CHARACTERISTICS

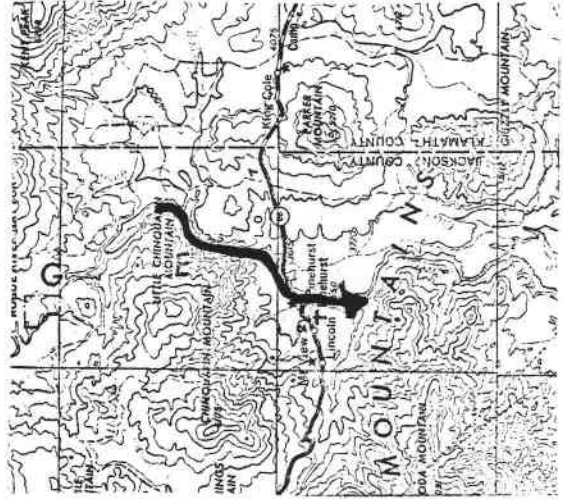
I PERCENTAGE	I DISCHARGE	I THEORETICAL	I ANNUAL ENERGY	I PLANT	I FACTOR
I	I CFS	I MW	I AVAILABLE	I	I
I	I	I	I GWH	I	I
I 95	I 1.4	I .07	I .64	I 1.000	I
I 80	I 48.7	I 2.56	I 19.69	I .879	I
I 50	I 166.6	I 8.76	I 54.98	I .717	I
I 30	I 222.2	I 11.67	I 65.20	I .638	I
I 10	I 259.2	I 13.62	I 68.61	I .575	I

IV. TYPICAL ANNUAL HYDROGRAPH

AVG. ANNUAL FLOW = 186 CFS



U.S.G.S. TOPO. SERIES
1:250,000 SCALE
MAP NAME: MEDFORD



REACH HYDRO POTENTIAL CHARACTERISTICS

REACH # 02-000-014-001-000-R0003

I. LOCATION

A. State	Oregon
B. County	Jackson
C. Township, Range	Sec. 27, T39S, R4E
D. Latitude, Longitude	42° 13' N, 122° 19' W
E. Stream Name	Jenny Creek
F. Major Basin Name	Klamath
G. River Mile	19.0 to 22.0

II. HYDROLOGIC AND HYDRAULIC CHARACTERISTICS

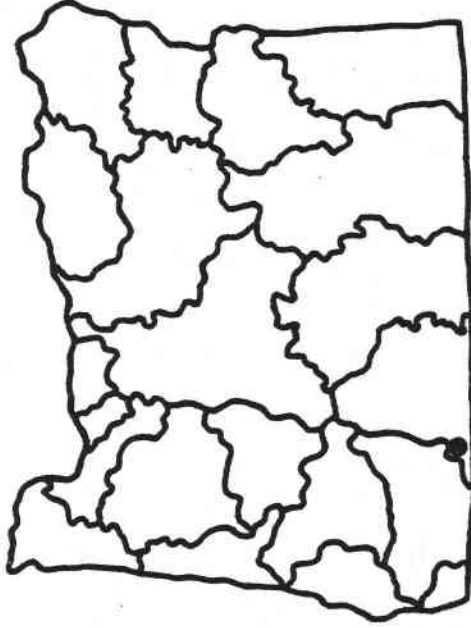
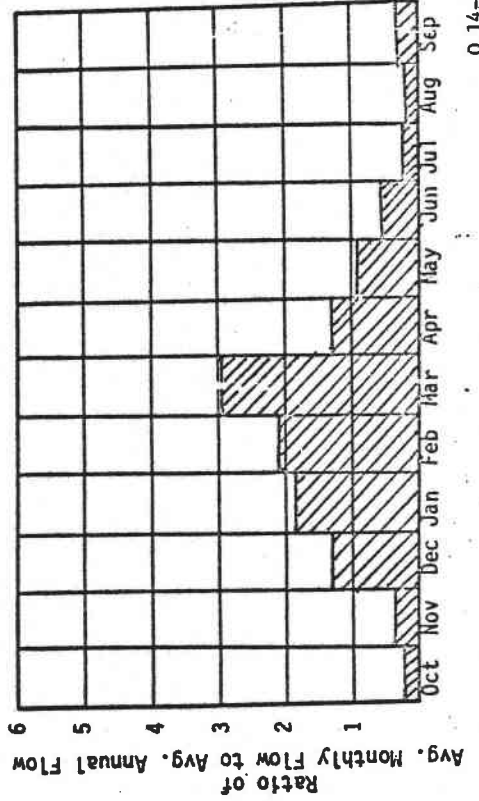
A. Upstream Elevation of Reach	4375	Ft. MSL
B. Downstream Elevation of Reach	3640	Ft. MSL
C. Total Available Head in Reach	735	Ft.
D. Average Slope in Reach	245	Ft./Mi.
E. Drainage Area above Reach Mouth	40	Sq. Mi.
F. Inflow Classification	Regulated	

III. REACH FLOW DURATION AND THEORETICAL POTENTIAL ENERGY CHARACTERISTICS

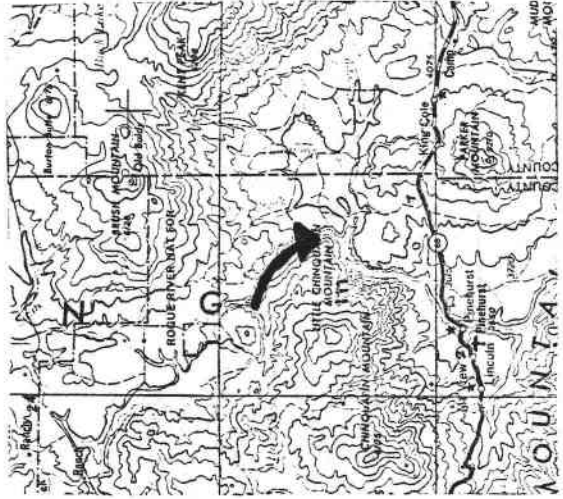
I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
PERCENTAGE	DISCHARGE	THEORETICAL	PLANT SIZE	ANNUAL ENERGY	PLANT	AVAILABLE	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
I	CFS	MW	I	GWH	I	I	I	I	I	I	I	I	I	I	I	I	I	I
95	5	.03		.26		1.000												
80	16.5	1.03		7.90		.879												
50	56.4	3.51		22.06		.717												
30	75.2	4.68		26.17		.638												
10	87.8	5.47		27.54		.575												

IV. TYPICAL ANNUAL HYDROGRAPH

AVG. ANNUAL FLOW = 63 CFS



U.S.G.S. TOPO. SERIES
1:250,000 SCALE
MAP NAME: MEDFORD



REACH HYDRO POTENTIAL CHARACTERISTICS

REACH # 02-000-014-001-000-R0004

I. LOCATION

A. State	Oregon
B. County	Jackson
C. Township, Range	Sec. 23, T39S, R4E
D. Latitude, Longitude	42° 13' N, 122° 20' W
E. Stream Name	Jenny Creek
F. Major Basin Name	Klamath
G. River Mile	22.0 to H.W.

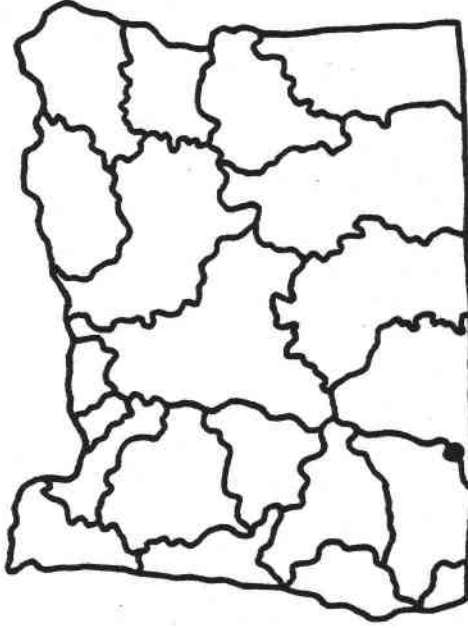
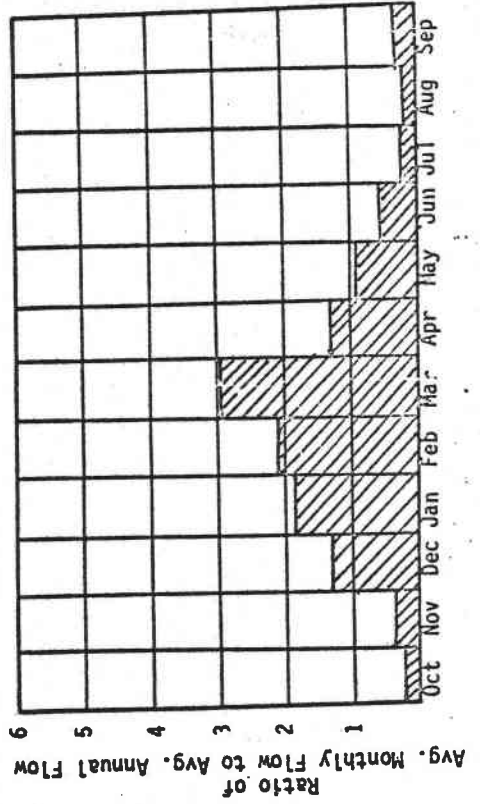
II. HYDROLOGIC AND HYDRAULIC CHARACTERISTICS

A. Upstream Elevation of Reach	--	Ft. MSL
B. Downstream Elevation of Reach	--	Ft. MSL
C. Total Available Head in Reach	66	Ft.
D. Average Slope in Reach	--	Ft./Mi.
E. Drainage Area above Reach Mouth	37	Sq. Mi.
F. Inflow Classification	Regulated	

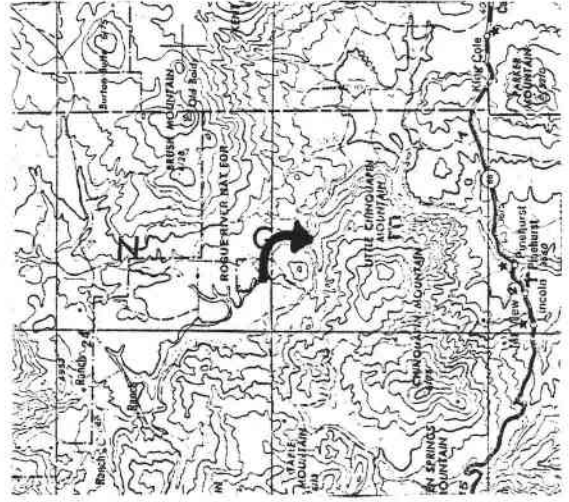
III. REACH FLOW DURATION AND THEORETICAL POTENTIAL ENERGY CHARACTERISTICS

I EXCEEDANCE I PERCENTAGE I	I DISCHARGE I	I THEORETICAL I	I ANNUAL ENERGY I	I PLANT I	I FACTOR I
I	I CFS	I MW	I AVAILABLE I	I GWH	I
I 95	I .5	I .00	I .02	I 1.000	I
I 80	I 15.9	I .09	I .68	I .879	I
I 50	I 54.3	I .30	I 1.91	I .717	I
I 30	I 72.5	I .41	I 2.26	I .638	I
I 10	I 84.5	I .47	I 2.38	I .575	I

IV. TYPICAL ANNUAL HYDROGRAPH



U.S.G.S. TOPO. SERIES
1:250,000 SCALE
MAP NAME: MEDFORD



REACH HYDRO POTENTIAL CHARACTERISTICS

REACH # 02-000-014-002-000-R0001

I. LOCATION

A. State	Oregon
B. County	Klamath
C. Township, Range	Sec. 14, T41S, R6E
D. Latitude, Longitude	42°02'N, 122°06'W
E. Stream Name	Klamath River
F. Major Basin Name	Klamath
G. River Mile	207.5 to 219.0

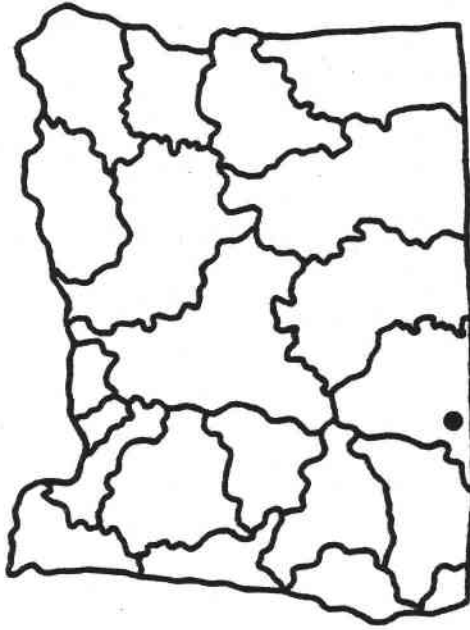
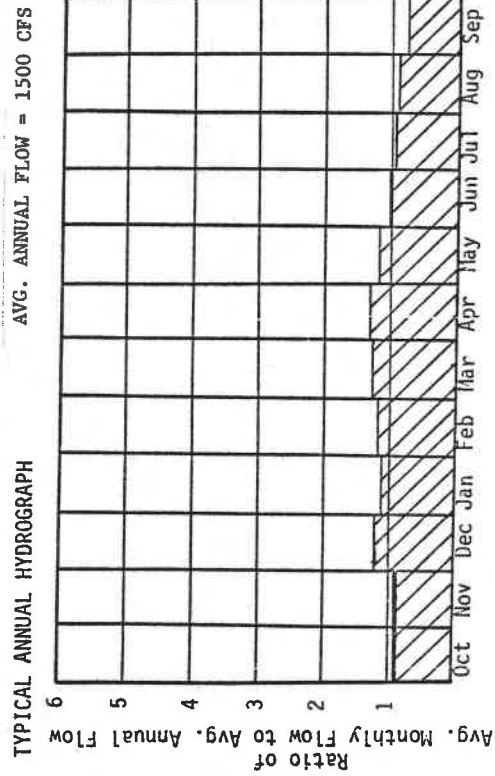
II. HYDROLOGIC AND HYDRAULIC CHARACTERISTICS

A. Upstream Elevation of Reach	3260	Ft. MSL
B. Downstream Elevation of Reach	2740	Ft. MSL
C. Total Available Head in Reach	520	Ft.
D. Average Slope in Reach	11.5	Ft./Mi.
E. Drainage Area above Reach Mouth	4102	Sq. Mi.
F. Inflow Classification	Regulated	

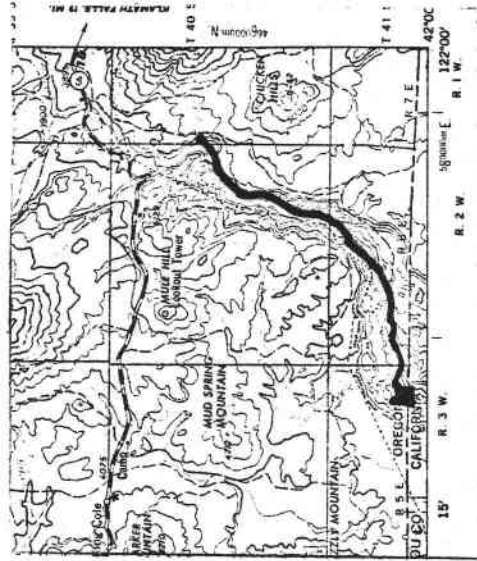
III. REACH FLOW DURATION AND THEORETICAL POTENTIAL ENERGY CHARACTERISTICS

I PERCENTAGE I	I DISCHARGE I	I THEORETICAL I	I ANNUAL ENERGY I	I PLANT I	I FACTOR I
I	I CFS	I PLANT SIZE I	I AVAILABLE I	I GWH	I
I	I	I MW	I	I	I
I 95	I 299.2	I 13.18	I 115.48	I 1.000	I
I 80	I 430.0	I 18.95	I 159.69	I .962	I
I 50	I 598.3	I 26.37	I 201.91	I .874	I
I 30	I 934.8	I 41.20	I 253.88	I .704	I
I 10	I 1682.7	I 74.15	I 311.62	I .480	I

IV. TYPICAL ANNUAL HYDROGRAPH



U.S.G.S. TOPO. SERIES
1:250,000 SCALE
MAP NAME: MEDFORD-WEED



REACH HYDRO POTENTIAL CHARACTERISTICS

REACH # 02-000-014-002-000-R0002

I. LOCATION

A. State	Oregon
B. County	Klamath
C. Township, Range	Sec. 30, T39S, R63E
D. Latitude, Longitude	42°09'N, 121°57'W
E. Stream Name	Klamath River
F. Major Basin Name	Klamath
G. River Mile	219.0 to 243.0

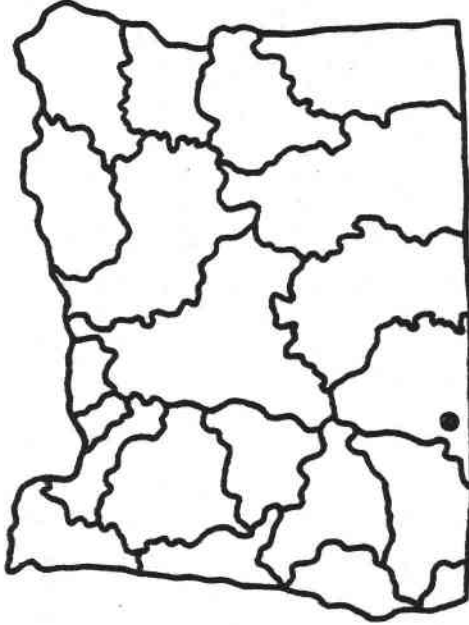
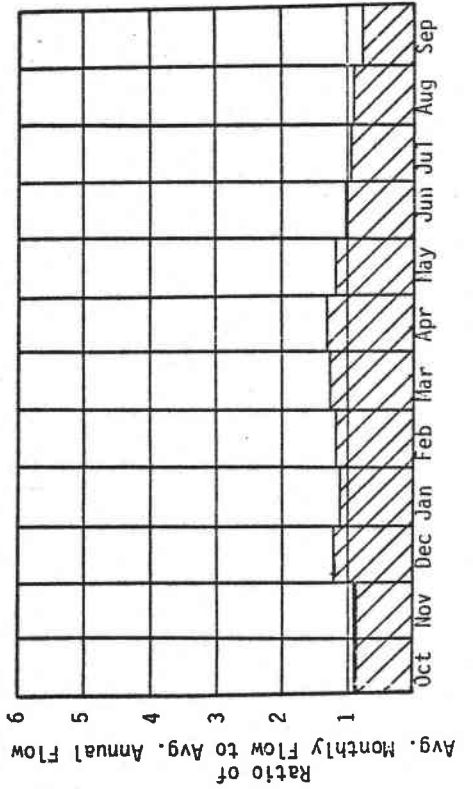
II. HYDROLOGIC AND HYDRAULIC CHARACTERISTICS

A. Upstream Elevation of Reach	4050	Ft. MSL
B. Downstream Elevation of Reach	3260	Ft. MSL
C. Total Available Head in Reach	790	Ft.
D. Average Slope in Reach	32.9	Ft./Mi.
E. Drainage Area above Reach Mouth	3992	Sq. Mi.
F. Inflow Classification	Regulated	

III. REACH FLOW DURATION AND THEORETICAL POTENTIAL ENERGY CHARACTERISTICS

I EXCEEDANCE I PERCENTAGE I I	I DISCHARGE I CFS I	I THEORETICAL I PLANT SIZE I MW I	I ANNUAL ENERGY I AVAILABLE I GWH I	I PLANT I FACTOR I I
I 95 I	I 294.4 I	I 19.71 I	I 172.66 I	I 1.000 I
I 80 I	I 423.2 I	I 28.33 I	I 238.76 I	I .962 I
I 50 I	I 588.8 I	I 39.42 I	I 301.89 I	I .874 I
I 30 I	I 920.0 I	I 61.59 I	I 379.59 I	I .704 I
I 10 I	I 1656.0 I	I 110.87 I	I 465.92 I	I .480 I

IV. TYPICAL ANNUAL HYDROGRAPH



U. S. G. S. TOPO. SERIES
1:250,000 SCALE
MAP NAME: KLAMATH FALLS

