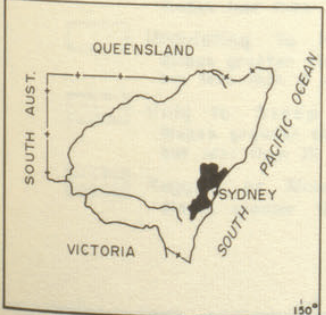
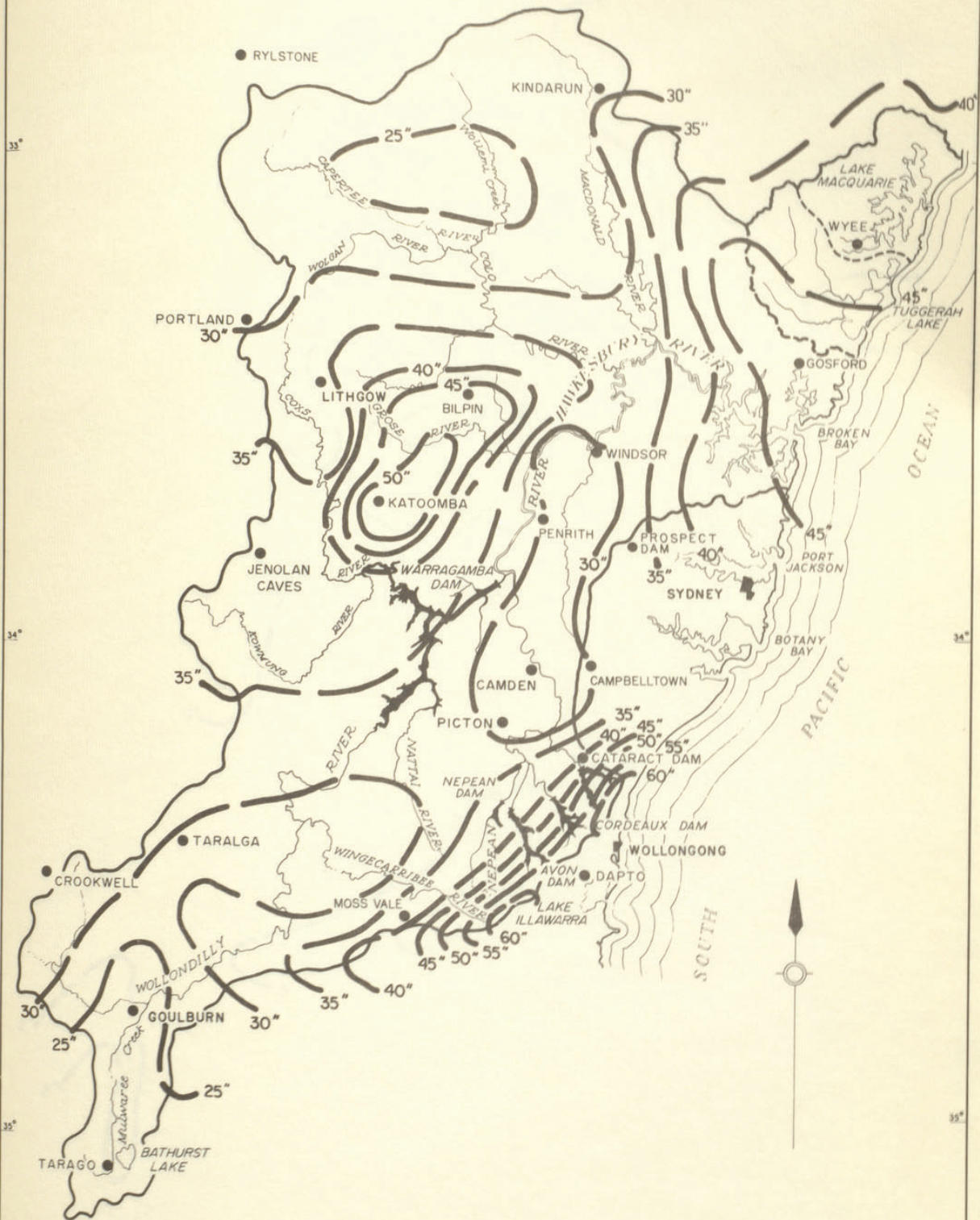


NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION

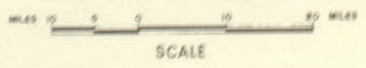
## HAWKESBURY RIVER VALLEY INCLUDING LAKE MACQUARIE AND TUGGERAH LAKE SYSTEMS







NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
**ANNUAL MEDIAN RAINFALL**









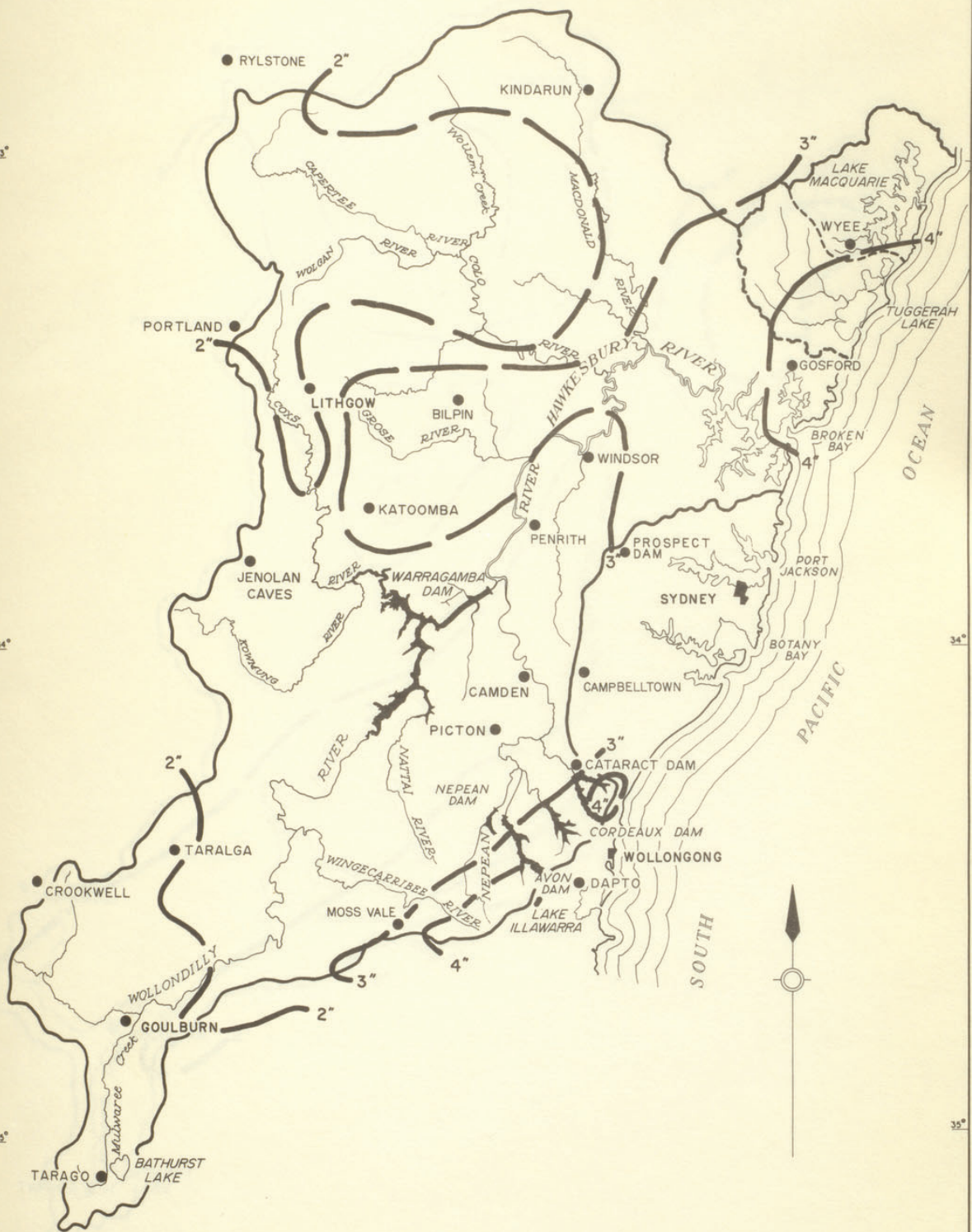
33°

34°

34°

33°

33°



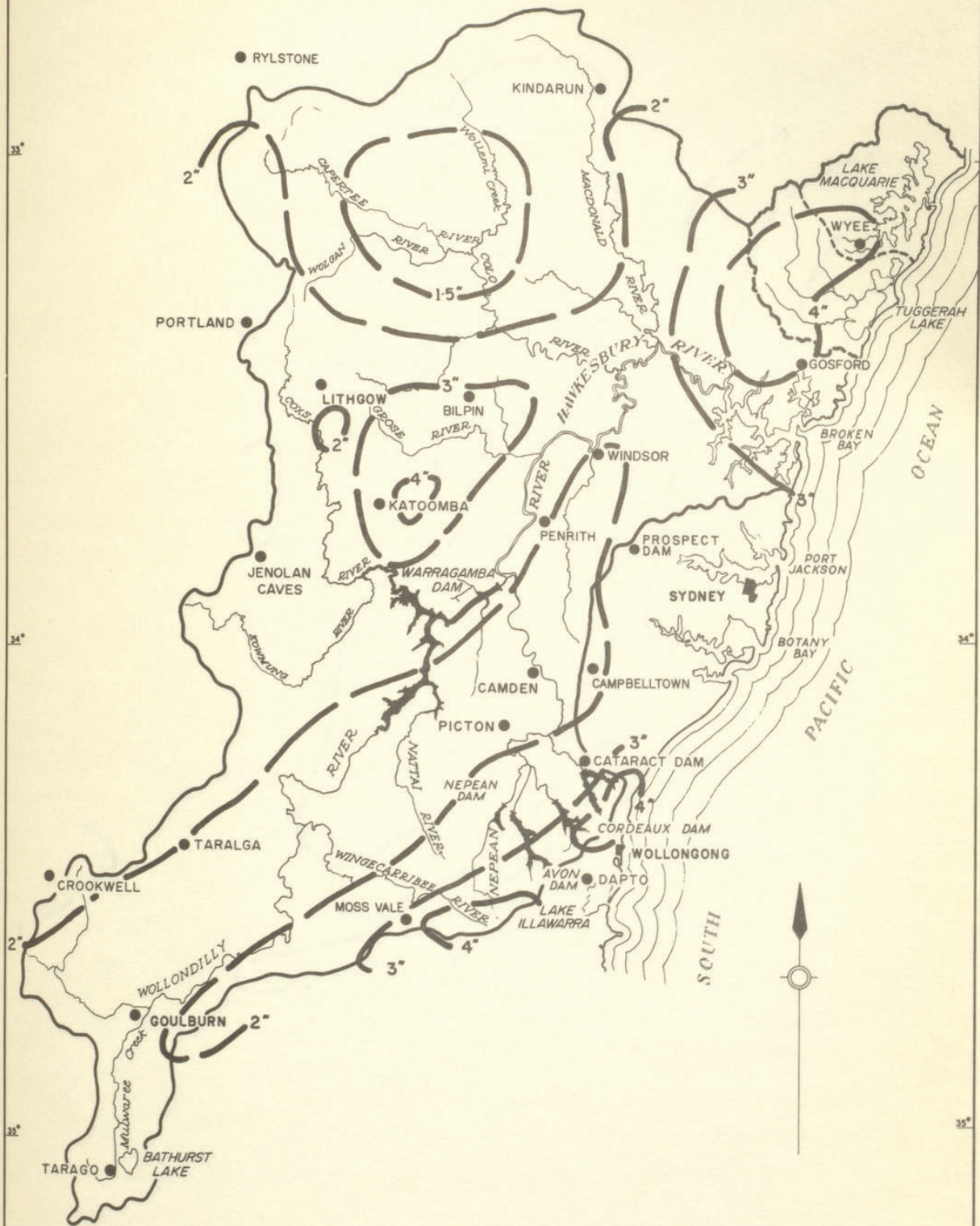
NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION

**HAWKESBURY RIVER VALLEY  
 INCLUDING LAKE MACQUARIE AND  
 TUGGERAH LAKE SYSTEMS**

MARCH MEDIAN RAINFALL



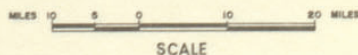
SCALE



NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION

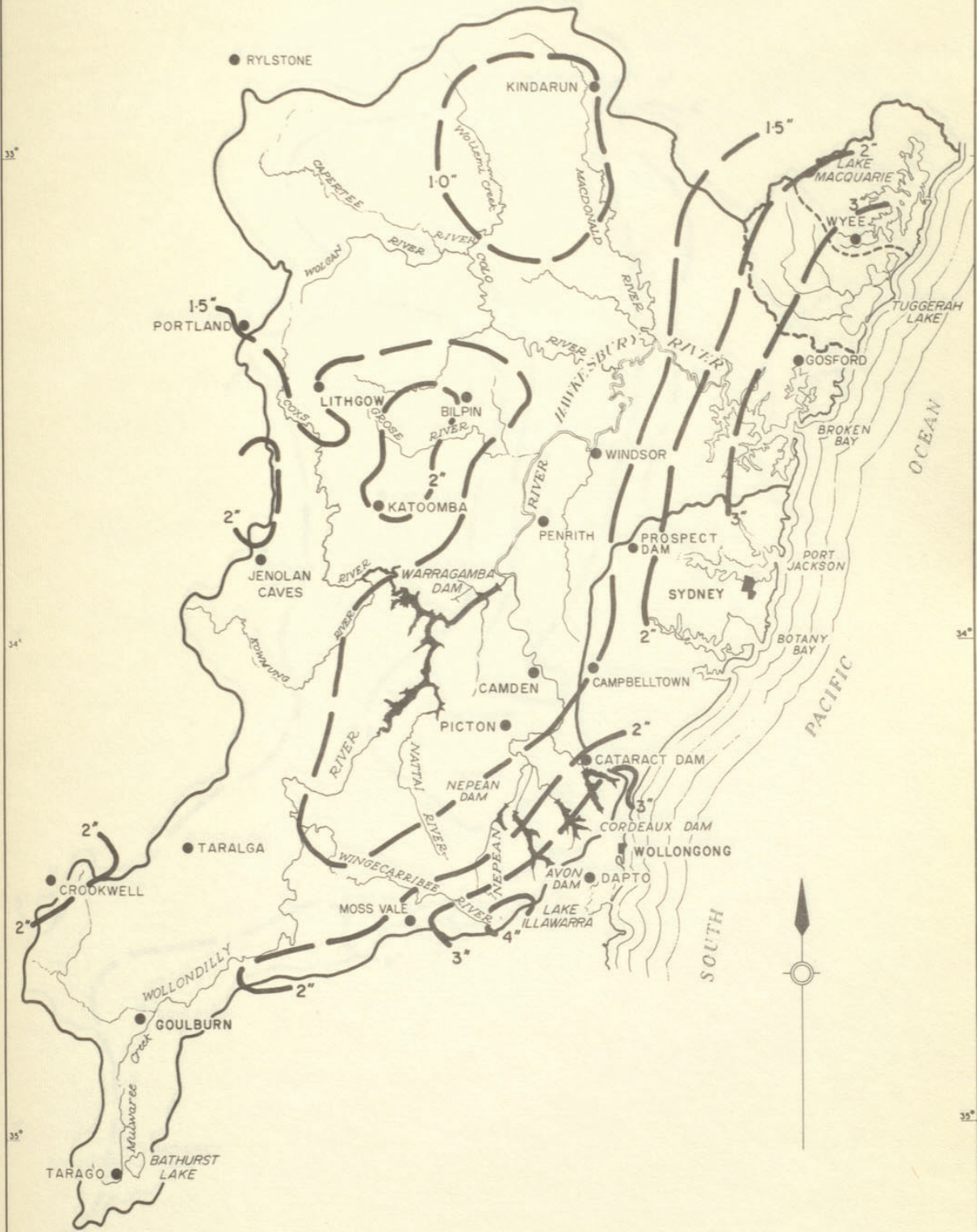
**HAWKESBURY RIVER VALLEY  
 INCLUDING LAKE MACQUARIE AND  
 TUGGERAH LAKE SYSTEMS**

APRIL MEDIAN RAINFALL



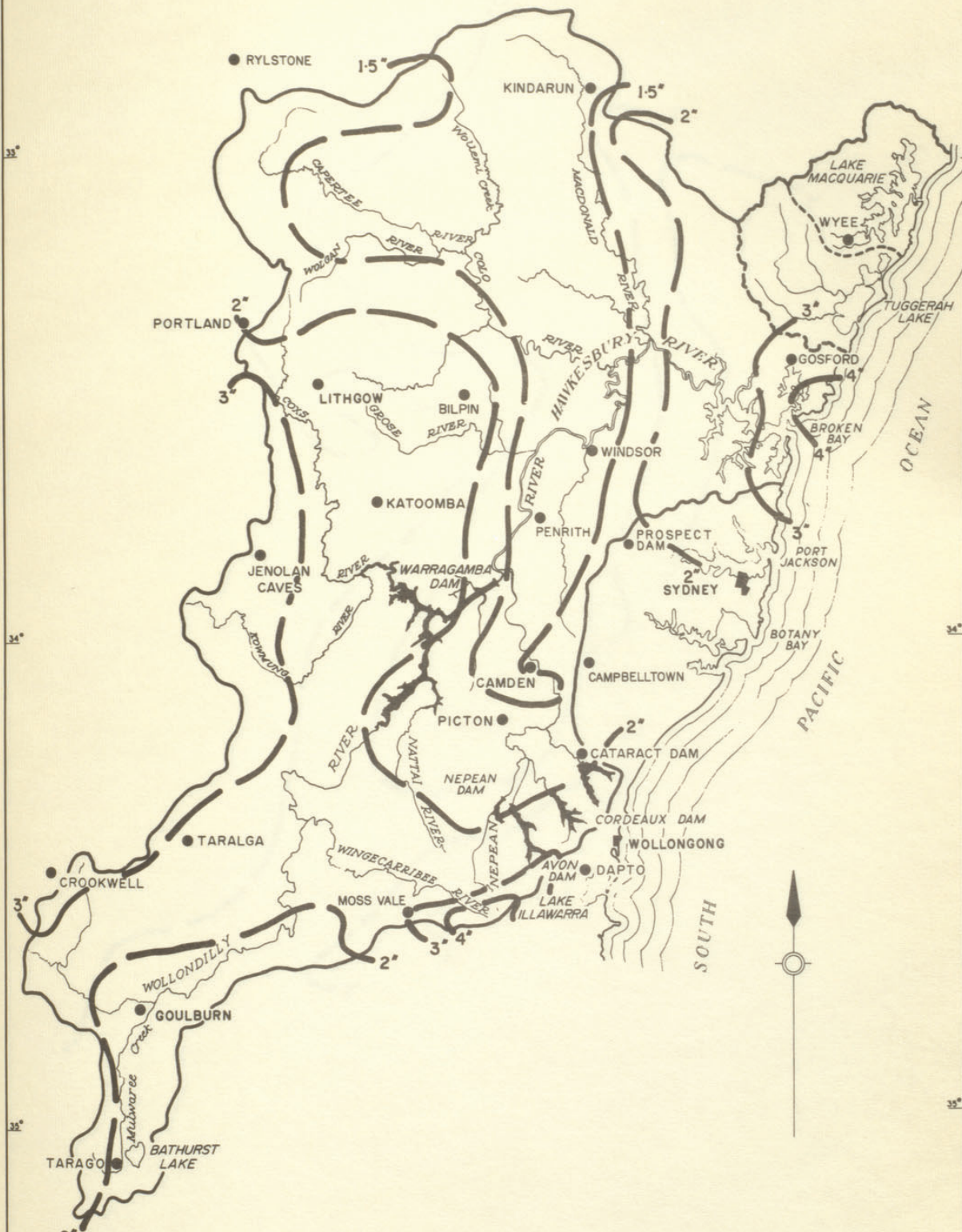
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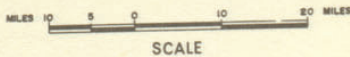


NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
 MAY MEDIAN RAINFALL

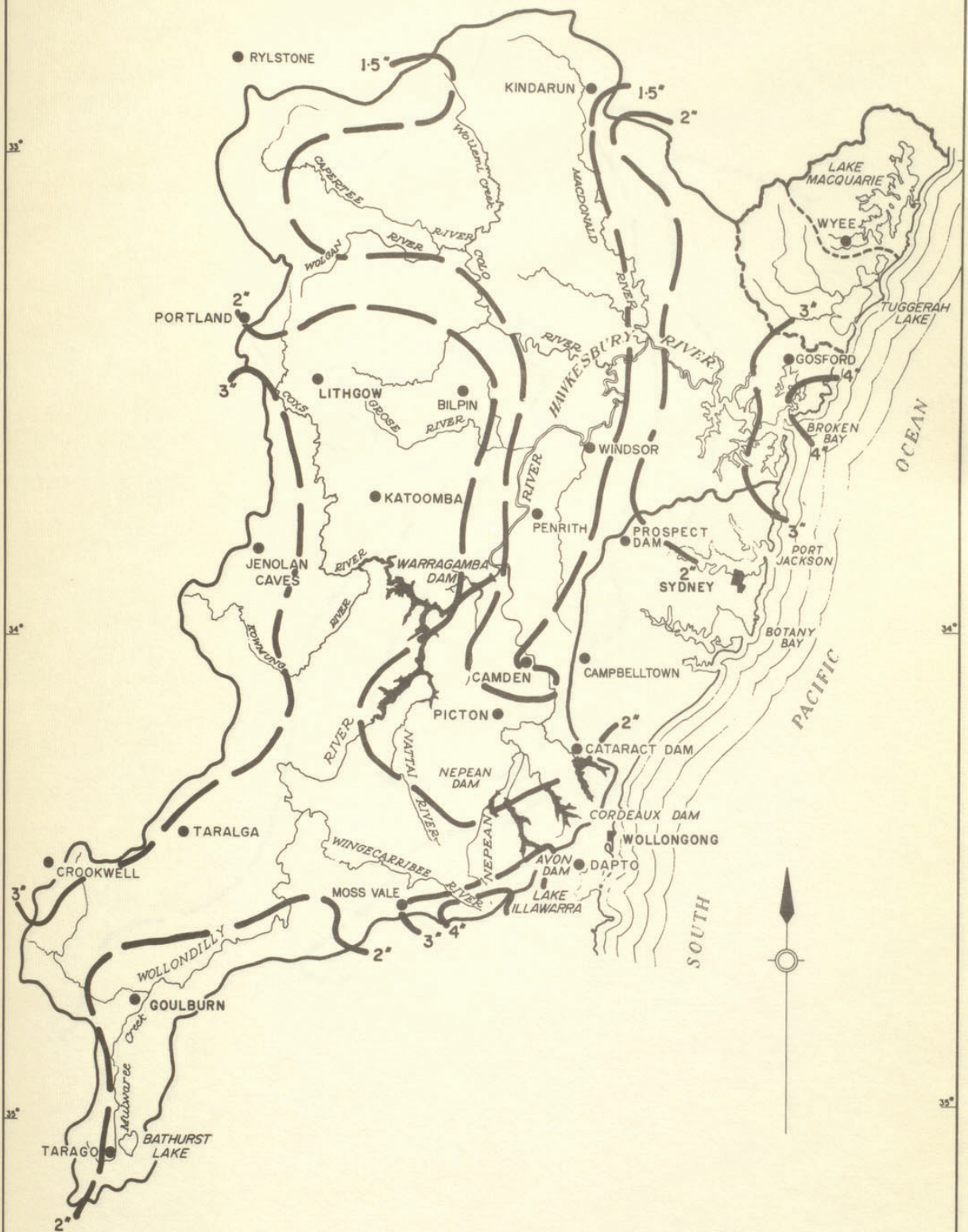




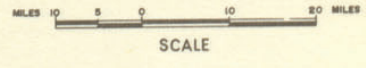
NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
 JUNE MEDIAN RAINFALL

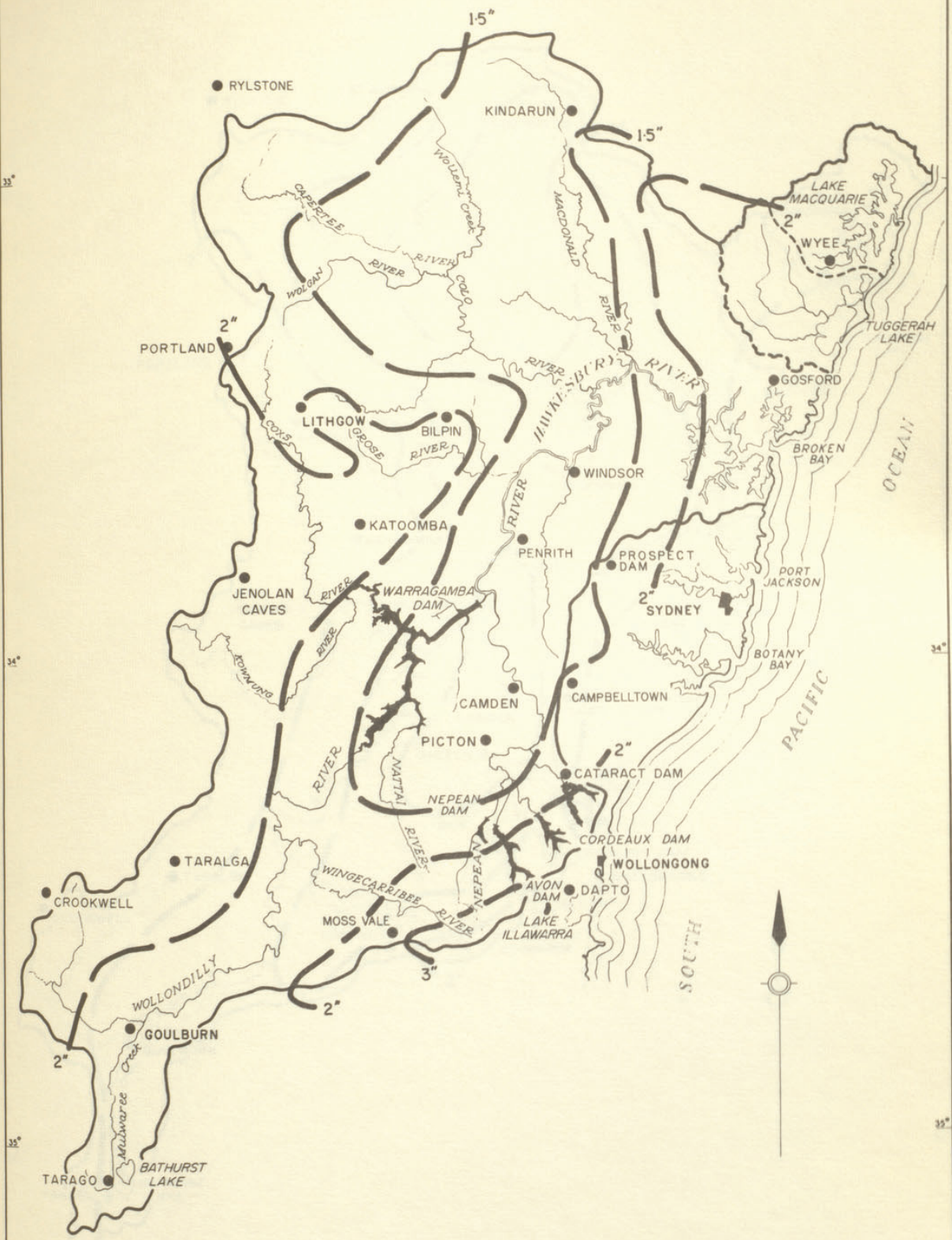


SCALE

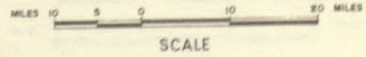


NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
**JUNE MEDIAN RAINFALL**

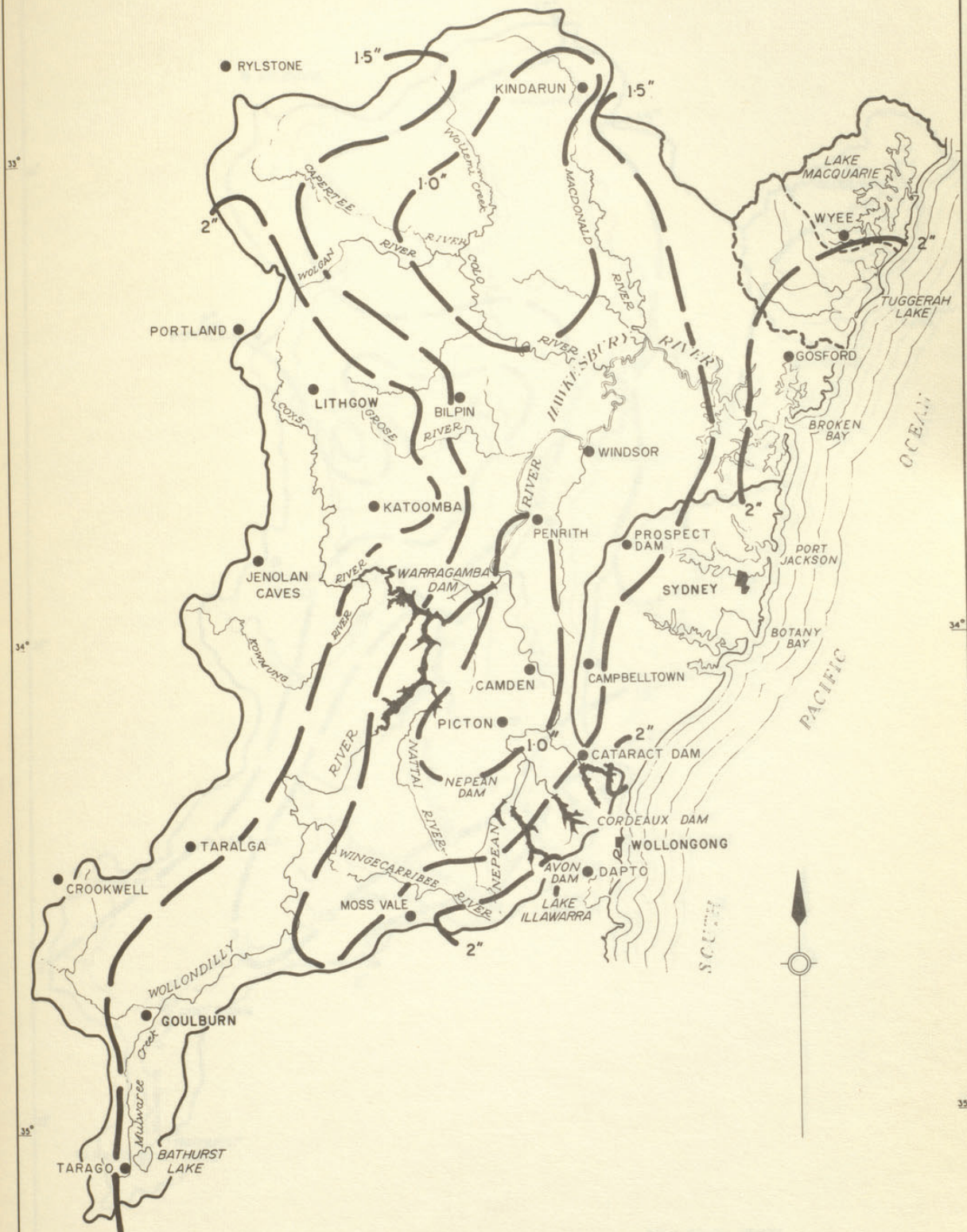




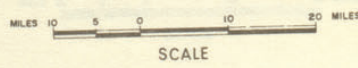
NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
 JULY MEDIAN RAINFALL

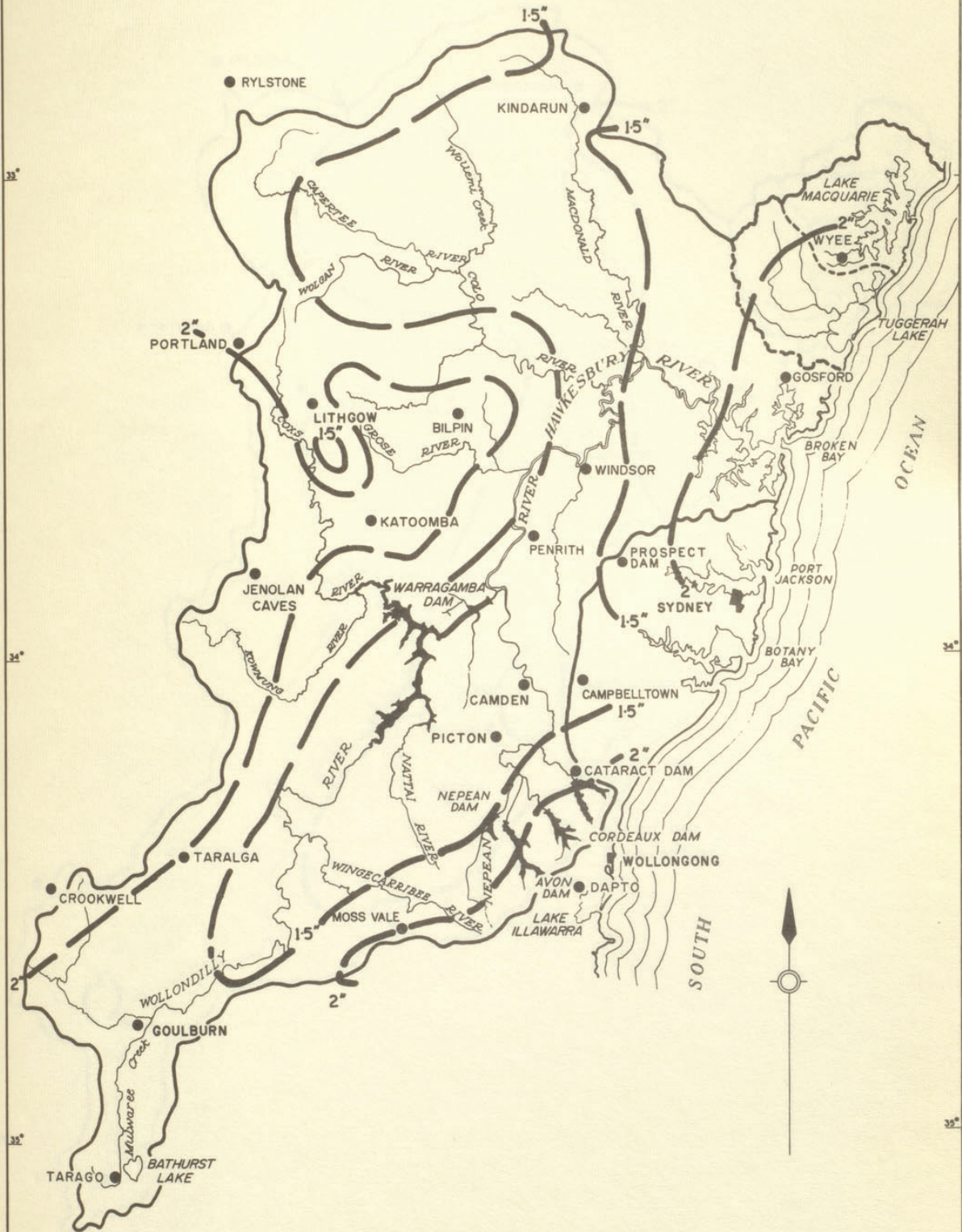


DRP 33



NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
 INCLUDING LAKE MACQUARIE AND  
 TUGGERAH LAKE SYSTEMS  
 AUGUST MEDIAN RAINFALL



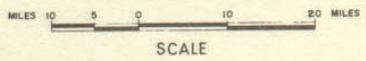


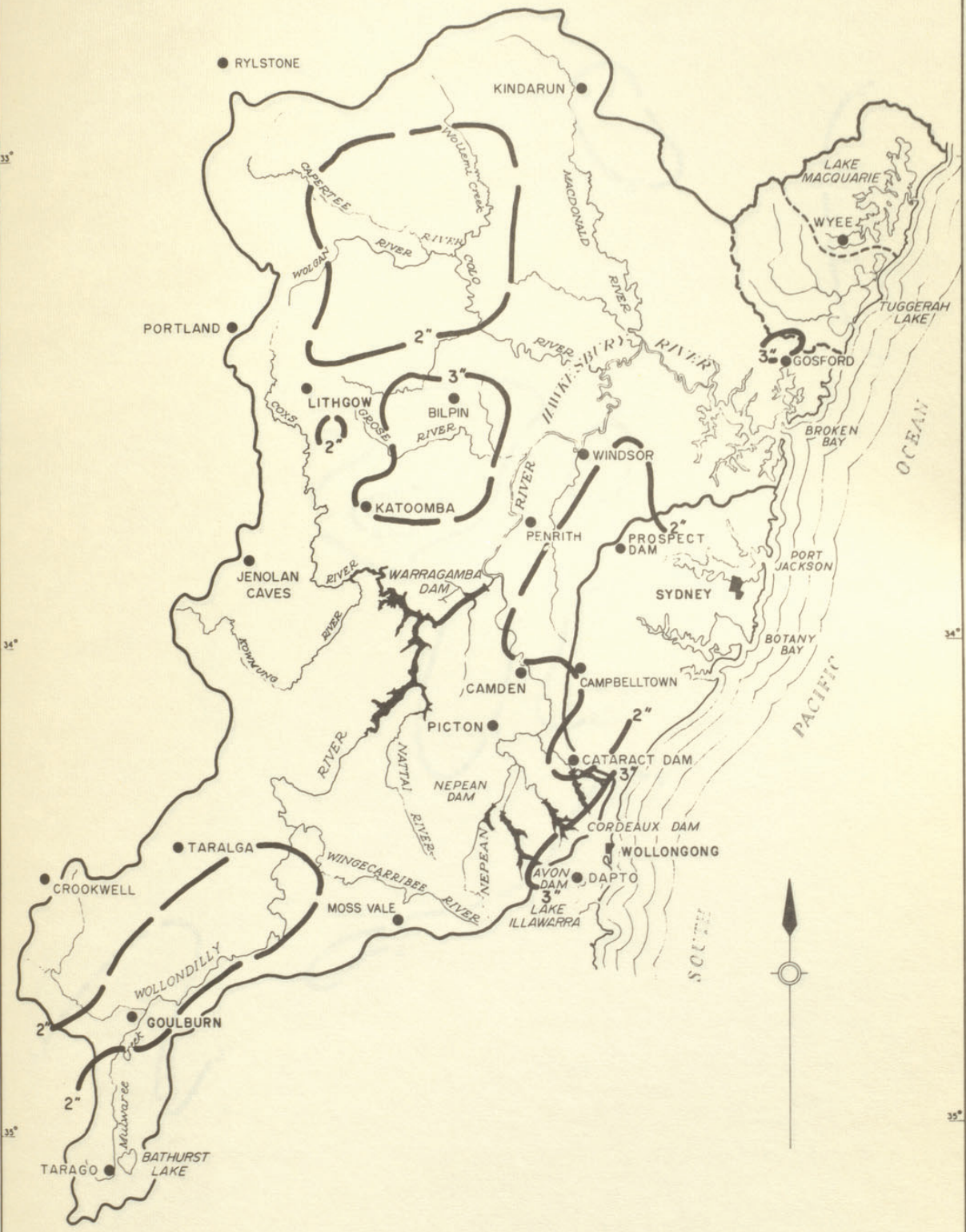
NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
 SEPTEMBER MEDIAN RAINFALL



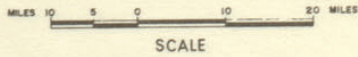


NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
 OCTOBER MEDIAN RAINFALL

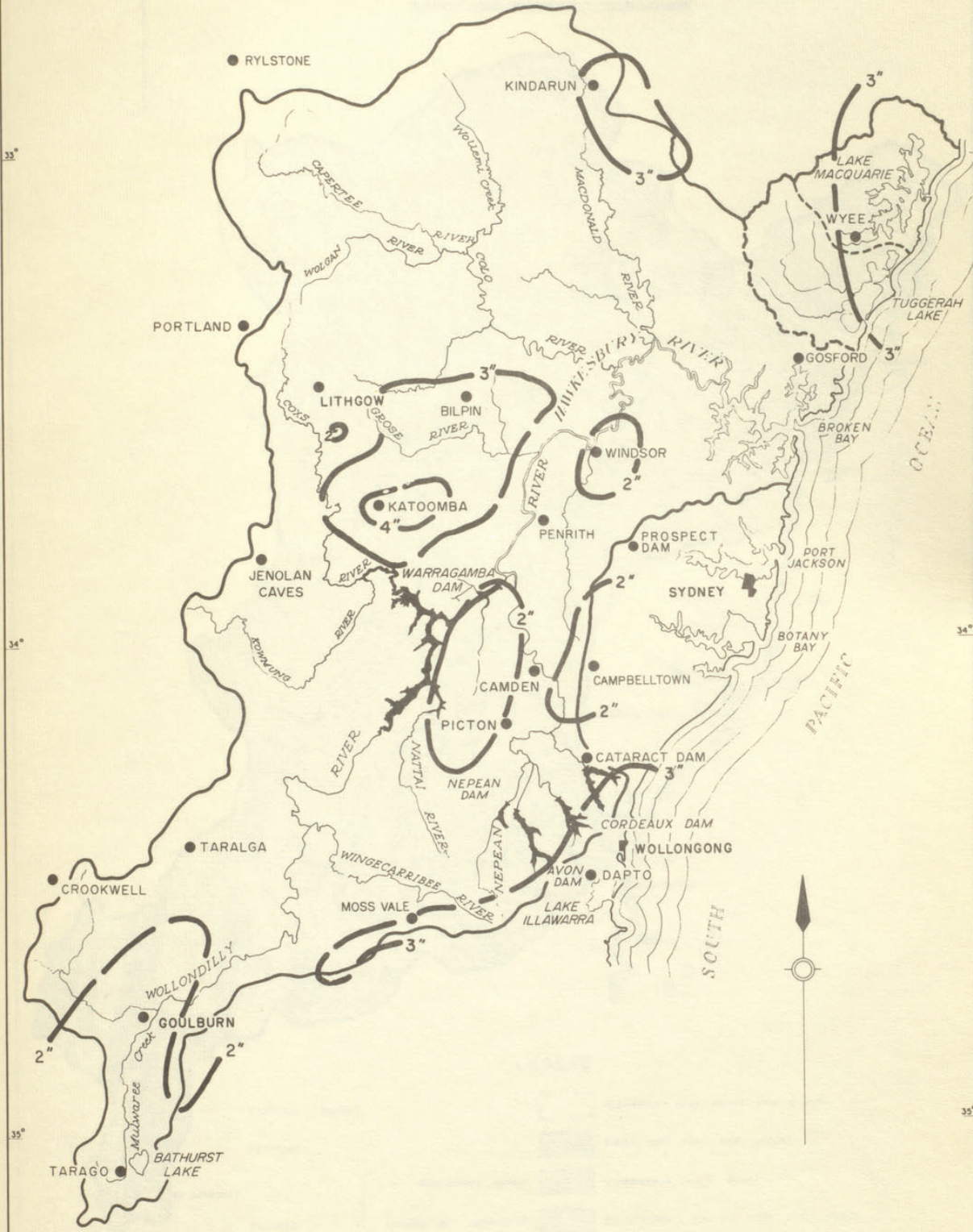




NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
 NOVEMBER MEDIAN RAINFALL







NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION  
**HAWKESBURY RIVER VALLEY**  
**INCLUDING LAKE MACQUARIE AND**  
**TUGGERAH LAKE SYSTEMS**  
 DECEMBER MEDIAN RAINFALL



SCALE

# HAWKESBURY RIVER VALLEY GEOLOGICAL FORMATIONS



### LEGEND

TERTIARY - RECENT		Alluvium - clay, sand and gravel
TERTIARY		Sand, silt, clay and gravel
TRIASSIC		WIANAMATTA GROUP Sandstone and shale
		HAWKESBURY SANDSTONE Sandstone, quartz with some shale
		NARRABEEN GROUP Sandstone, shale and tuff
PERMIAN		Sandstone, shale, conglomerate, coal seams, chert and tuff
DEVONIAN		Quartzite, sandstone, siltstone, claystone, shale, tuff and limestone
SILURIAN		Slate, phyllite, sandstone, limestone and tuff
ORDOVICIAN		Slate, quartzite, phyllite, greywacke, sandstone and limestone
<b>IGNEOUS</b>		
		Basalt
		Granite

008226

150°

151°

33°

34°

35°

34°

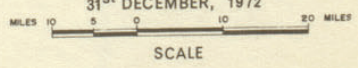
35°



NEW SOUTH WALES  
 WATER CONSERVATION AND IRRIGATION COMMISSION

### HAWKESBURY RIVER VALLEY INCLUDING LAKE MACQUARIE AND TUGGERAH LAKE SYSTEMS

GAUGING STATIONS  
 31<sup>ST</sup> DECEMBER, 1972

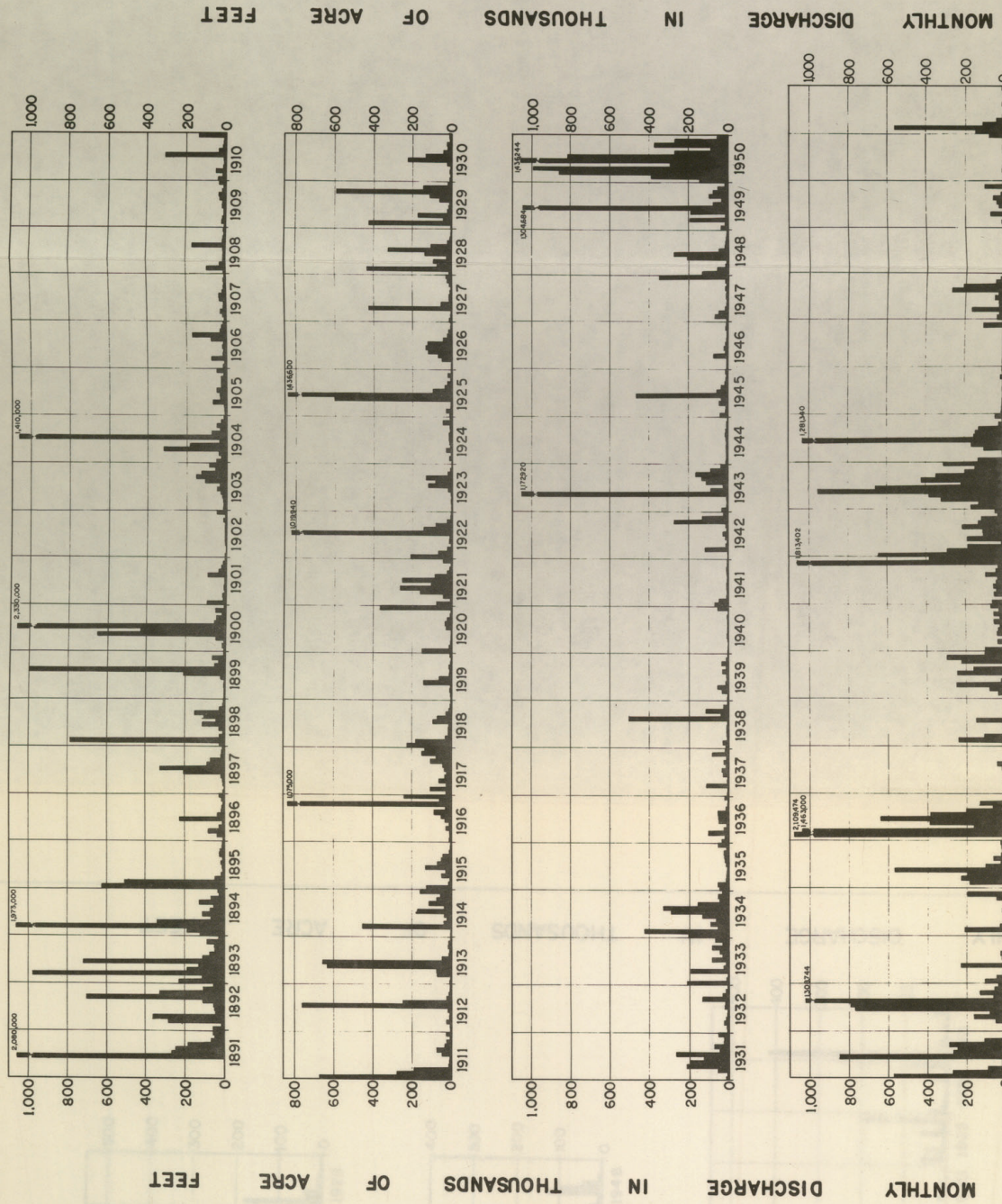


- LEGEND**
- Staff Gauge -----●
  - Automatic Recorder (Pressure Type) -----●<sup>P</sup>
  - (Float Type) -----●<sup>F</sup>
  - (Pressure Type, Servo Assisted) -----●<sup>PS</sup>
  - Discontinued Station -----X

150°

151°

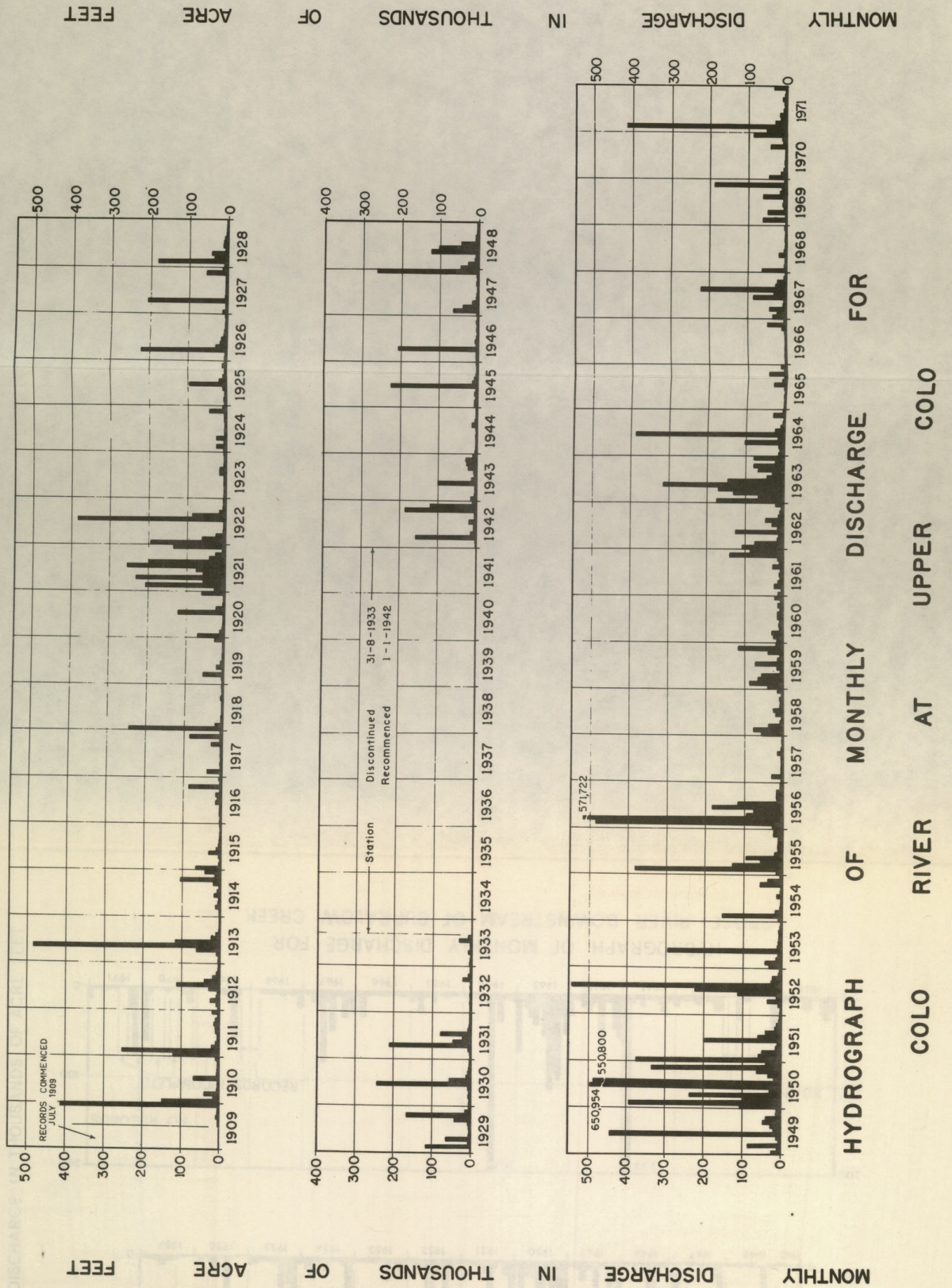
FIGURE 18



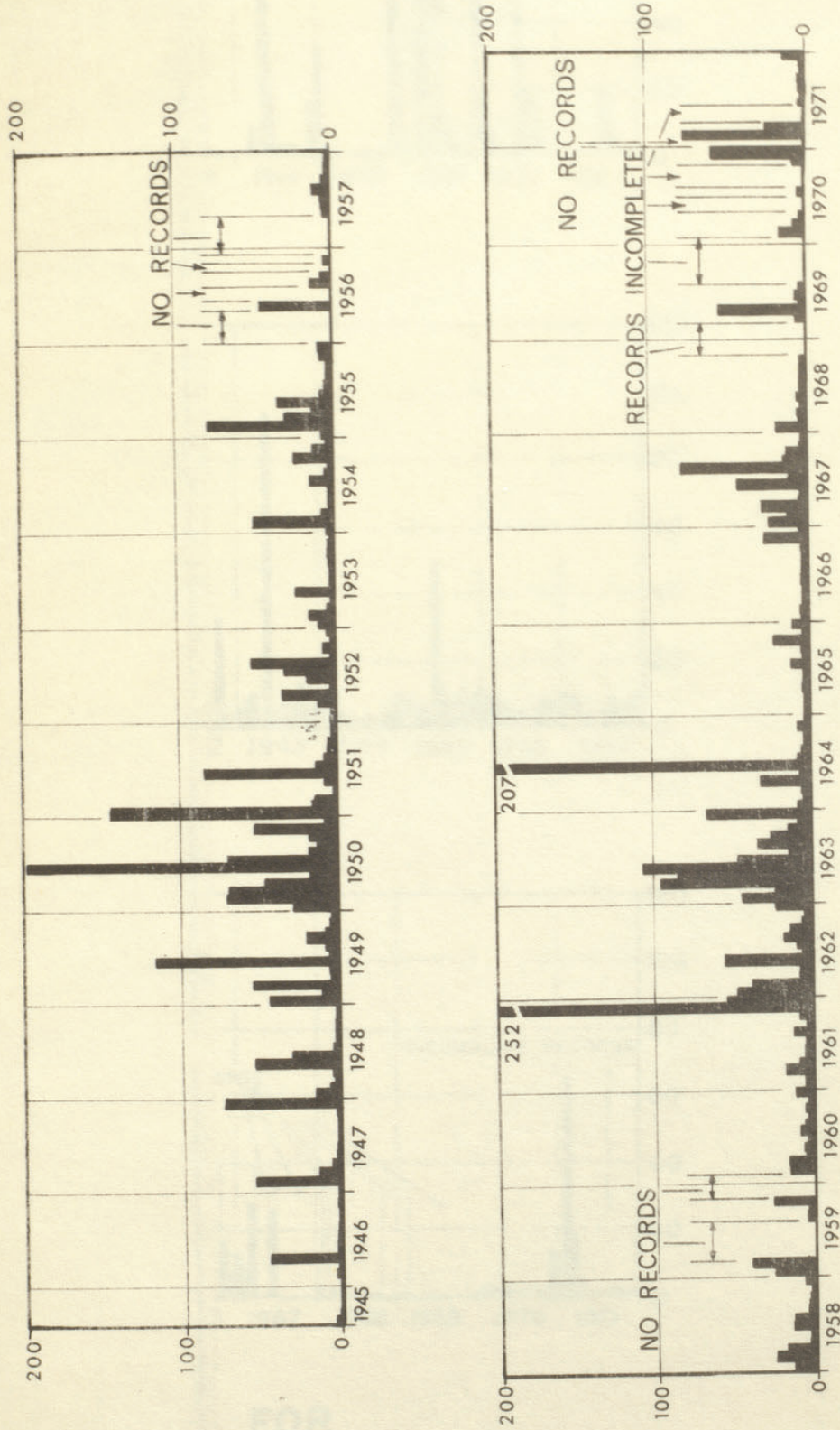
HYDROGRAPH OF MONTHLY DISCHARGE

FOR NEPEAN RIVER AT PENRITH

FIGURE 19



MONTHLY DISCHARGE IN THOUSANDS OF ACRE FEET

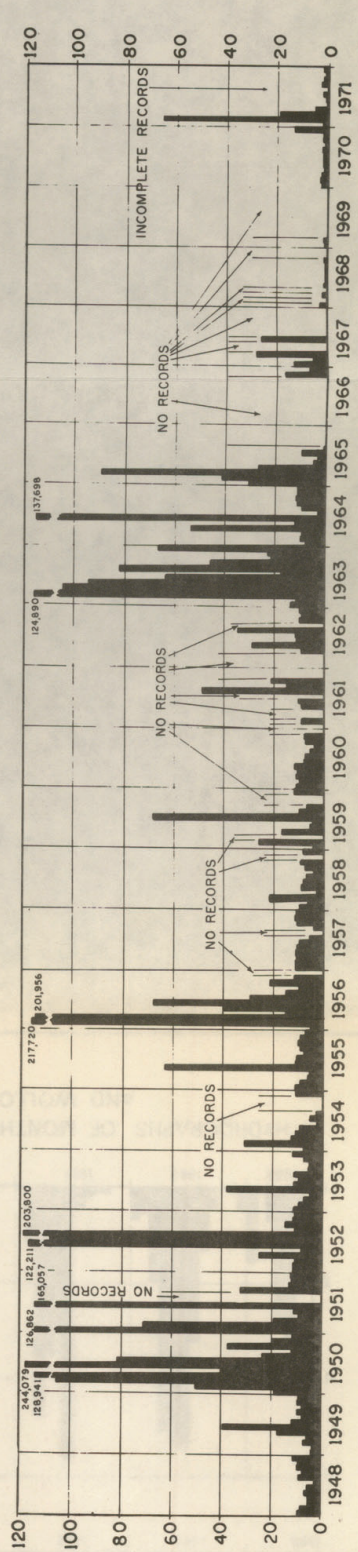
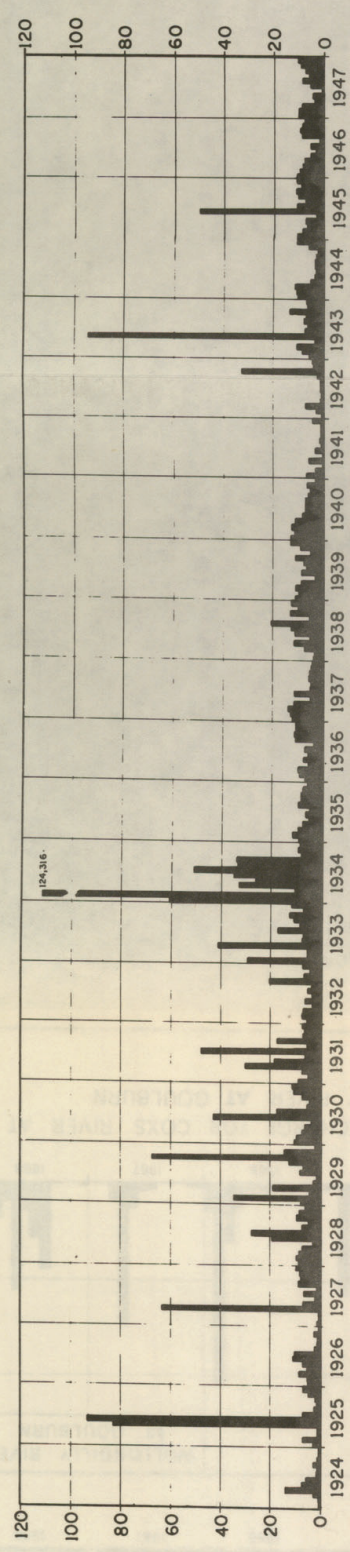
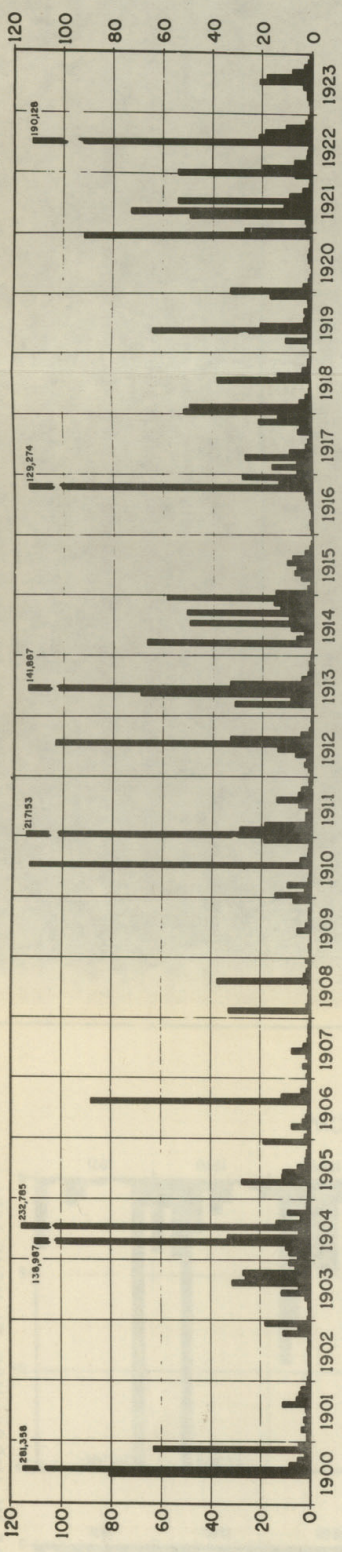


HYDROGRAPH OF MONTHLY DISCHARGE FOR  
GROSE RIVER DOWNSTREAM OF BURRALOW CREEK

FIGURE 21

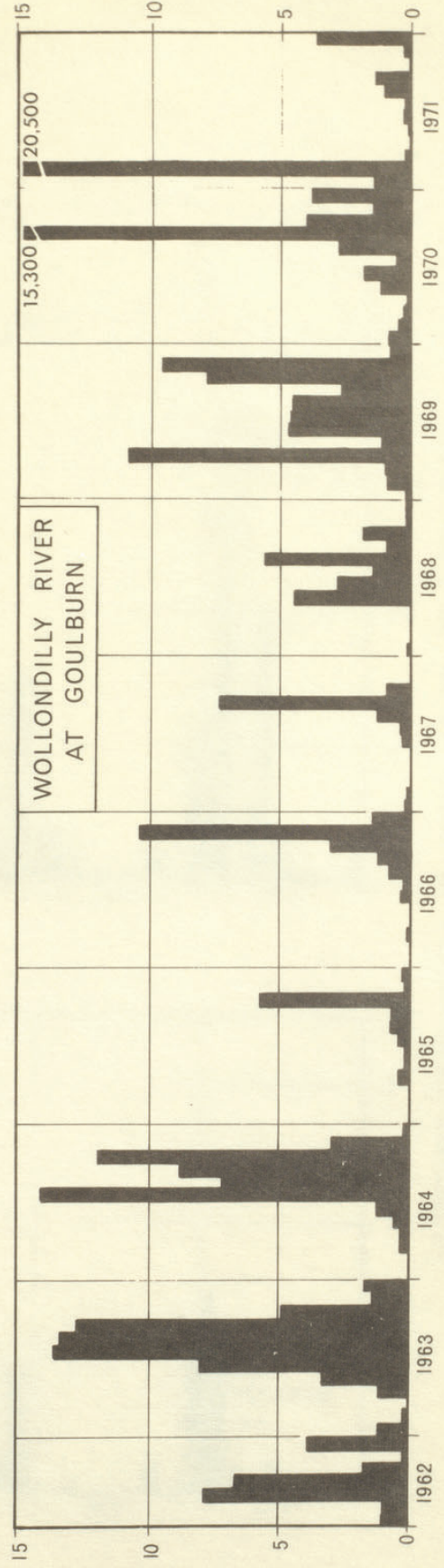
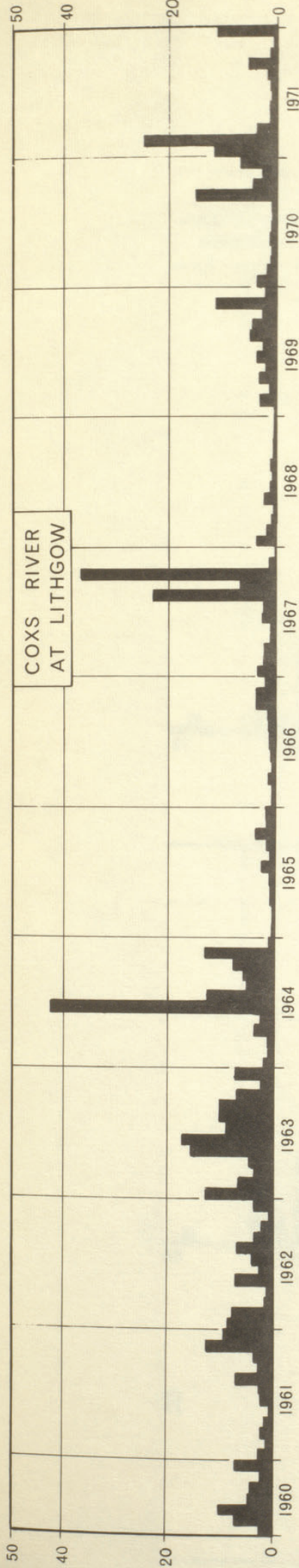
170

MONTHLY DISCHARGE IN THOUSANDS OF ACRE FEET



HYDROGRAPH OF MONTHLY DISCHARGE FOR  
 NEPEAN RIVER AT PHEASANTS NEST

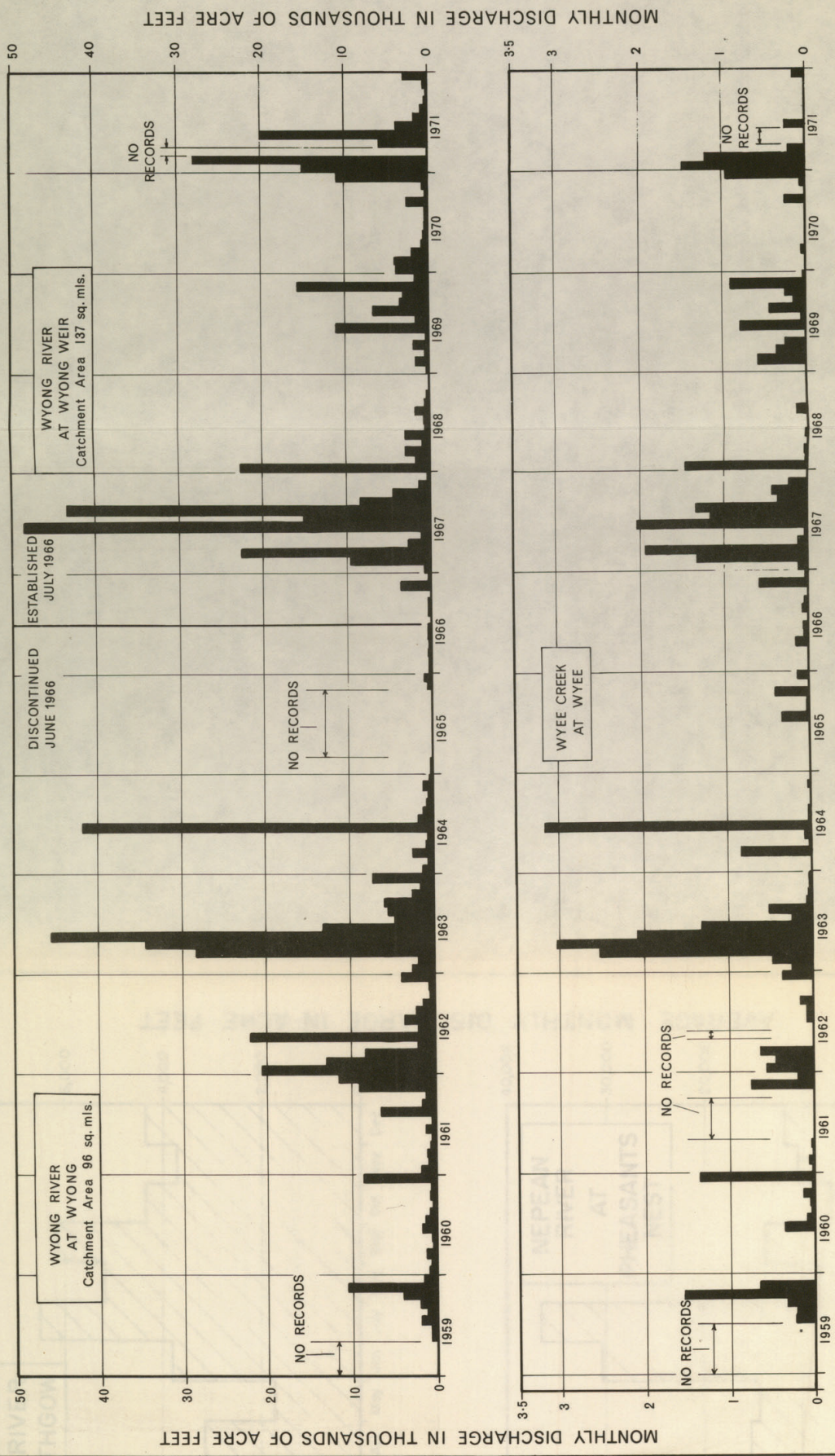
MONTHLY DISCHARGE IN THOUSANDS OF ACRE FEET



HYDROGRAPHS OF MONTHLY DISCHARGE FOR COXS RIVER AT LITHGOW AND WOLLONDILLY RIVER AT GOULBURN



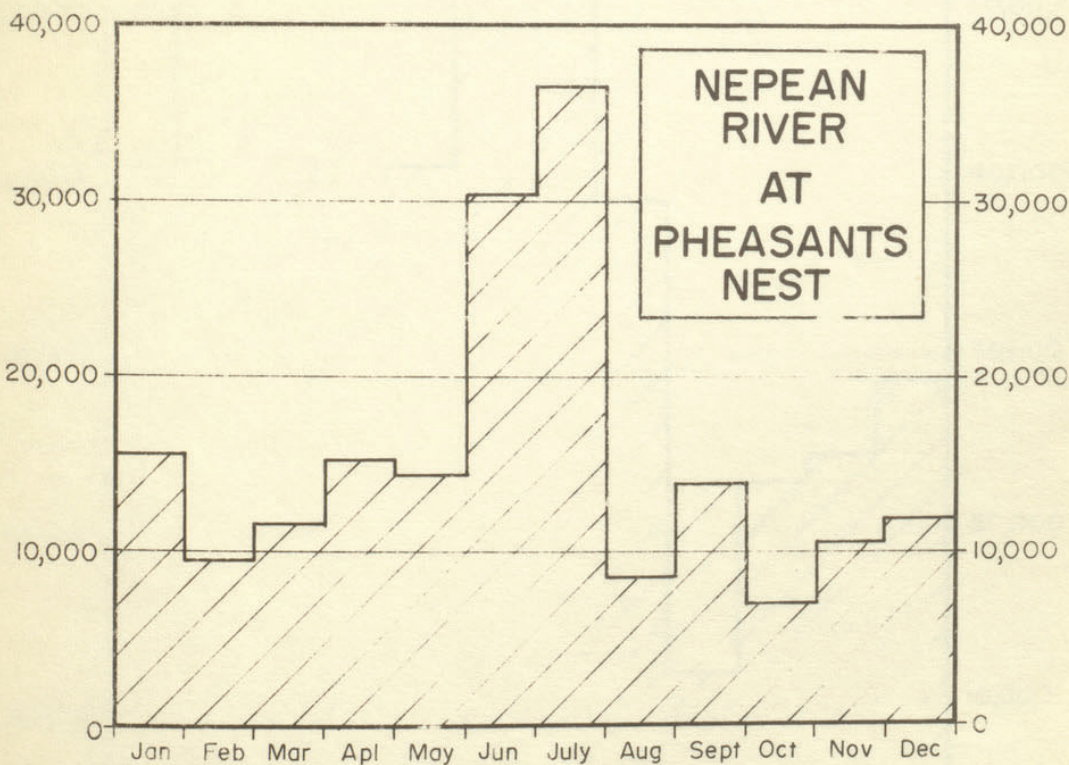
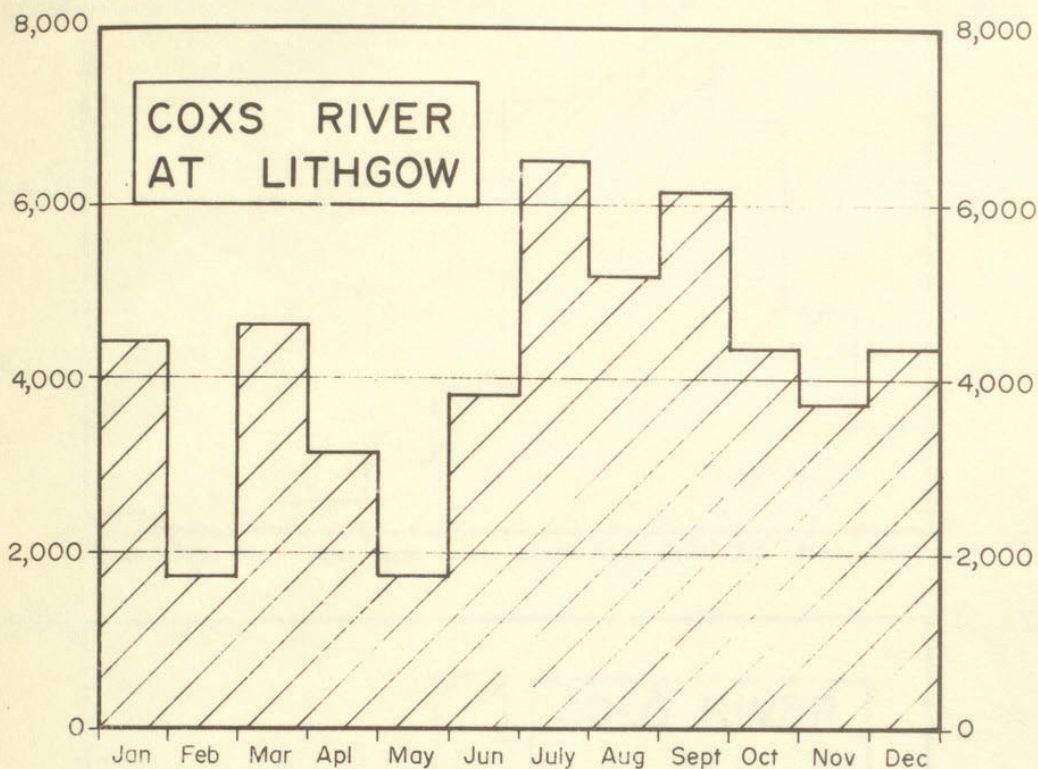
FIGURE 23



HYDROGRAPHS OF MONTHLY DISCHARGE FOR  
 WYONG RIVER AT WYONG AND WYONG WEIR  
 AND WYEE CREEK AT WYEE

FIGURE 24

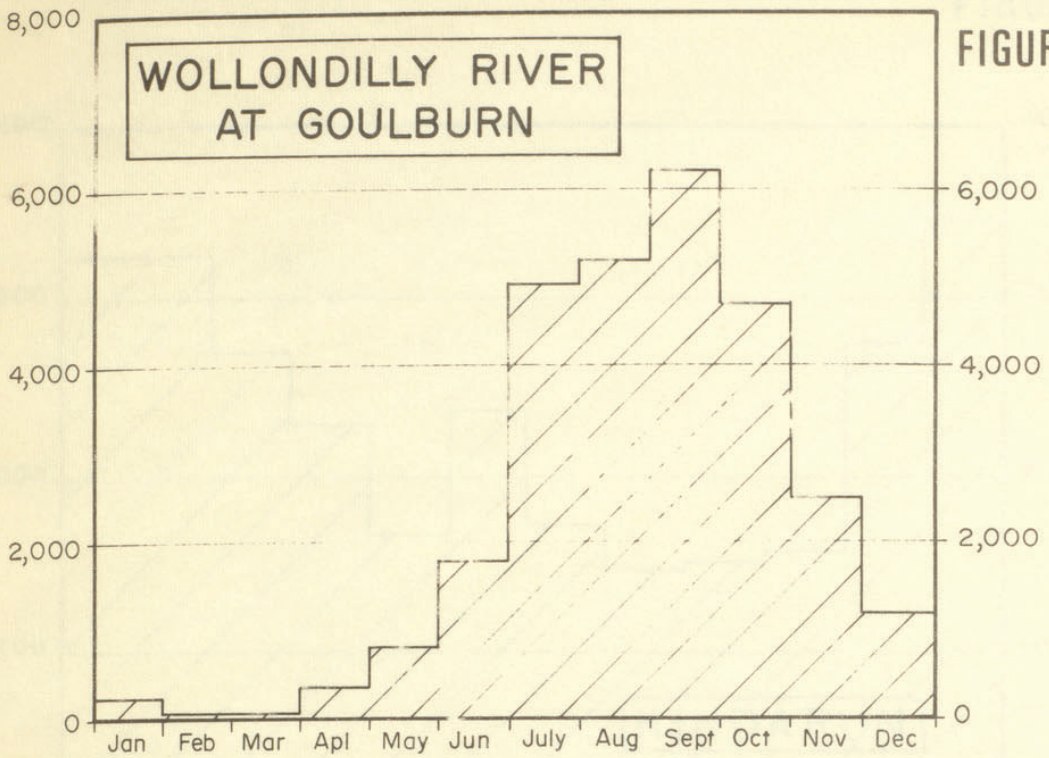
03253



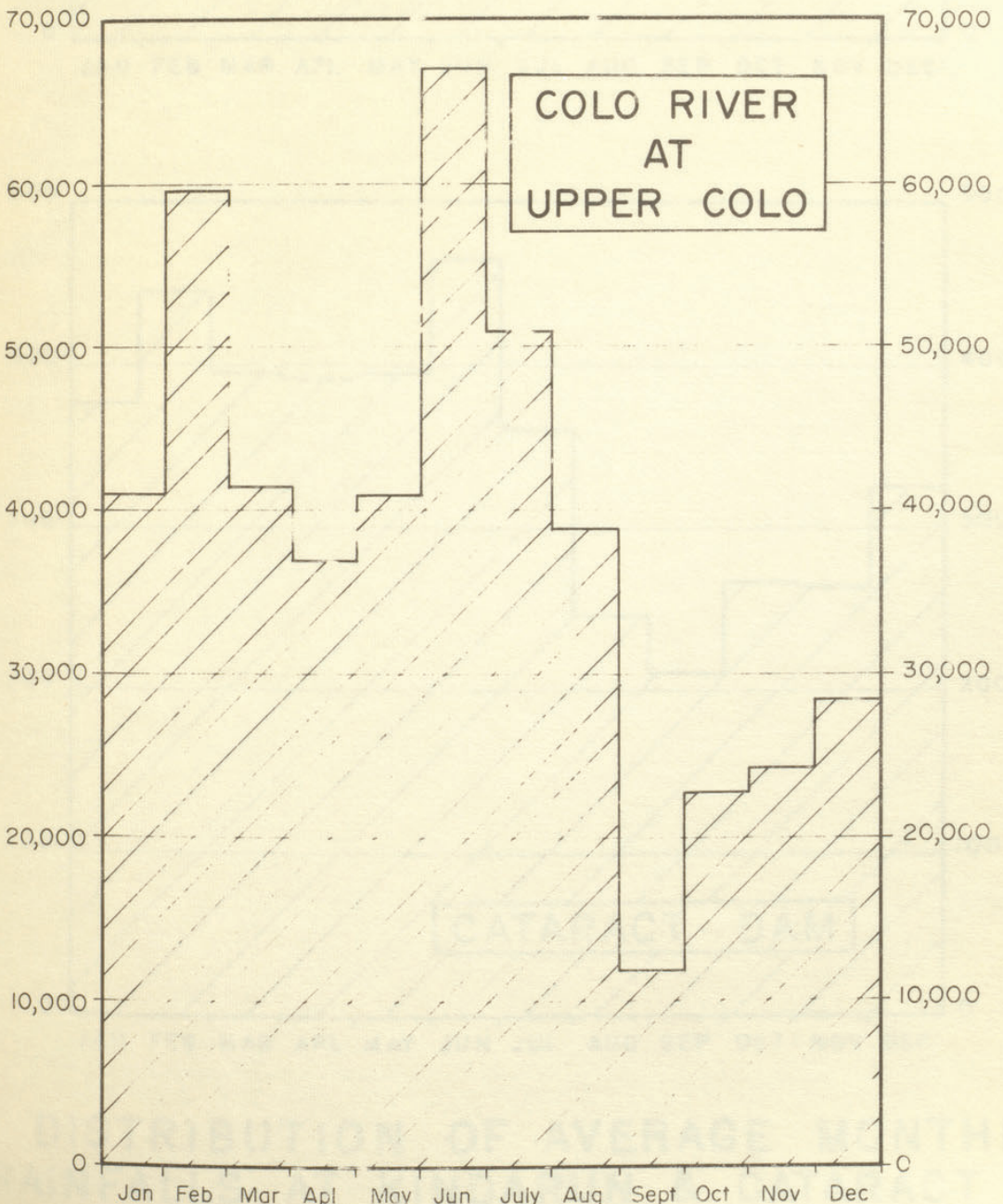
**AVERAGE MONTHLY DISCHARGE**

FIGURE 25

WOLLONDILLY RIVER  
AT GOULBURN



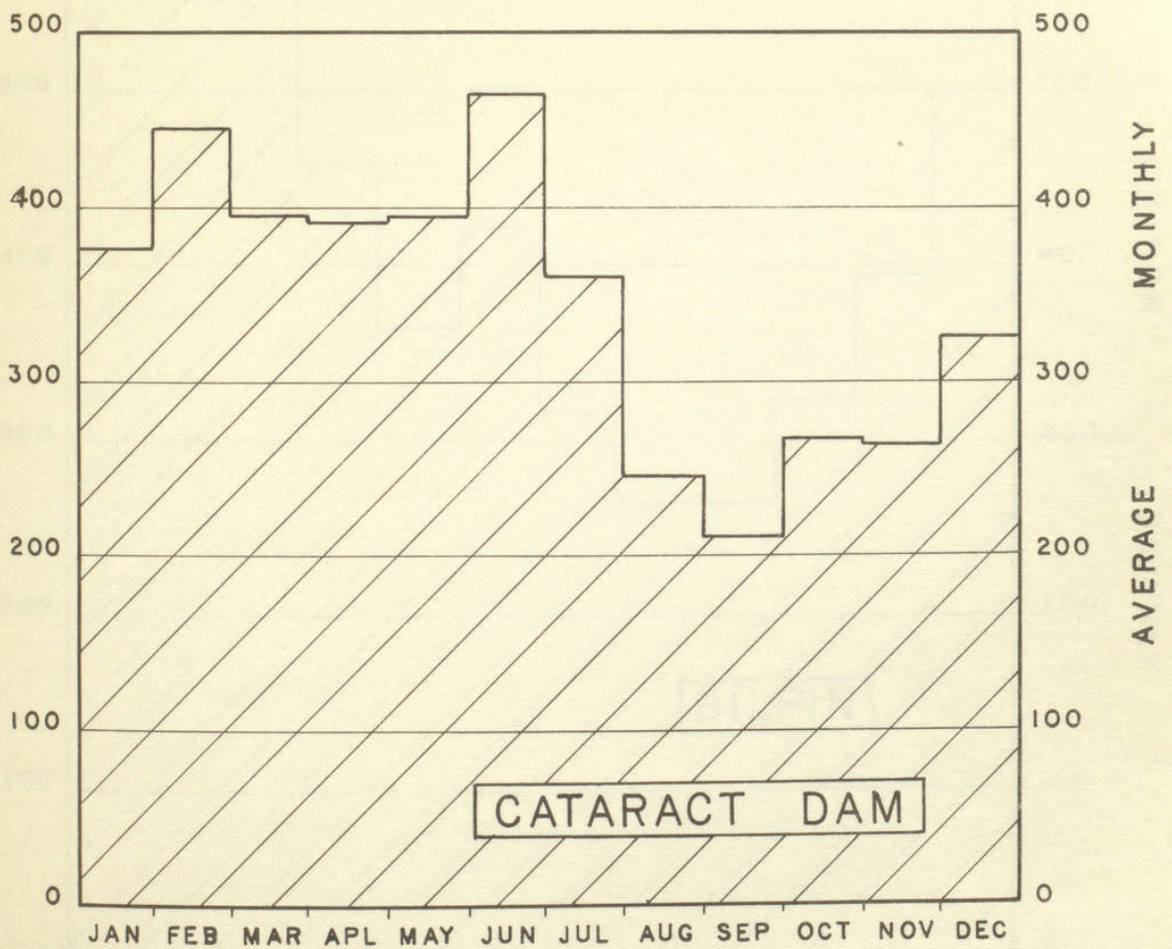
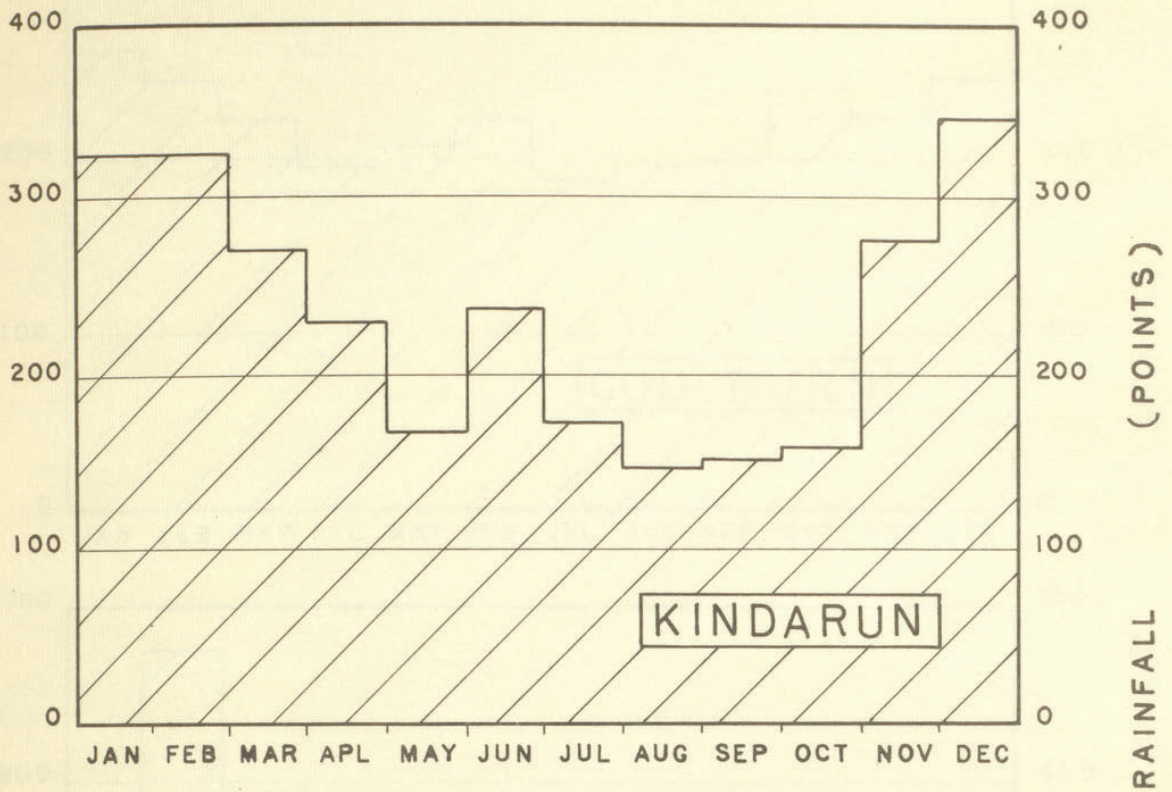
COLO RIVER  
AT  
UPPER COLO



AVERAGE MONTHLY DISCHARGE IN ACRE FEET

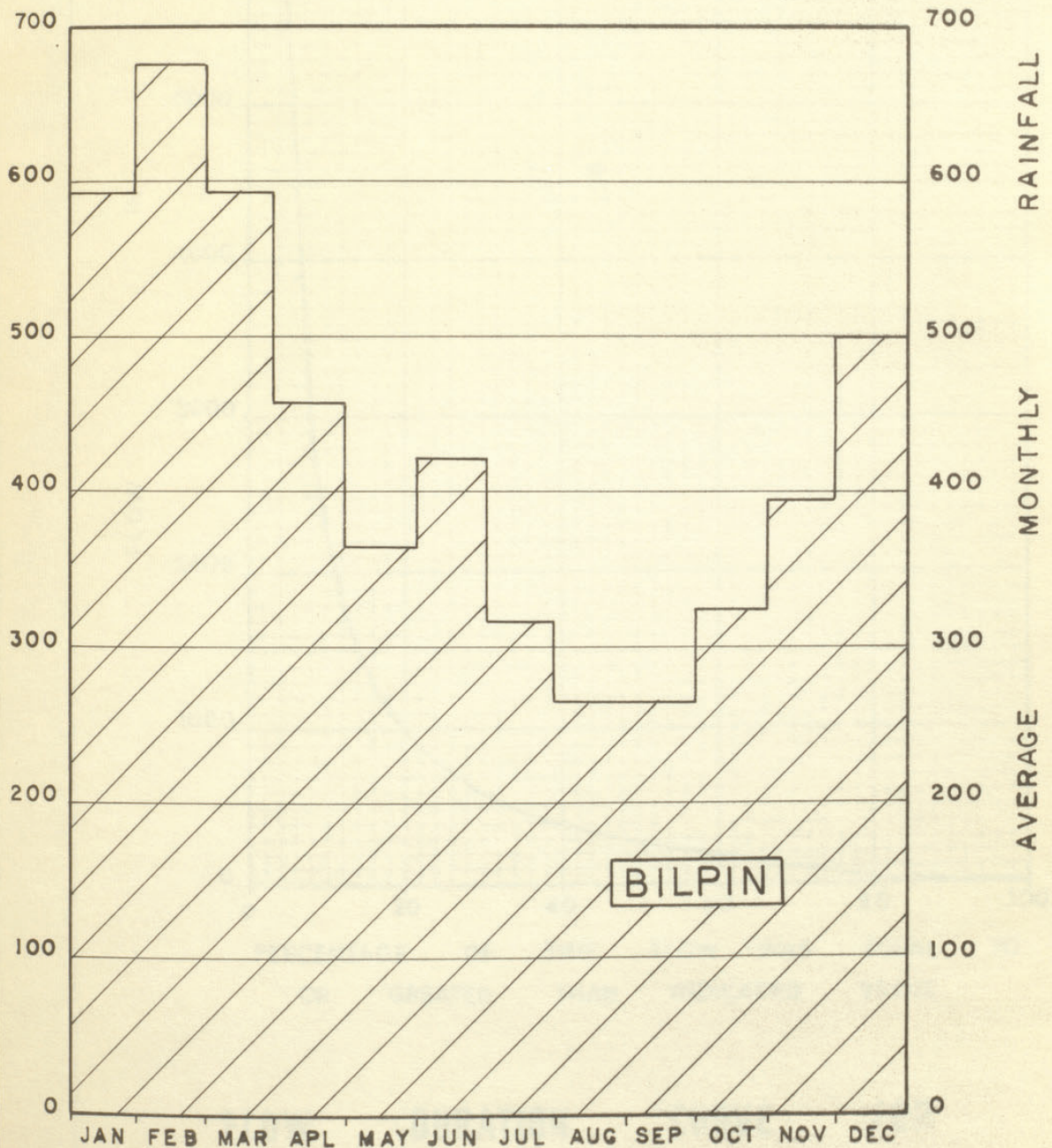
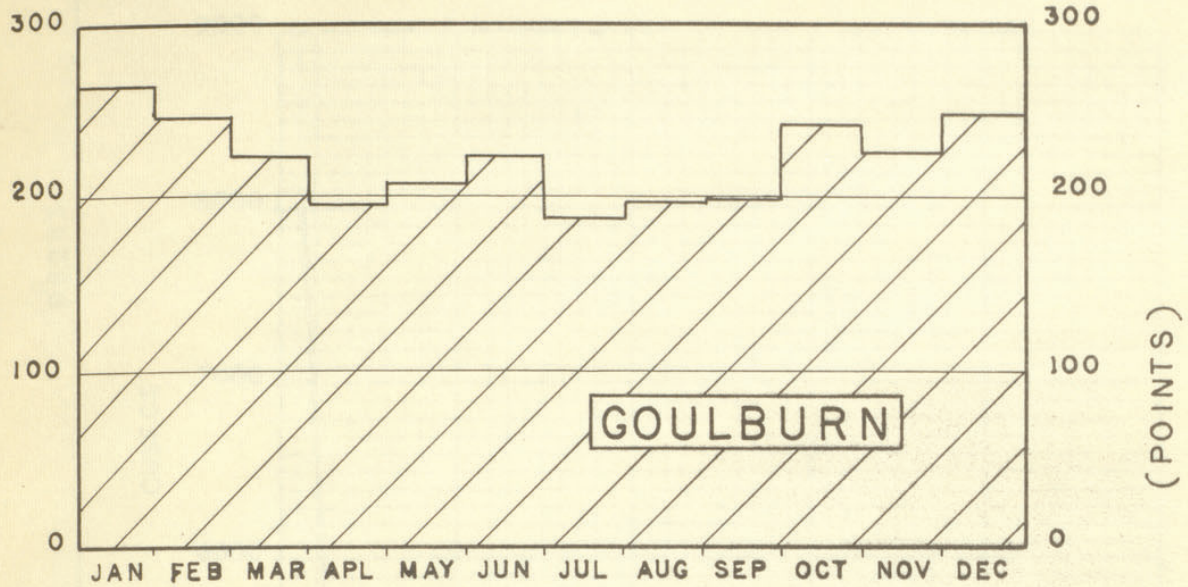
AVERAGE MONTHLY DISCHARGE

03256



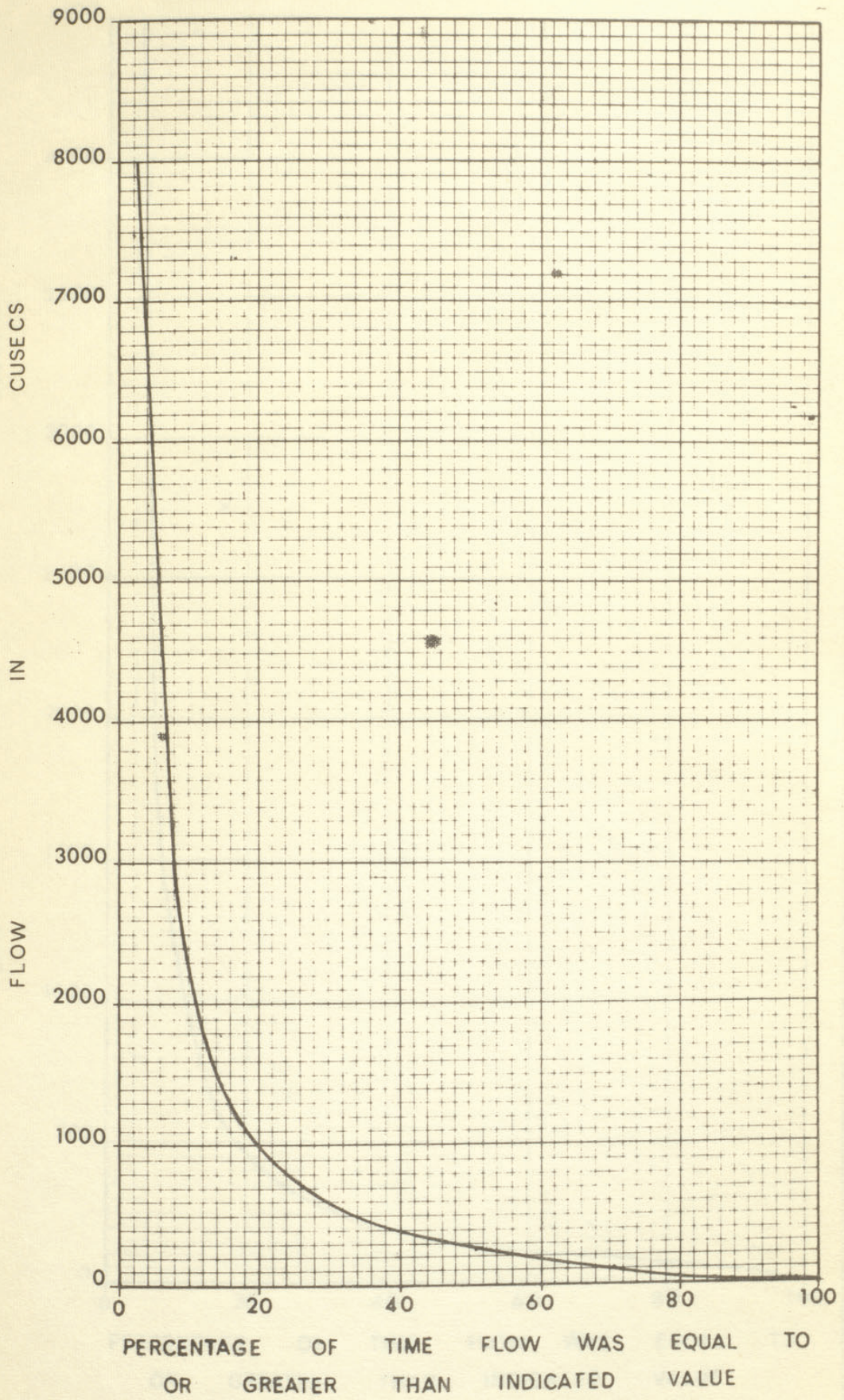
DISTRIBUTION OF AVERAGE MONTHLY RAINFALLS AT KINDARUN & CATARACT DAM

08257



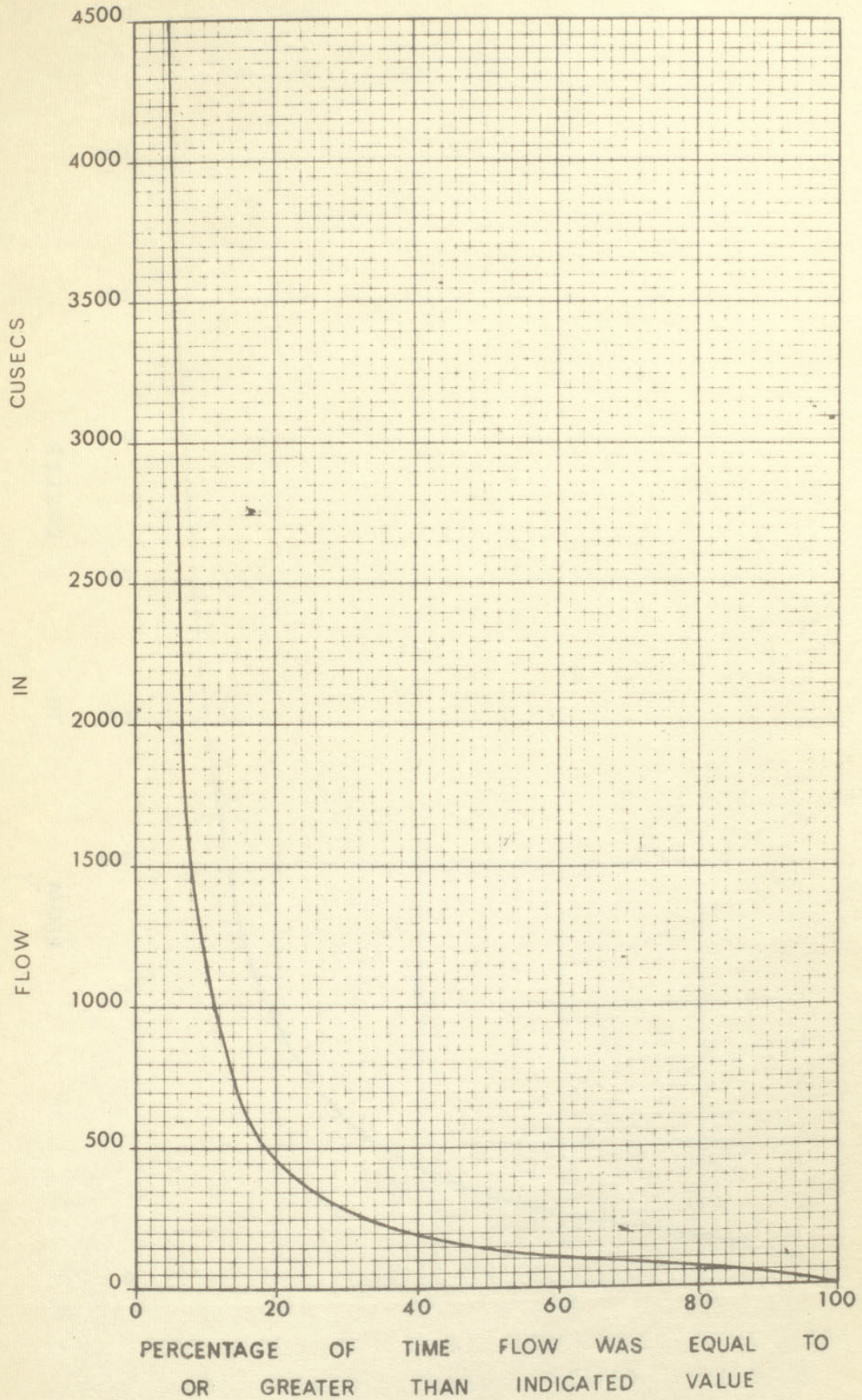
DISTRIBUTION OF AVERAGE MONTHLY RAINFALLS AT GOULBURN & BILPIN

08245



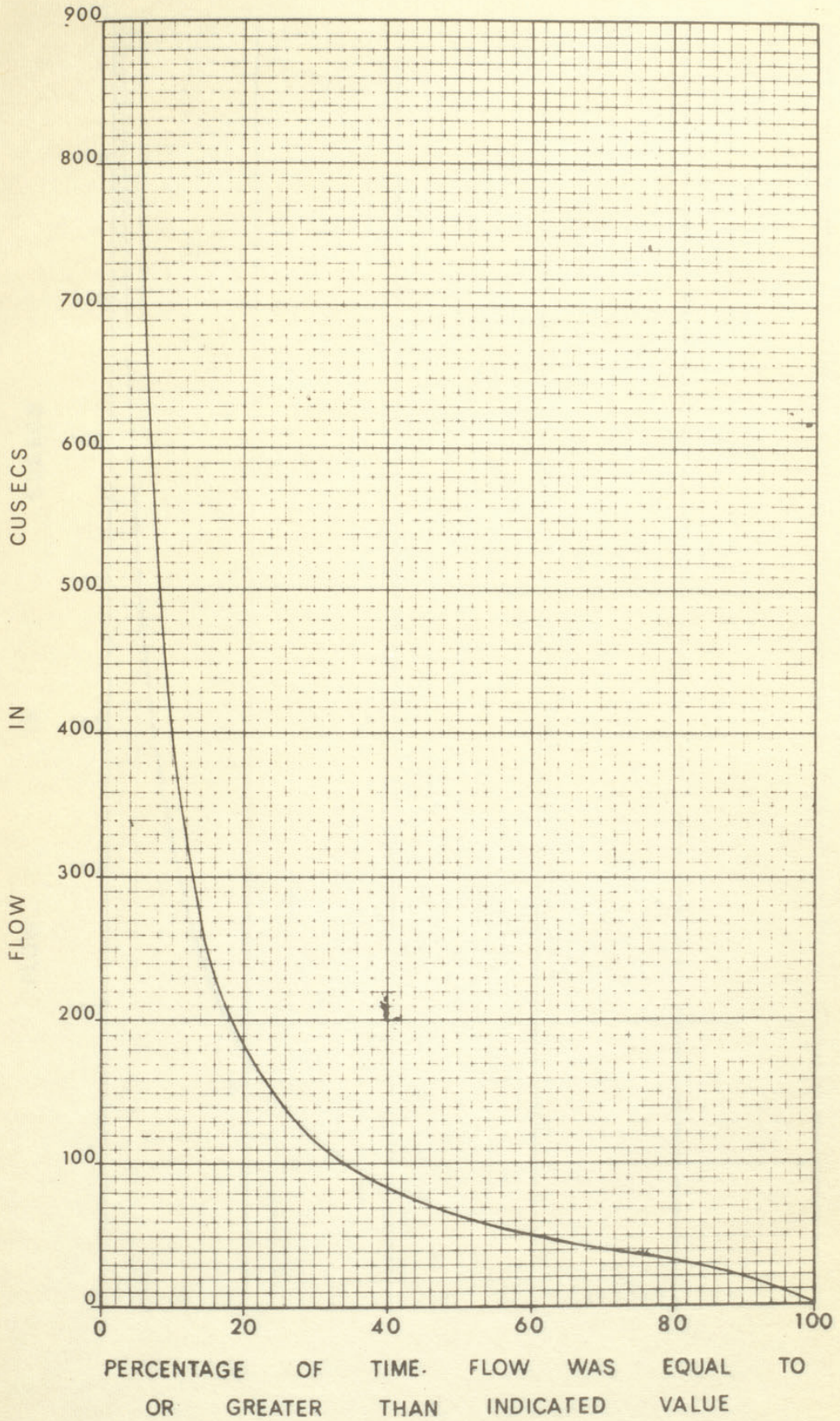
FLOW DURATION CURVE FOR NEPEAN RIVER AT PENRITH

08246



FLOW DURATION CURVE FOR  
COLO RIVER AT UPPER COLO

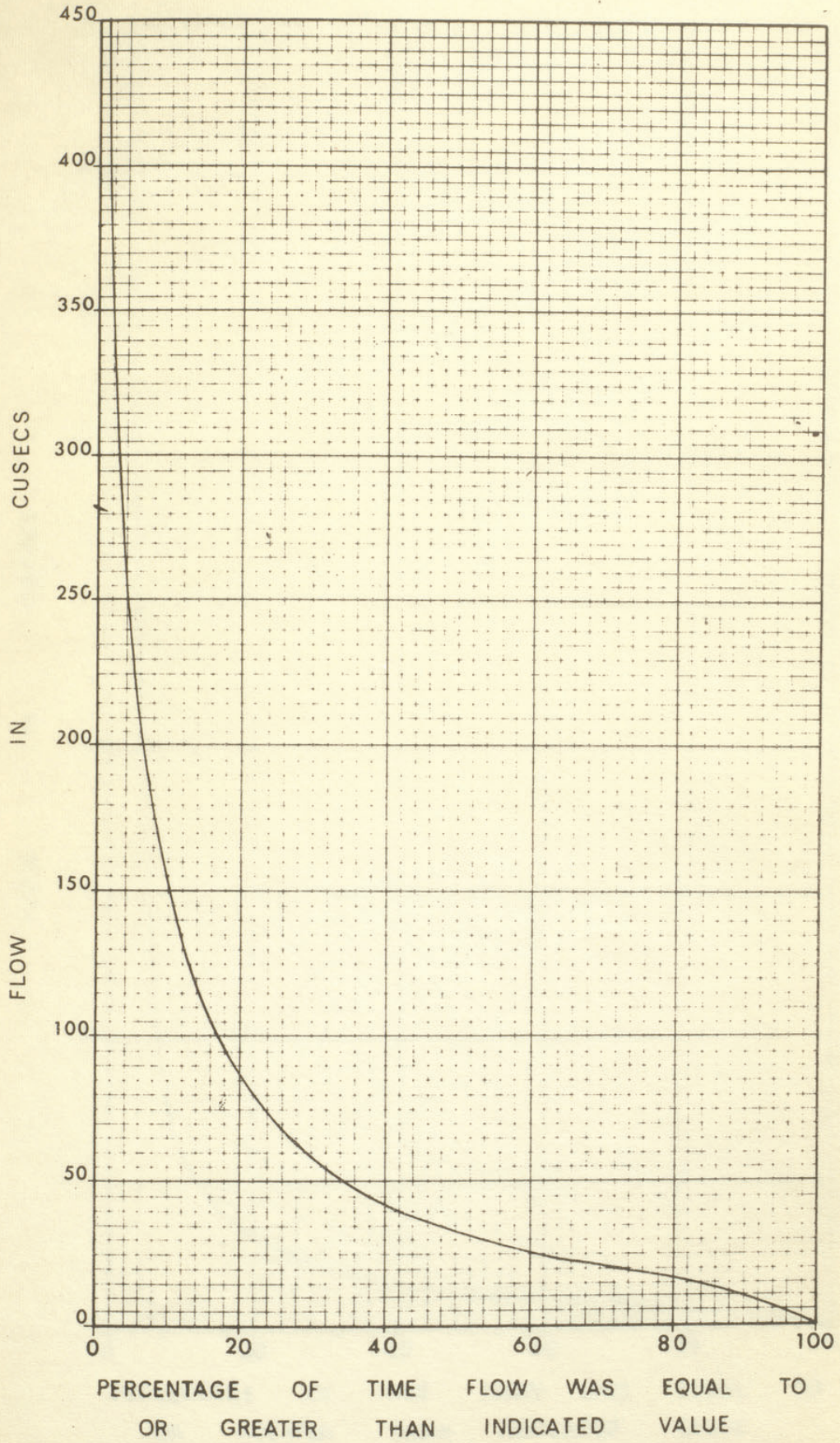
08247



**FLOW DURATION CURVE FOR  
GROSE RIVER AT D/S BURRELOW CREEK**



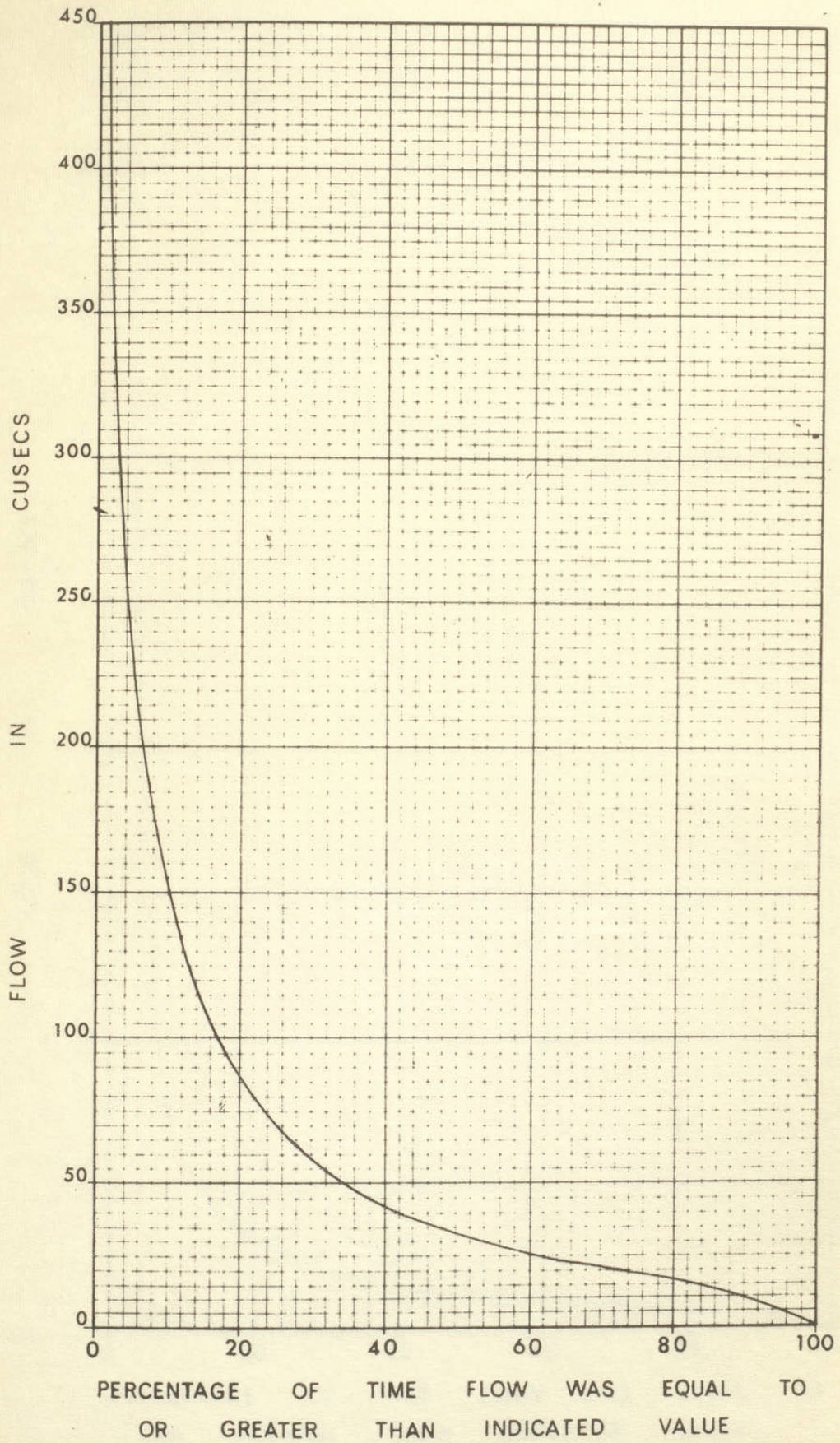
08248



FLOW DURATION CURVE FOR

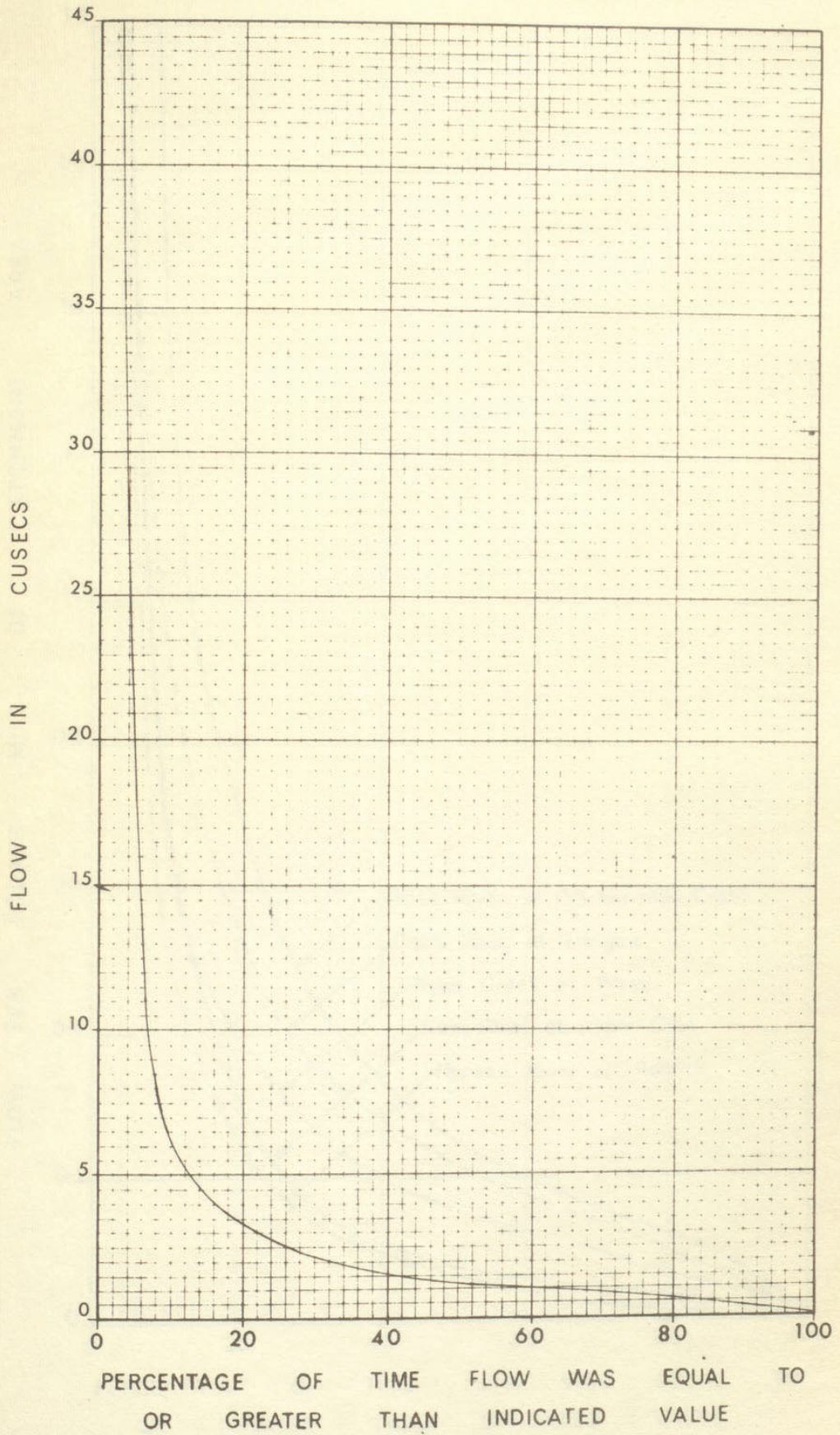
COX'S RIVER AT LITHGOW

08248



FLOW DURATION CURVE FOR  
COX'S RIVER AT LITHGOW

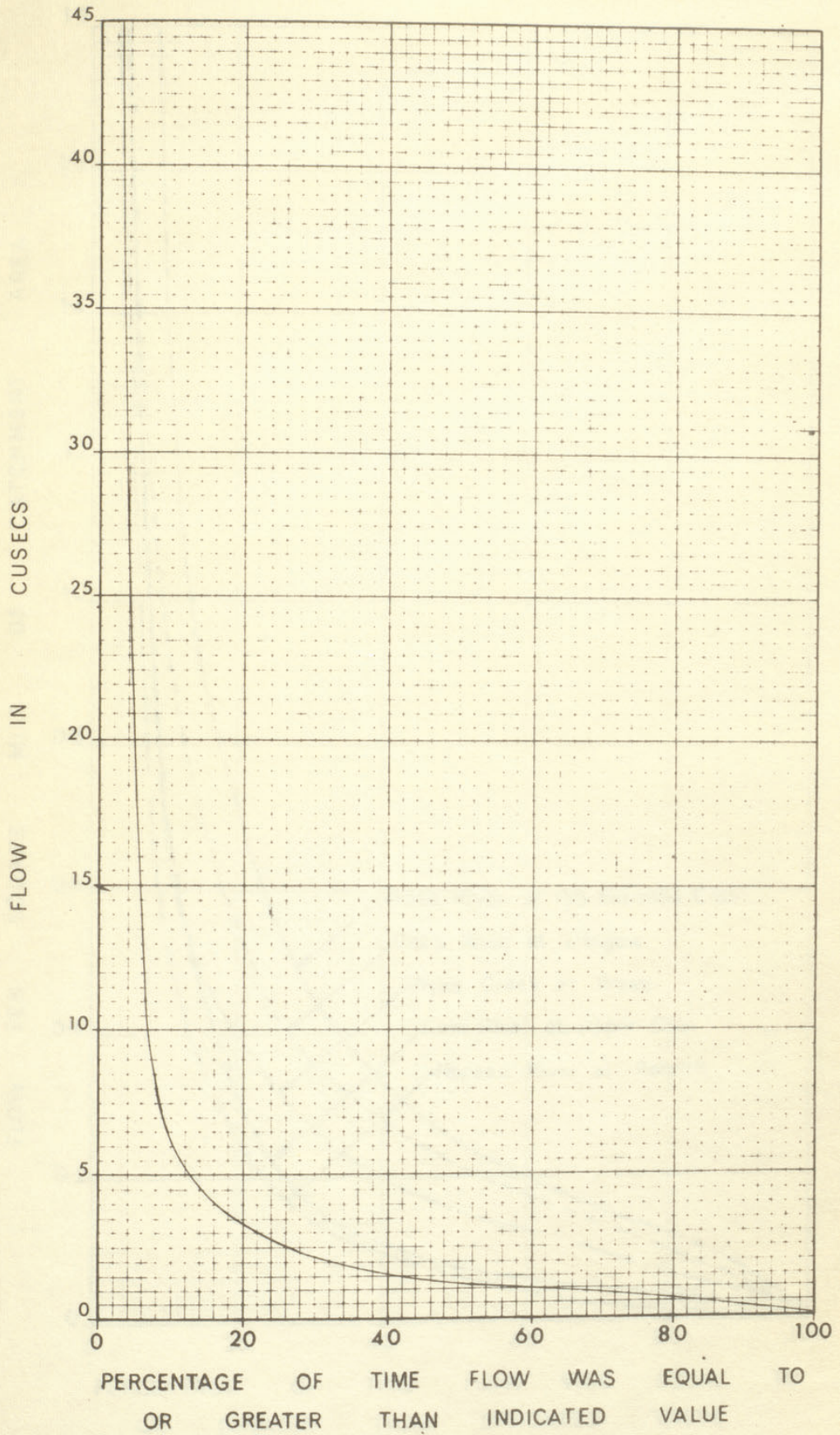
08249



**FLOW DURATION CURVE FOR**

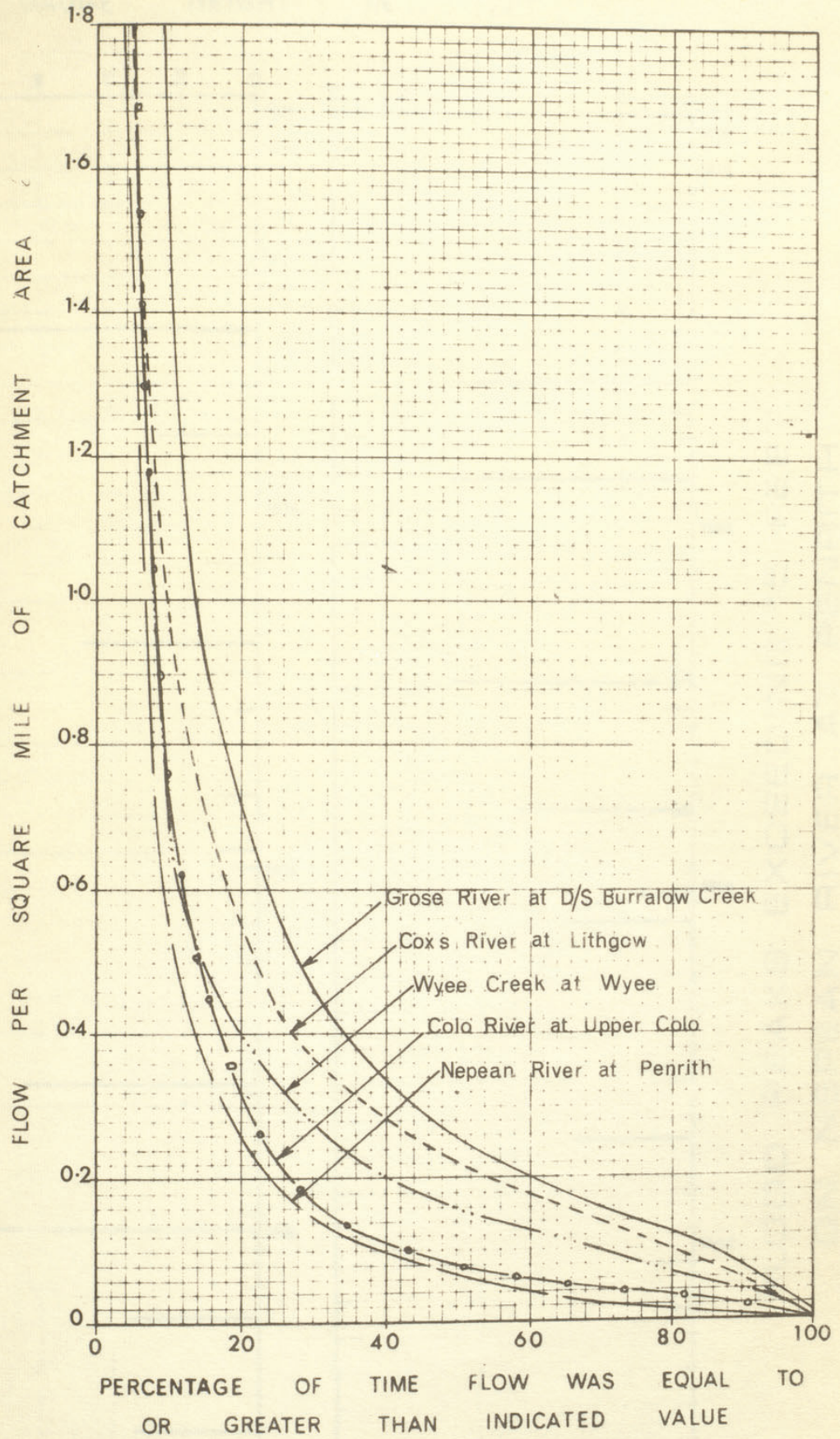
**WYEE CREEK AT WYEE**

08249



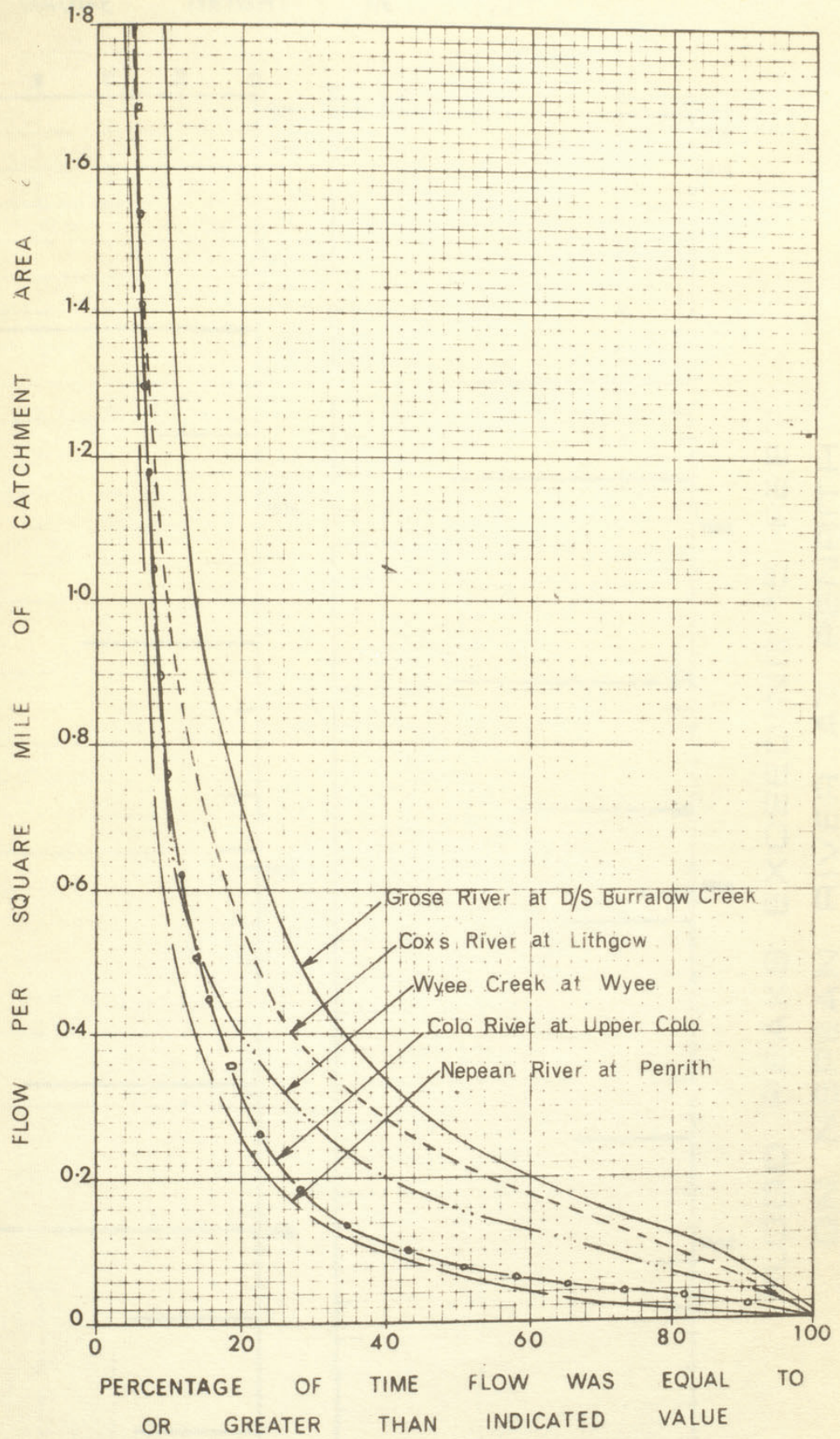
**FLOW DURATION CURVE FOR  
WYEE CREEK AT WYEE**

08250



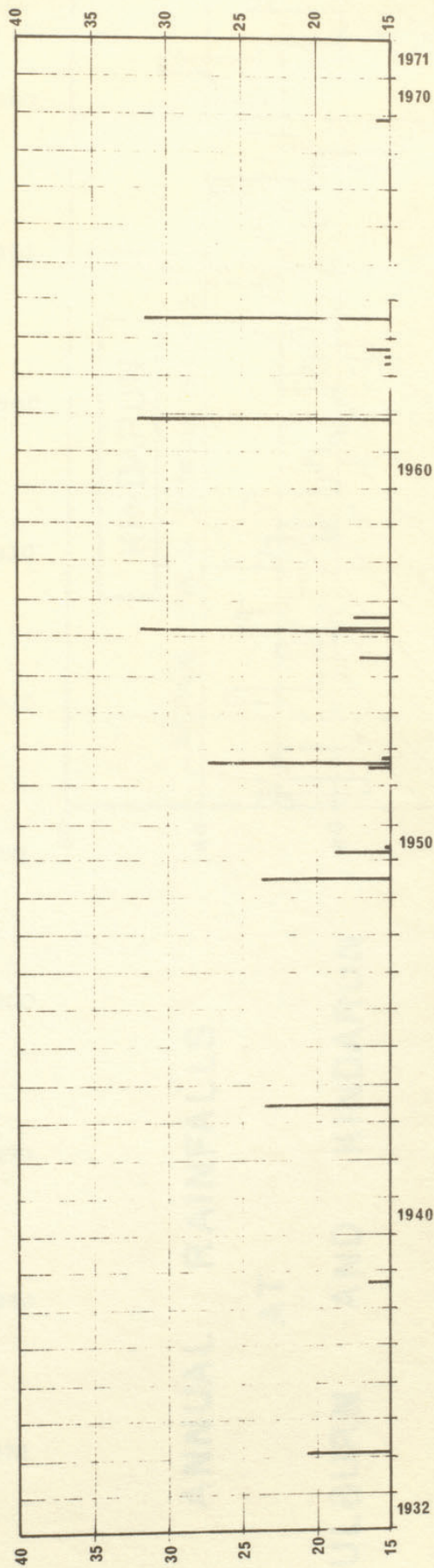
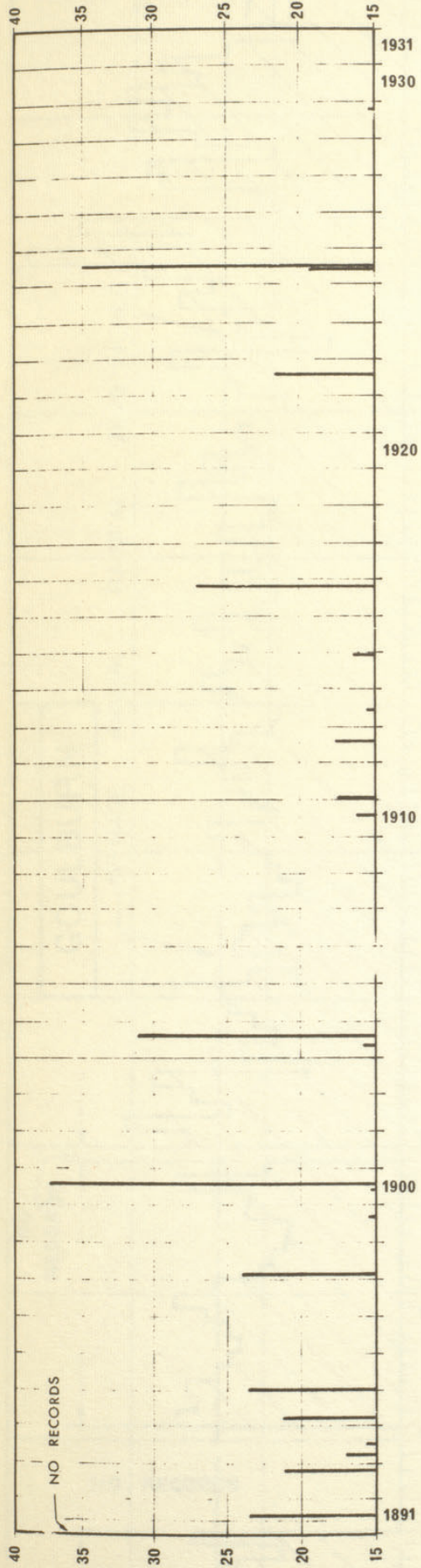
**FLOW DURATION CURVES FOR HAWKESBURY VALLEY**

08250



**FLOW DURATION CURVES FOR HAWKESBURY VALLEY**

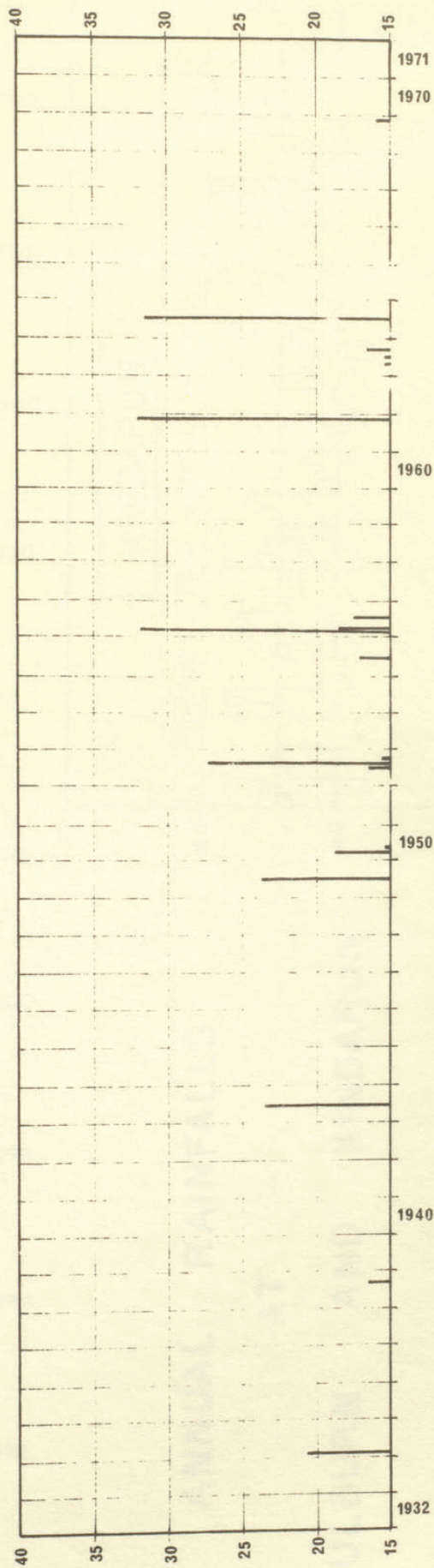
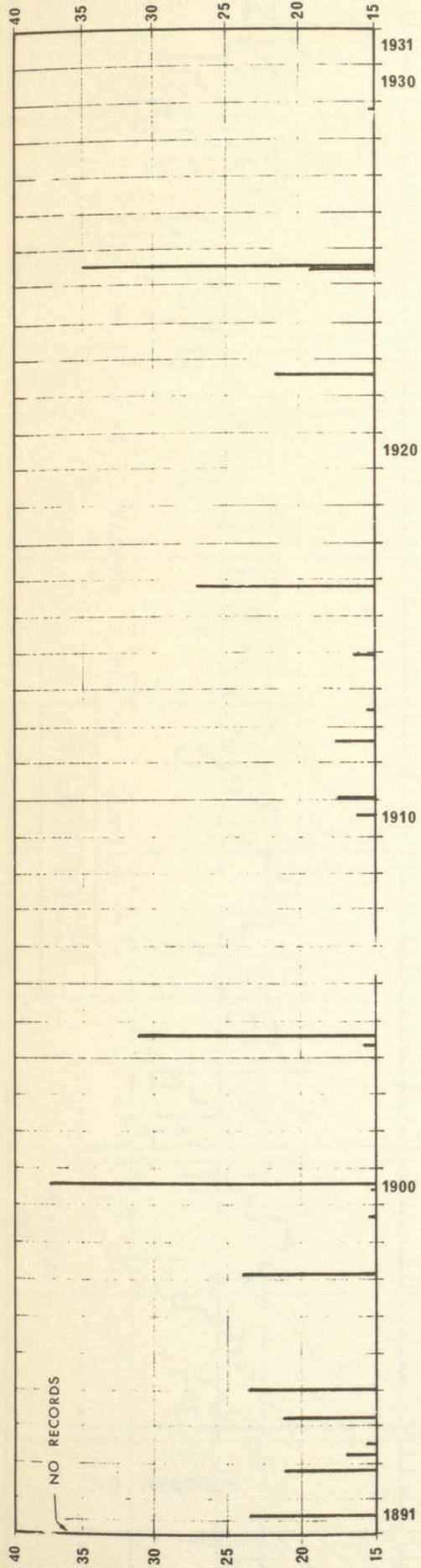
GAUGE HEIGHT IN FEET



FLOOD PEAKS EXCEEDING 15 FEET ON NEPEAN RIVER AT PENRITH

GAUGE HEIGHT IN FEET

GAUGE HEIGHT IN FEET

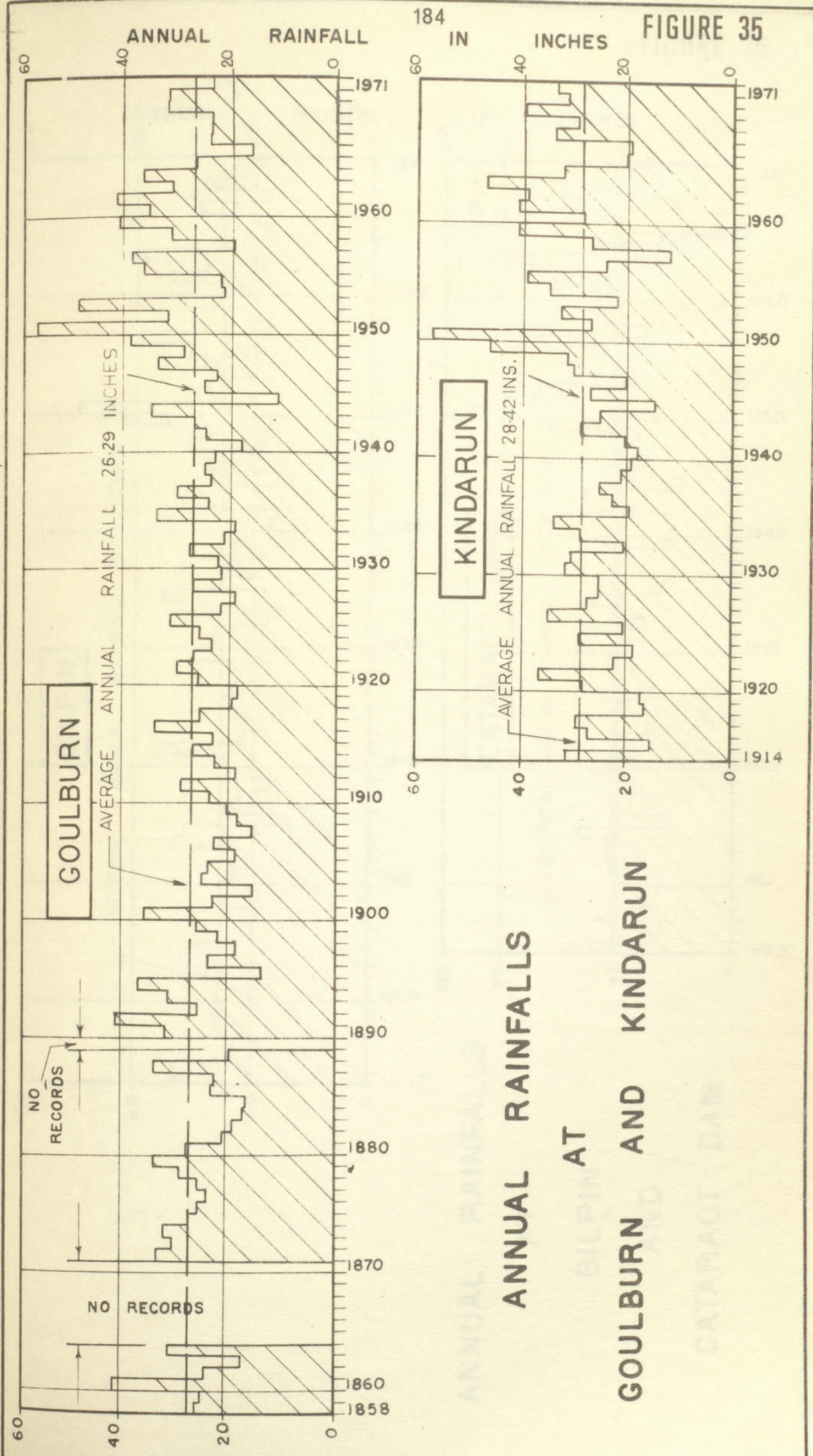


FLOOD PEAKS EXCEEDING 15 FEET ON NEPEAN RIVER AT PENRITH

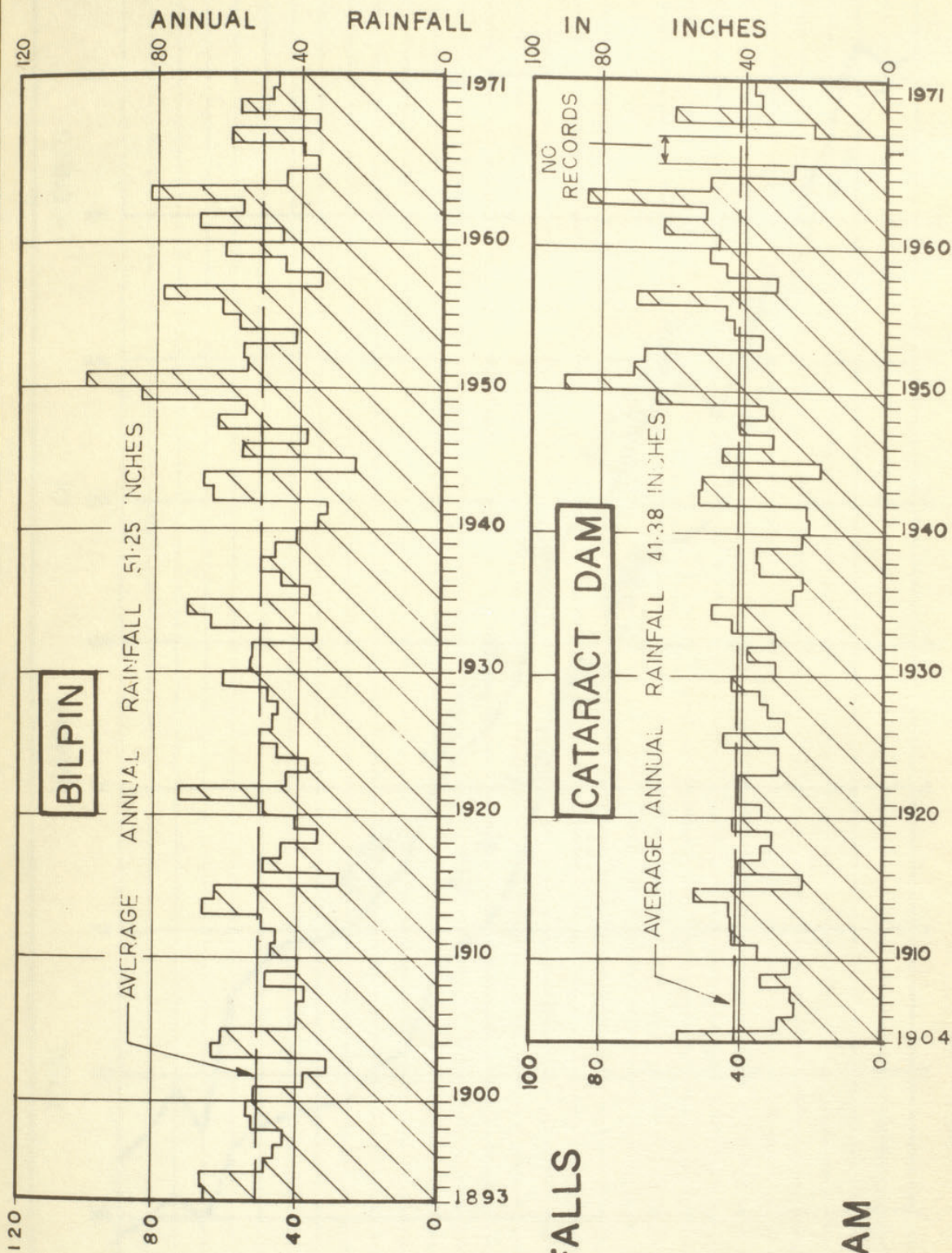
GAUGE HEIGHT IN FEET



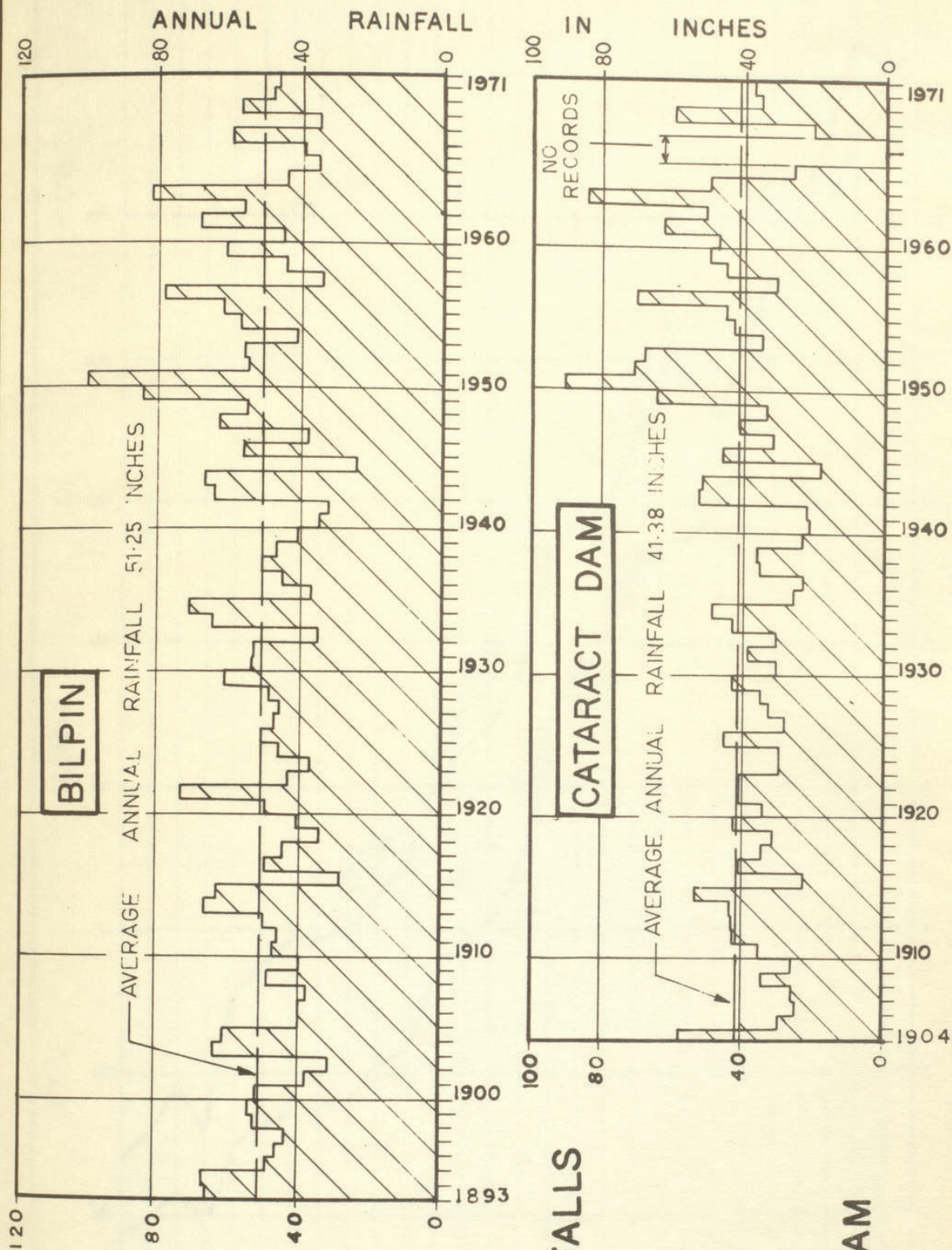
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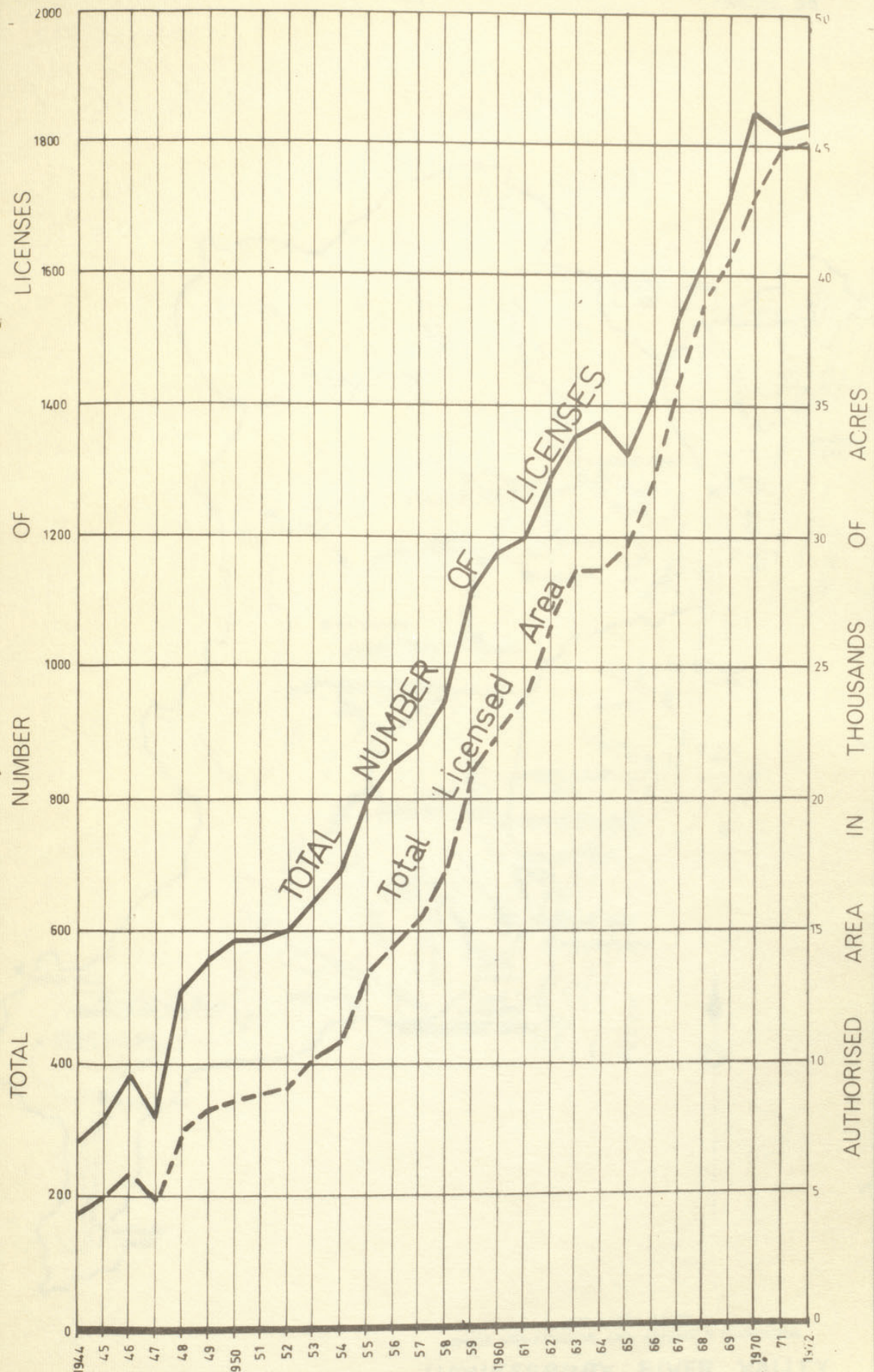
**ANNUAL RAINFALLS AT GOULBURN AND KINDARUN**



ANNUAL RAINFALLS  
 AT  
 BILPIN  
 AND  
 CATARACT DAM



ANNUAL RAINFALLS  
AT  
BILPIN  
AND  
CATARACT DAM



**HAWKESBURY RIVER VALLEY**  
**AREA AUTHORISED FOR IRRIGATION**  
**AND TOTAL NUMBER OF LICENSES AT**  
**30th JUNE FOR EACH YEAR INDICATED**



196P

2 Cont Assoc Cat  
~~for ANB~~

NQ

627-1209946

NEW