STREAMFLOW HYDROGRAPHS

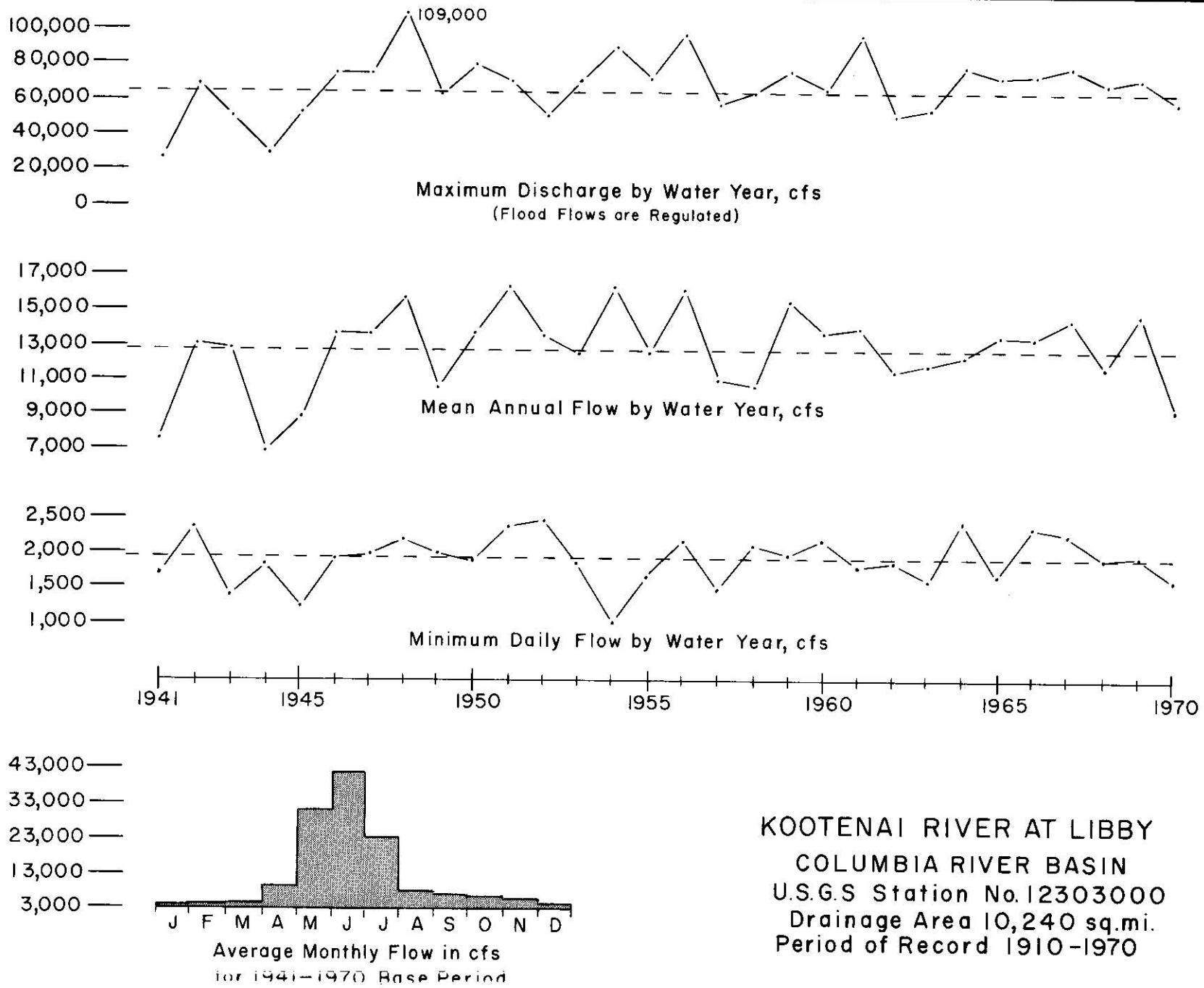
STREAMFLOW HYDROGRAPHS

Although the number of sites varies from year to year as some stations are discontinued and others added, in 1970 there were approximately 168 primary surface recording stations operating in Montana. Of this total, 84 were located in the Missouri River Basin, 36 in the Yellowstone River Basin, 31 in the Clark Fork Basin, 10 in the Kootenai River Basin, 6 in the St. Mary River Basin, and 1 in the Little Missouri River Basin. This total does not include stations for which the primary function is the operation of a given system (such as diversion stations for irrigation projects) or the collection of peak-flow and low-flow measurements.

Besides the various forms of streamflow data which are shown in the following hydrographs, supplemental data such as water quality and precipitation amount are collected at some stations.

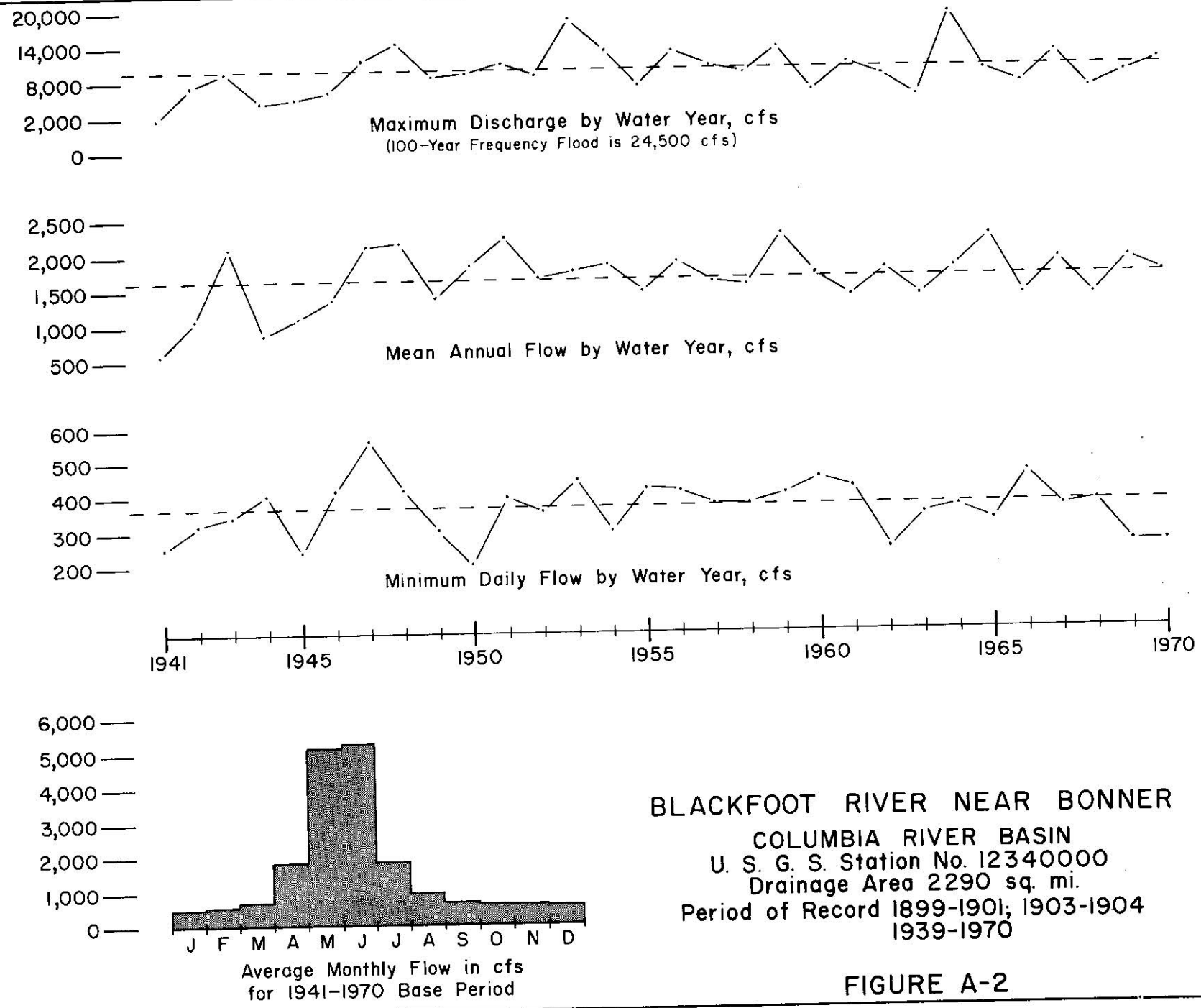
LIST OF HYDROGRAPHS

A- 1. Kootenai River at Libby
A- 2. Blackfoot River near Bonner
A- 3. Clark Fork above Missoula
A- 4. Bitterroot River at Florence
A- 5. Flathead River at Columbia Falls
A- 6. Flathead River near Polson
A- 7. Clark Fork near Plains
A- 8. Beaverhead River near Twin Bridges
A- 9. Jefferson River at Sappington
A-10. Madison River near McAllister
A-11. Gallatin River at Logan
A-12. Missouri River at Toston
A-13. Sun River near Vaughn
A-14. Marias River near Loma
A-15. Teton River near Dutton
A-16. Missouri River near Landusky
A-17. Musselshell River at Mosby
A-18. Milk River at Nashua
A-19. Missouri River near Culbertson
A-20. Yellowstone River near Livingston
A-21. Clarks Fork Yellowstone at Edgar
A-22. Bighorn River at Bighorn
A-23. Tongue River at Miles City
A-24. Yellowstone River at Miles City
A-25. Powder River near Locate
A-26. Yellowstone River near Sidney



KOOTENAI RIVER AT LIBBY
COLUMBIA RIVER BASIN
U.S.G.S Station No. 12303000
Drainage Area 10,240 sq.mi.
Period of Record 1910-1970

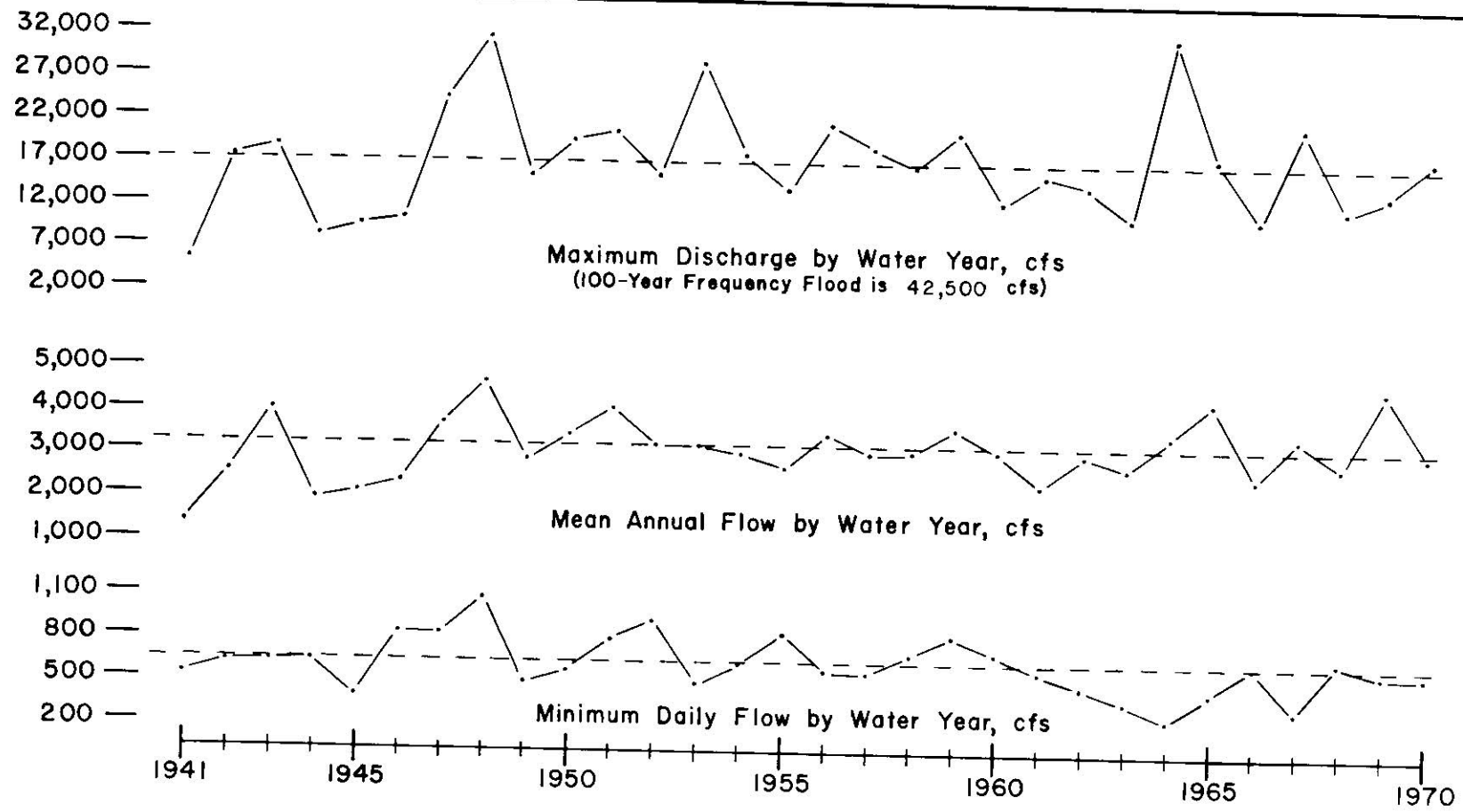
FIGURE A-1

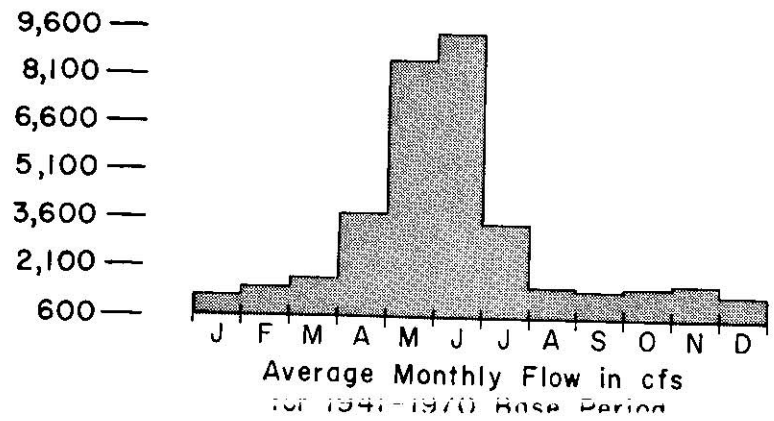


BLACKFOOT RIVER NEAR BONNER

COLUMBIA RIVER BASIN
U. S. G. S. Station No. 12340000
Drainage Area 2290 sq. mi.
Period of Record 1899-1901; 1903-1904
1939-1970

FIGURE A-2

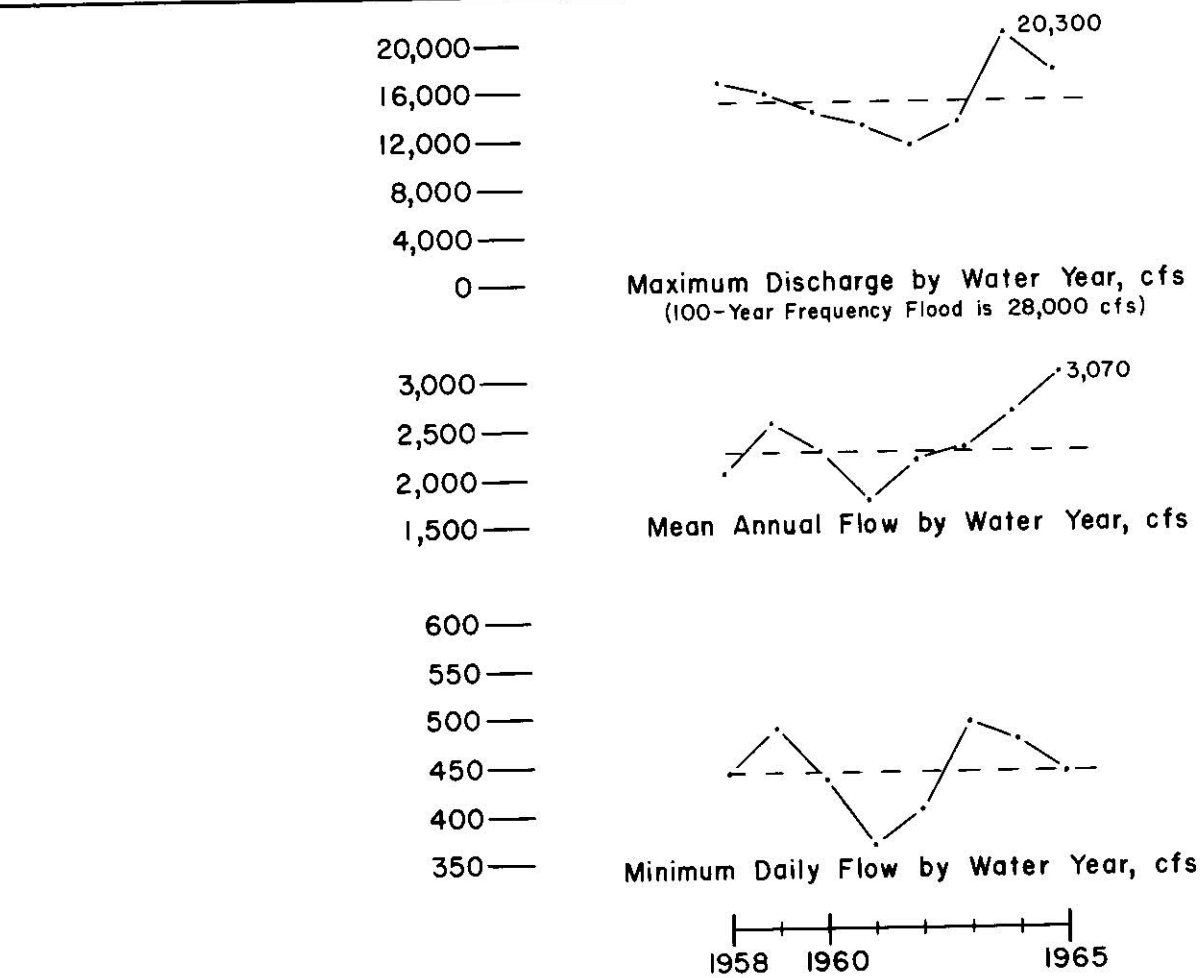


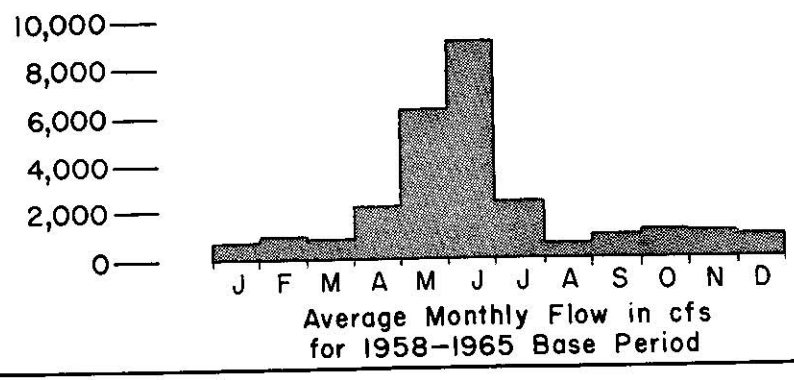


CLARK FORK ABOVE MISSOULA

COLUMBIA RIVER BASIN
U. S. G. S. Station No. 12340500
Drainage Area 5,999 sq. mi.
Period of Record 1929-1970

FIGURE A-3

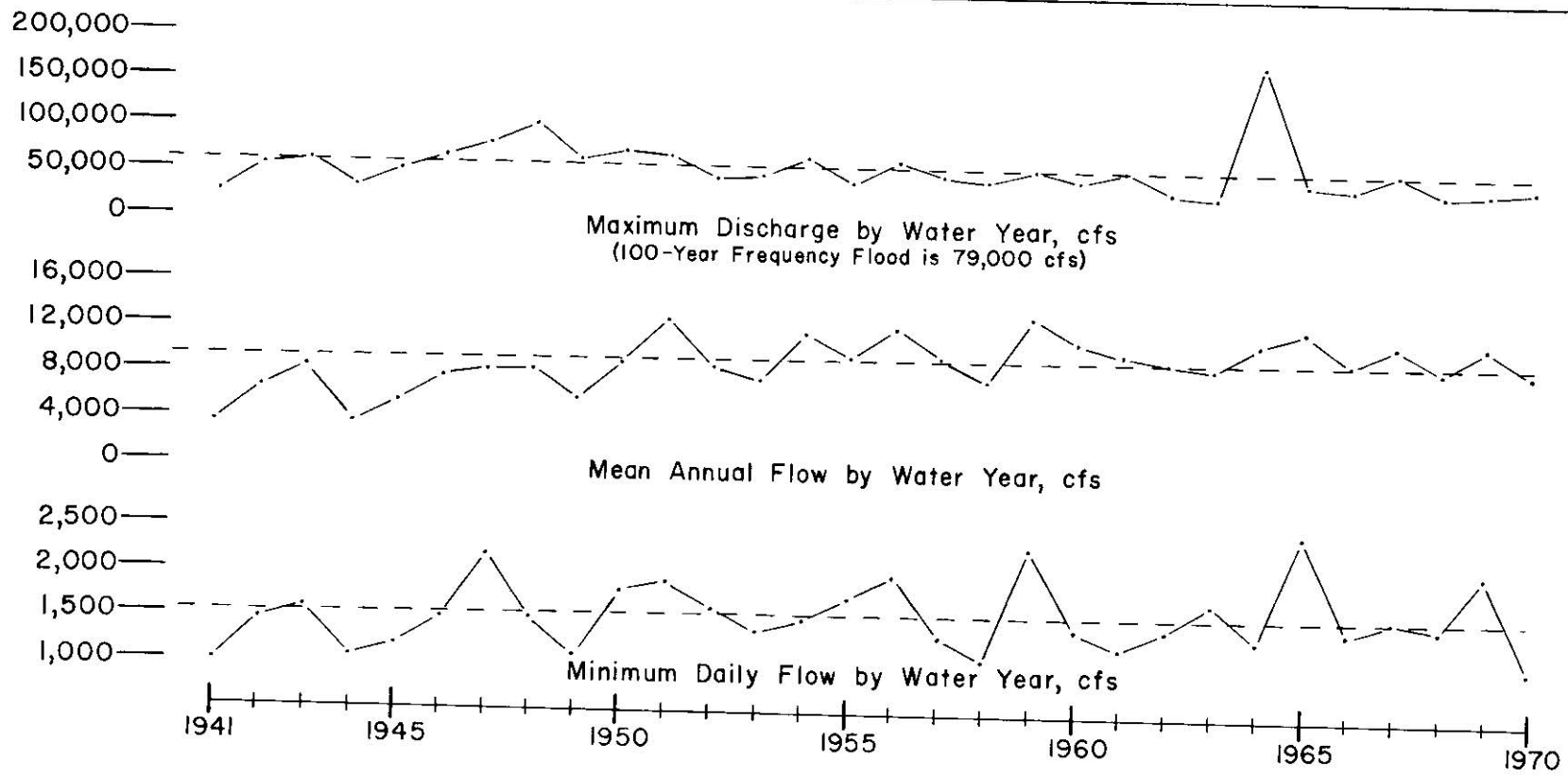


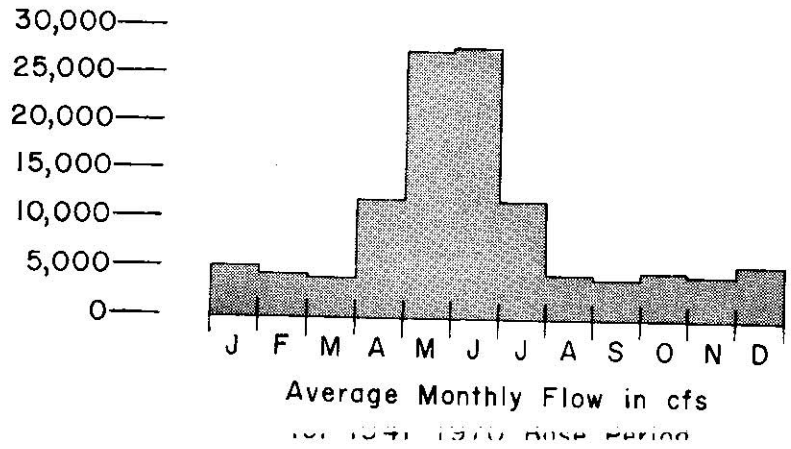


BITTERROOT RIVER AT FLORENCE

COLUMBIA RIVER BASIN
U. S. G. S. Station No. 12351200
Drainage Area 2354 sq. mi.
Period of Record 1958—1965

FIGURE A-4

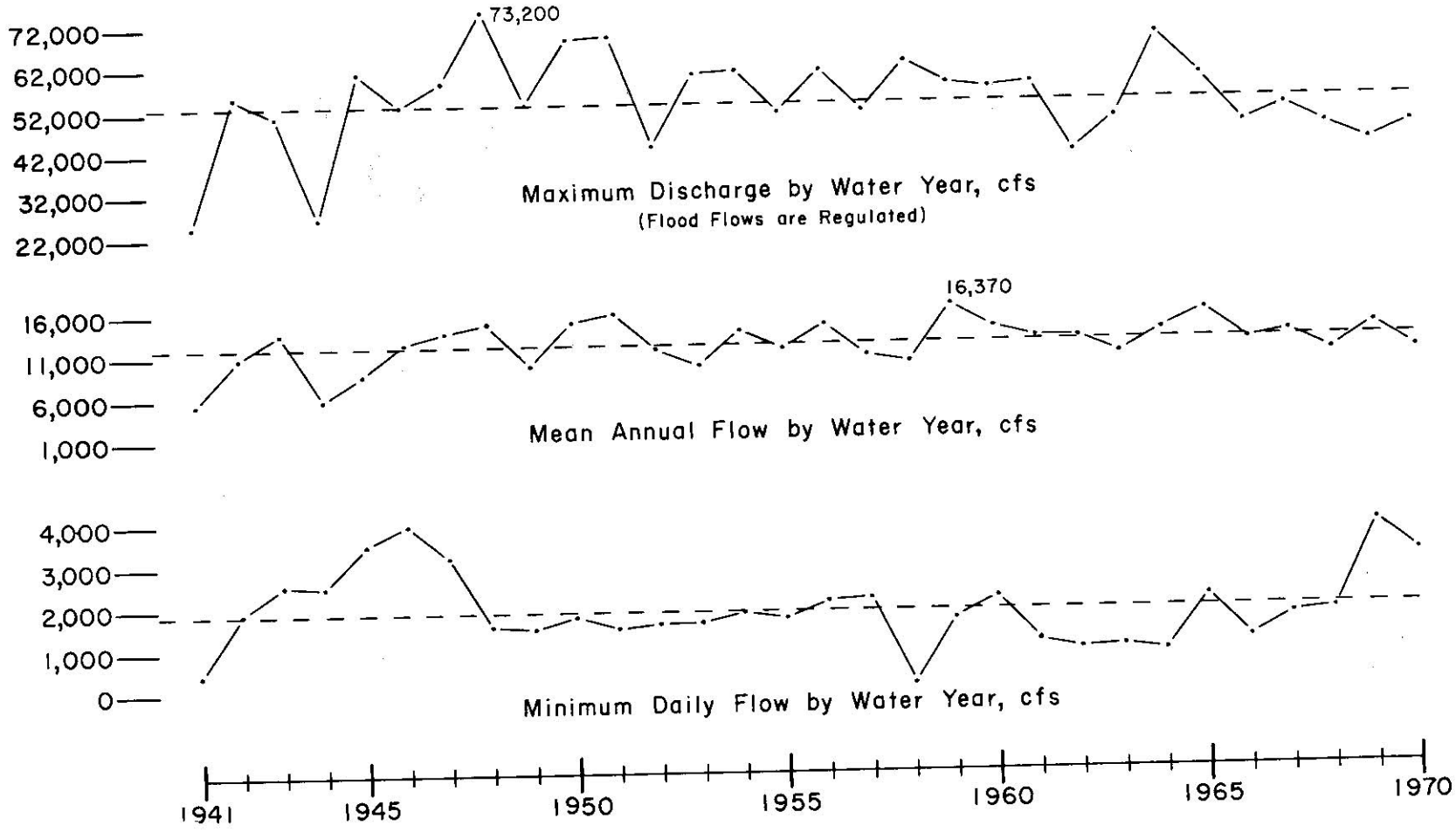


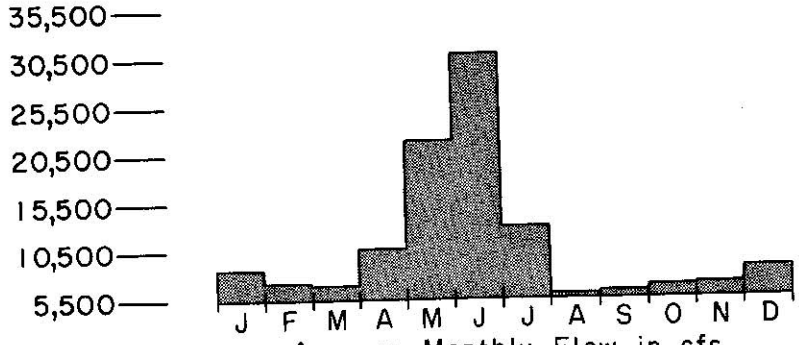


FLATHEAD RIVER AT COLUMBIA FALLS

COLUMBIA RIVER BASIN
U. S. G. S. Station No. 12363000
Drainage Area 4,464 sq. mi.
Period of Record 1922-1923
1928-1970

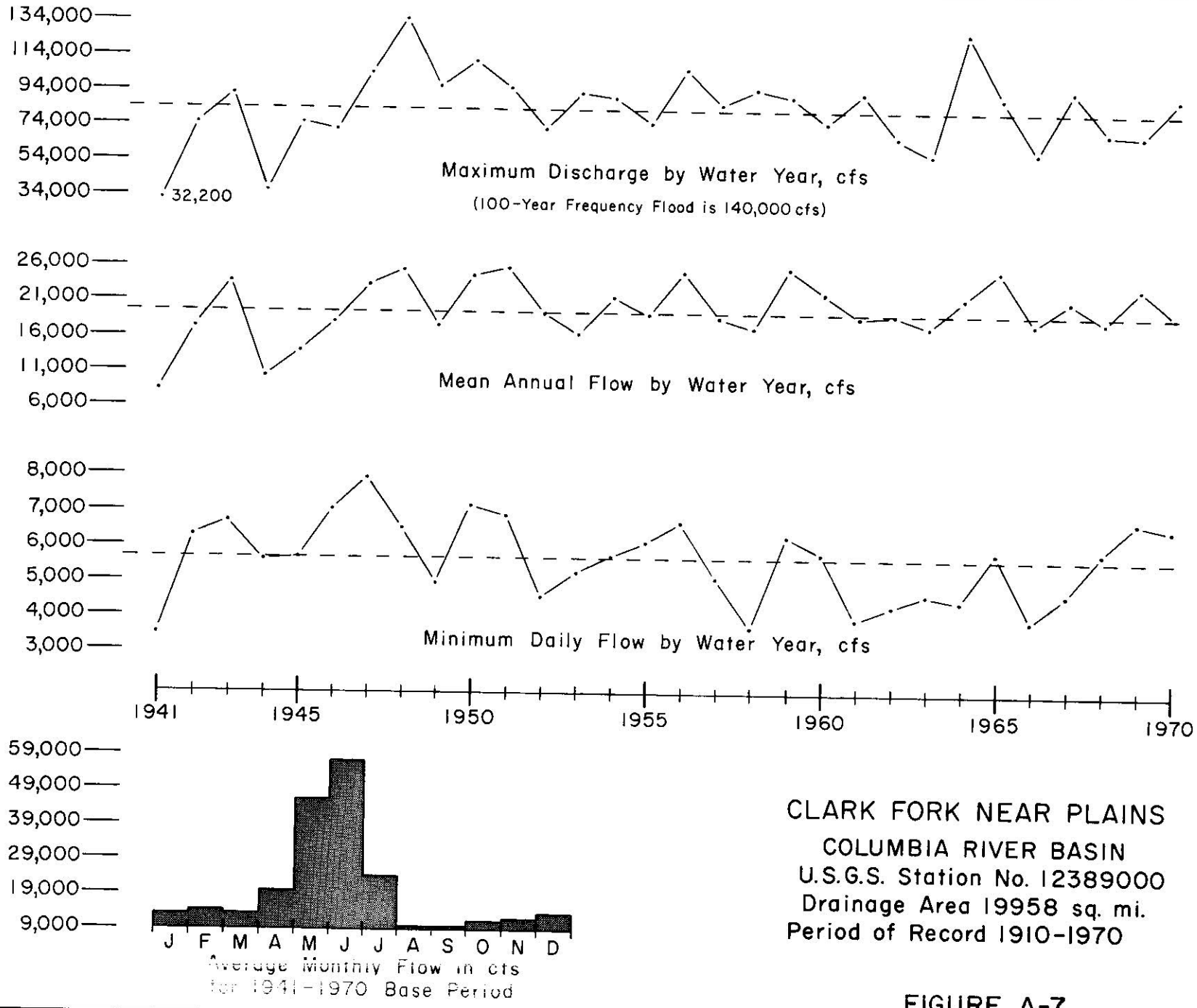
FIGURE A-5





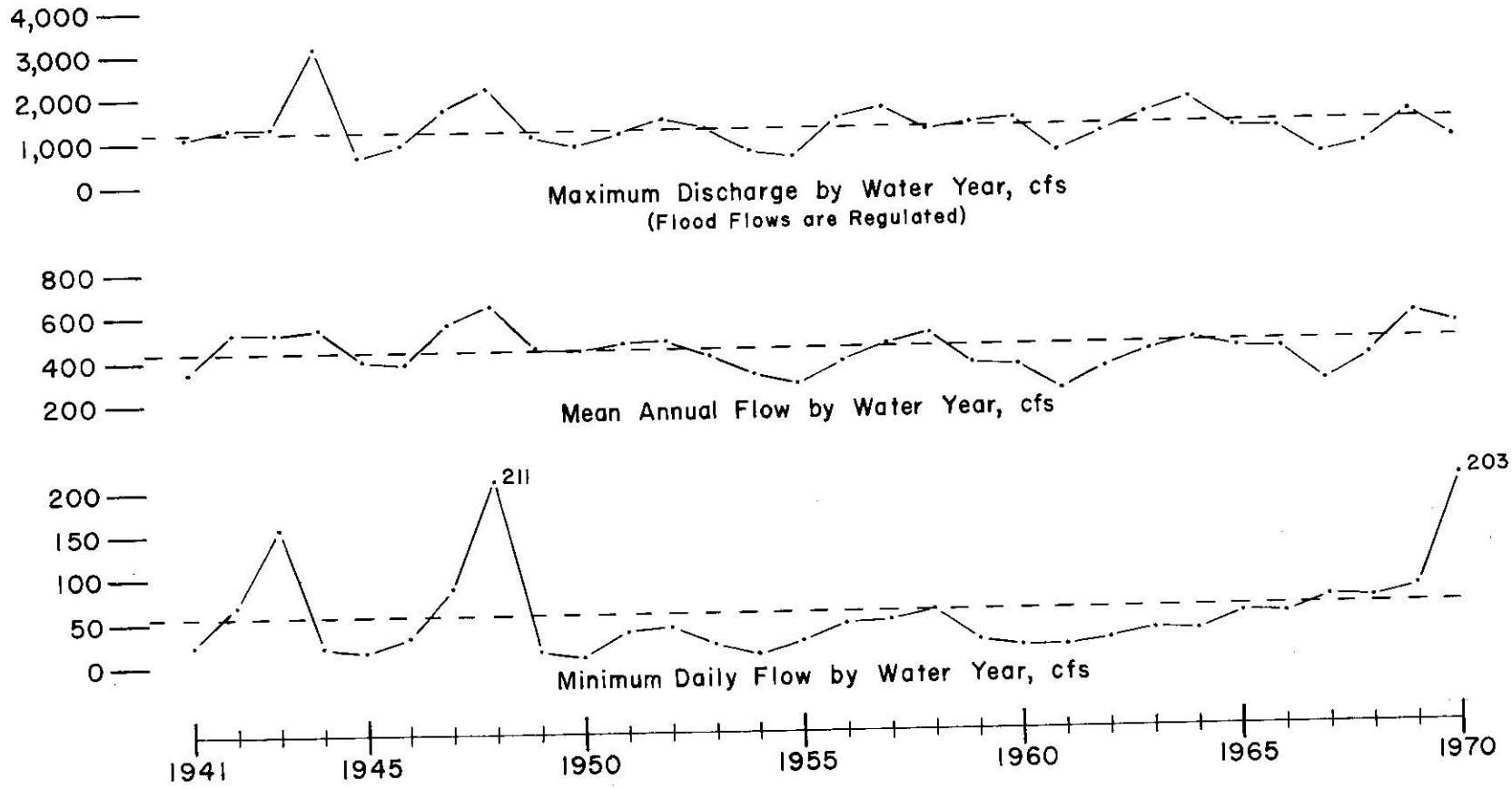
FLATHEAD RIVER NEAR POLSON
COLUMBIA RIVER BASIN
U.S.G.S. Station No. 12372000
Drainage Area 7096 sq. mi.
Period of Record 1907-1970

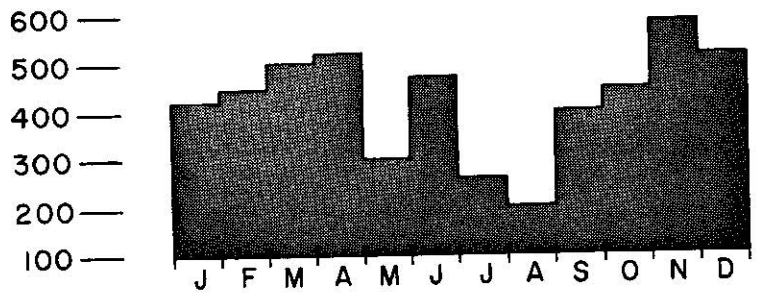
FIGURE A-6



CLARK FORK NEAR PLAINS
COLUMBIA RIVER BASIN
U.S.G.S. Station No. 12389000
Drainage Area 19958 sq. mi.
Period of Record 1910-1970

FIGURE A-7



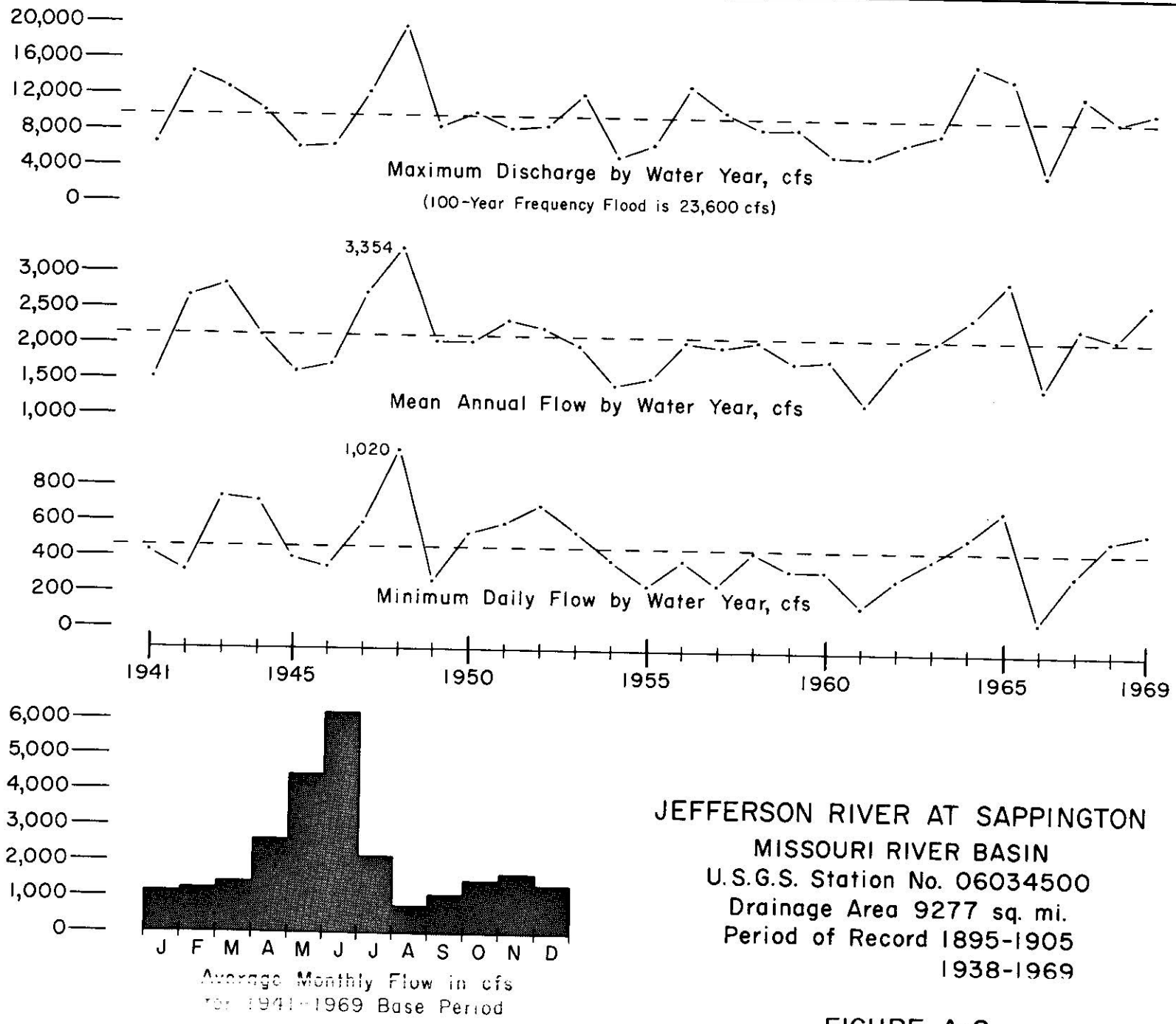


Average Monthly Flow in cfs
for 1941-1970 Base Period

BEAVERHEAD RIVER NEAR TWIN BRIDGES

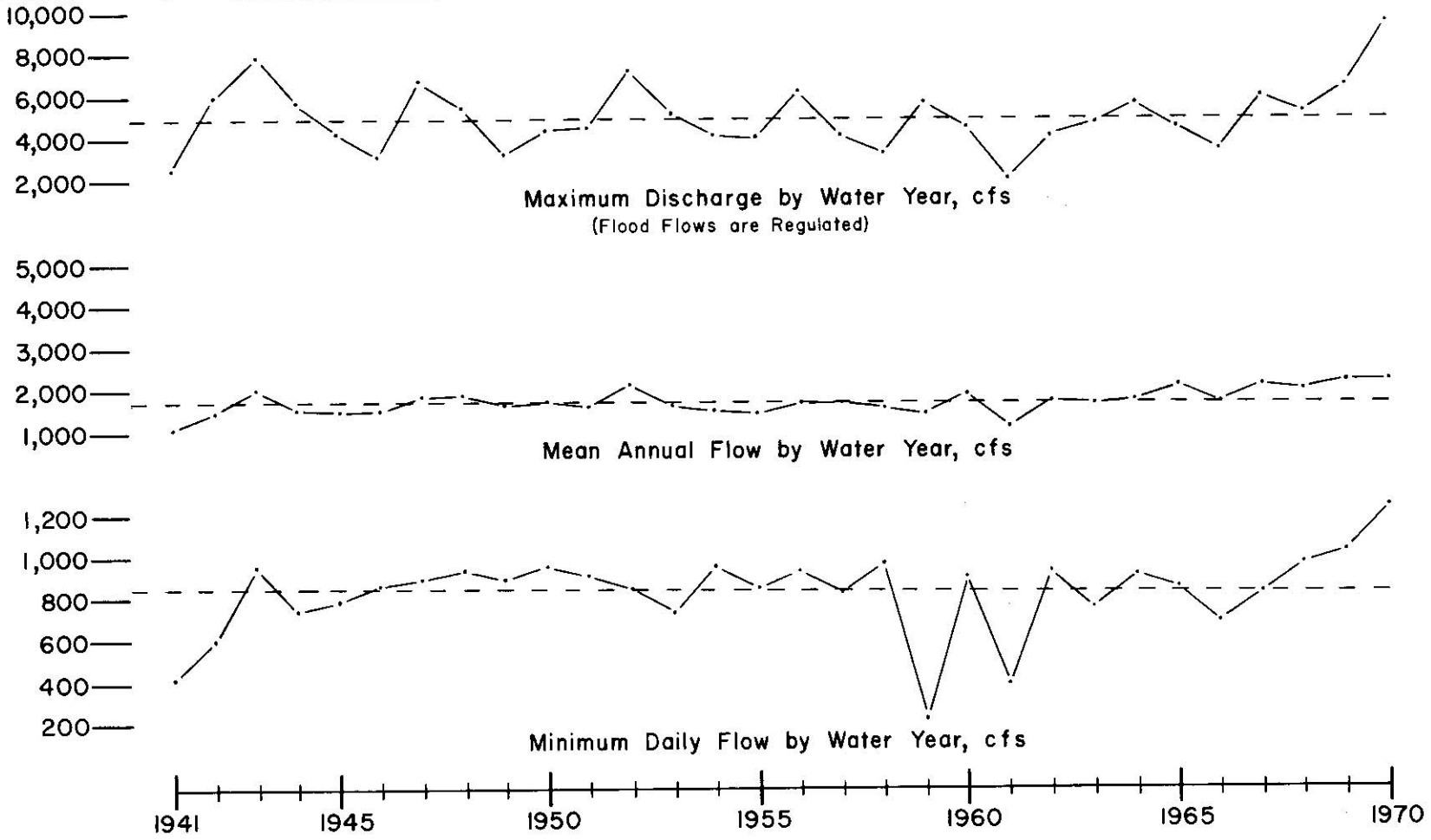
MISSOURI RIVER BASIN
U. S. G. S. Station No. 06018500
Drainage Area 3619 sq. mi.
Period of Record 1935-1970

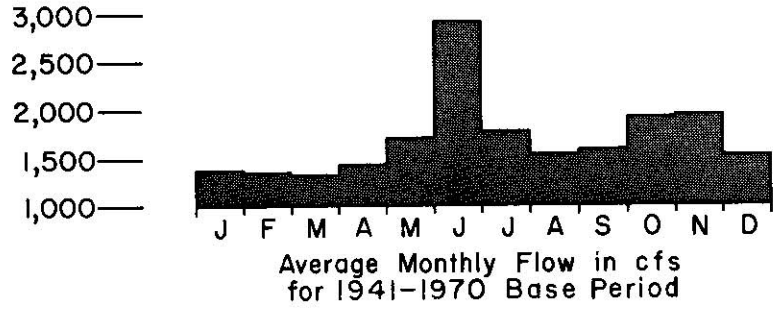
FIGURE A-8



JEFFERSON RIVER AT SAPPINGTON
MISSOURI RIVER BASIN
U.S.G.S. Station No. 06034500
Drainage Area 9277 sq. mi.
Period of Record 1895-1905
1938-1969

FIGURE A-9

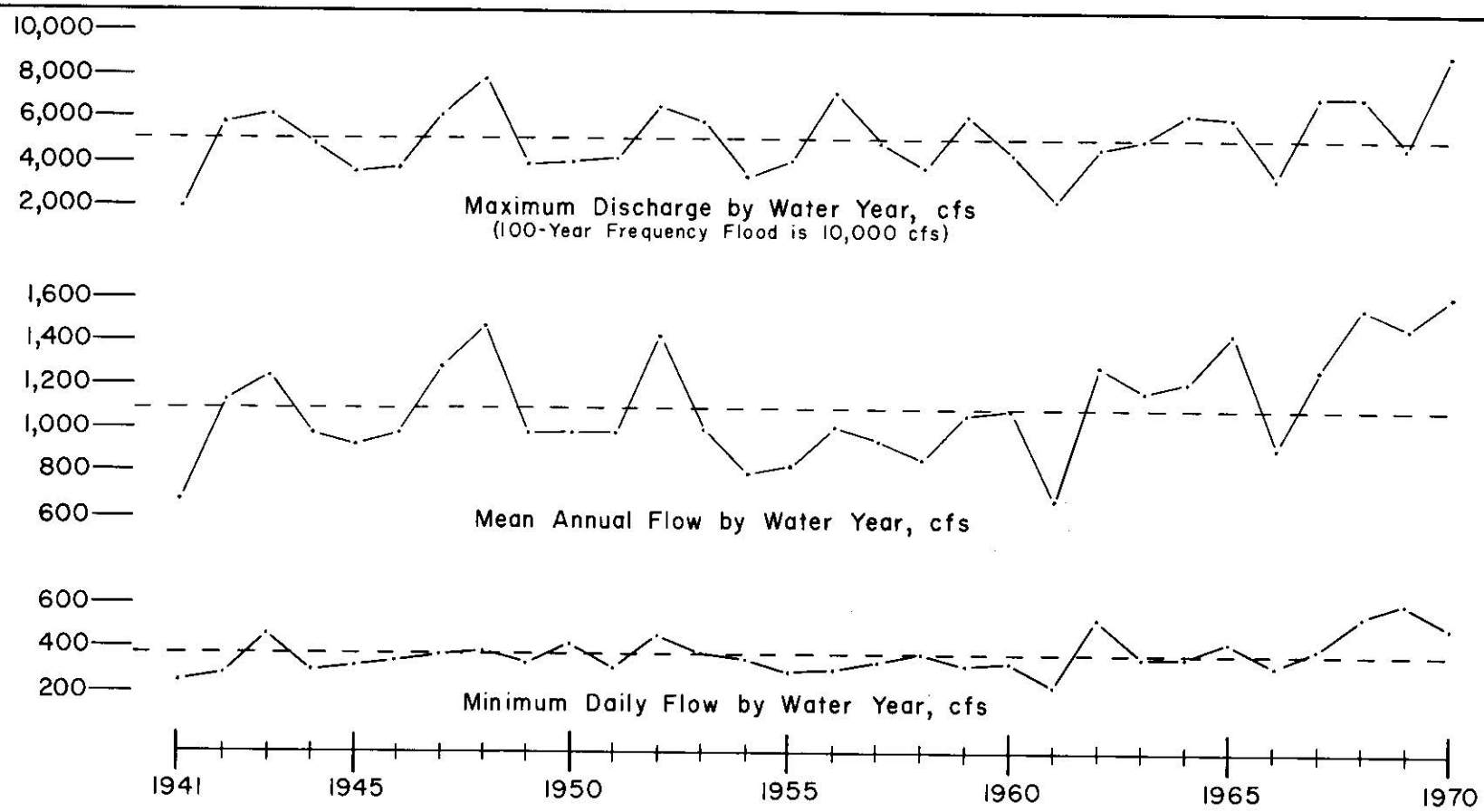


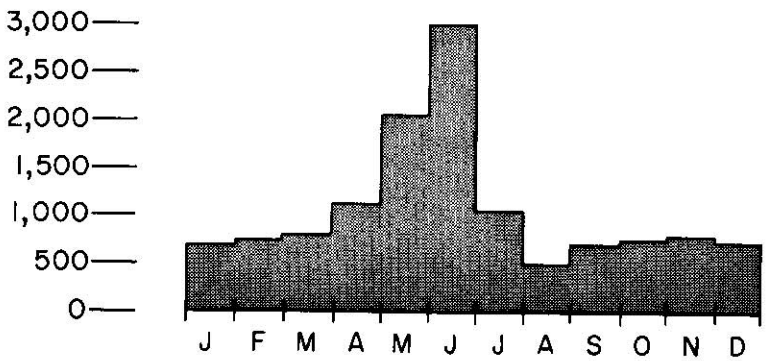


MADISON RIVER NEAR McALLISTER

MISSOURI RIVER BASIN
U. S. G. S. Station No. 06041000
Drainage Area 2186 sq. mi.
Period of Record 1901-1970

FIGURE A-10



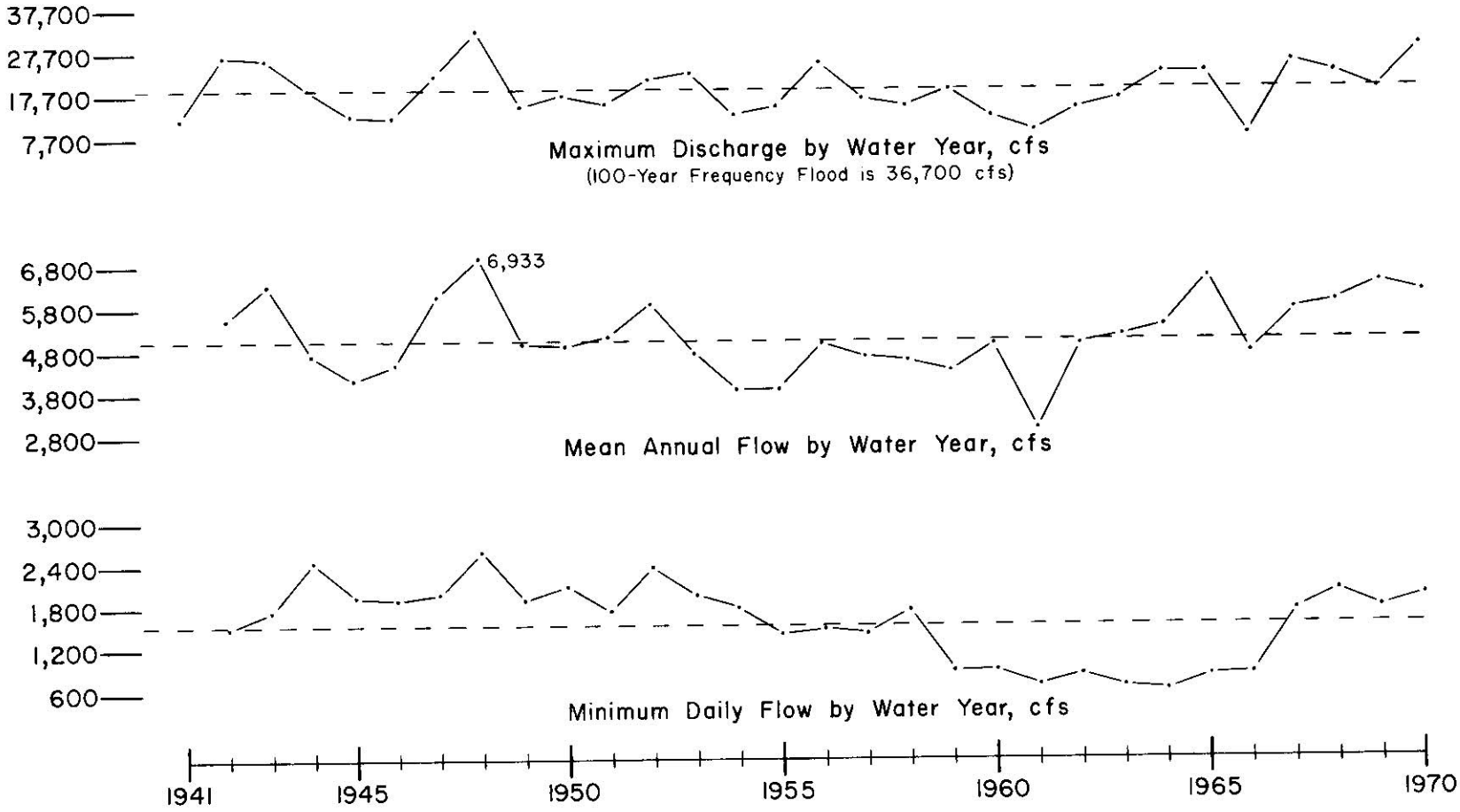


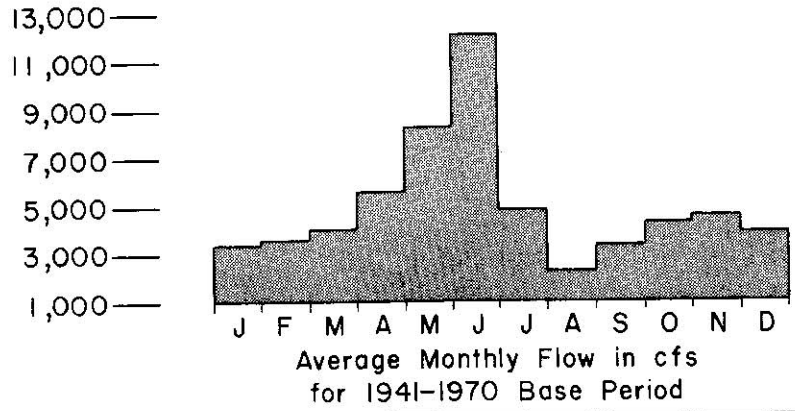
Average Monthly Flow in cfs
for 1941-1970 Base Period

GALLATIN RIVER AT LOGAN

MISSOURI RIVER BASIN
U. S. G. S. Station No. 06052500
Drainage Area 1795 sq. mi.
Period of Record 1893-1895
1928-1970

FIGURE A-11

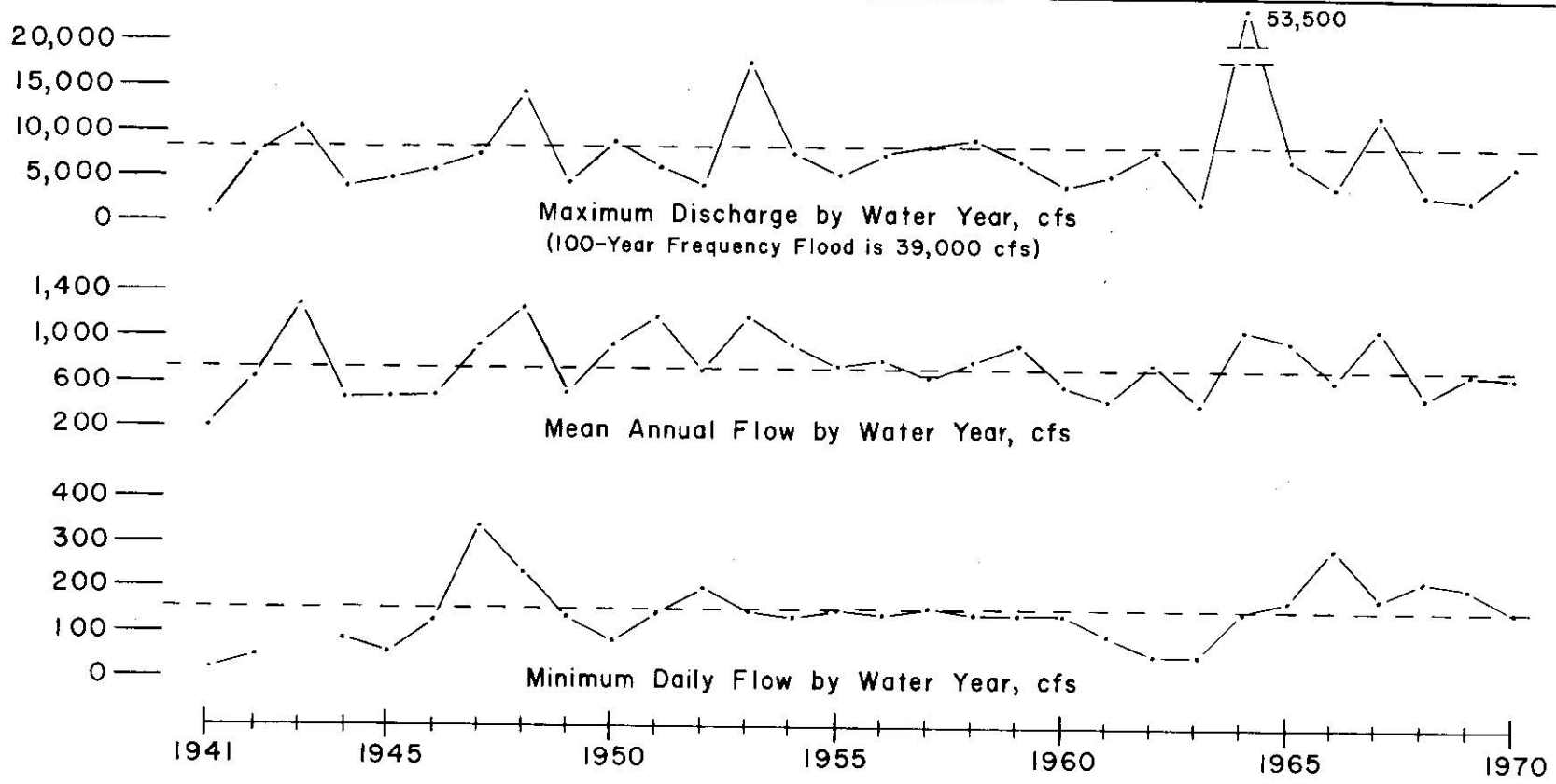


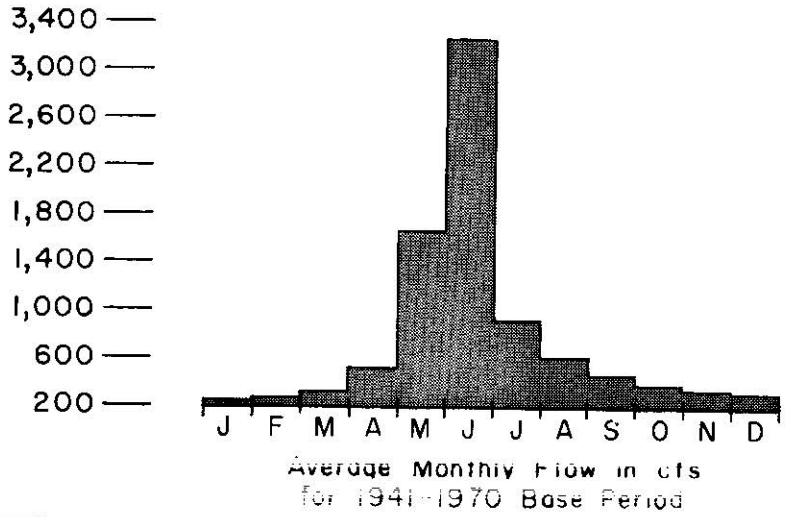


MISSOURI RIVER AT TOSTON

MISSOURI RIVER BASIN
U. S. G. S. Station No. 06054500
Drainage Area 14699 sq. mi.
Period of Record 1890-1891; 1910-1916
1941-1970

FIGURE A-12

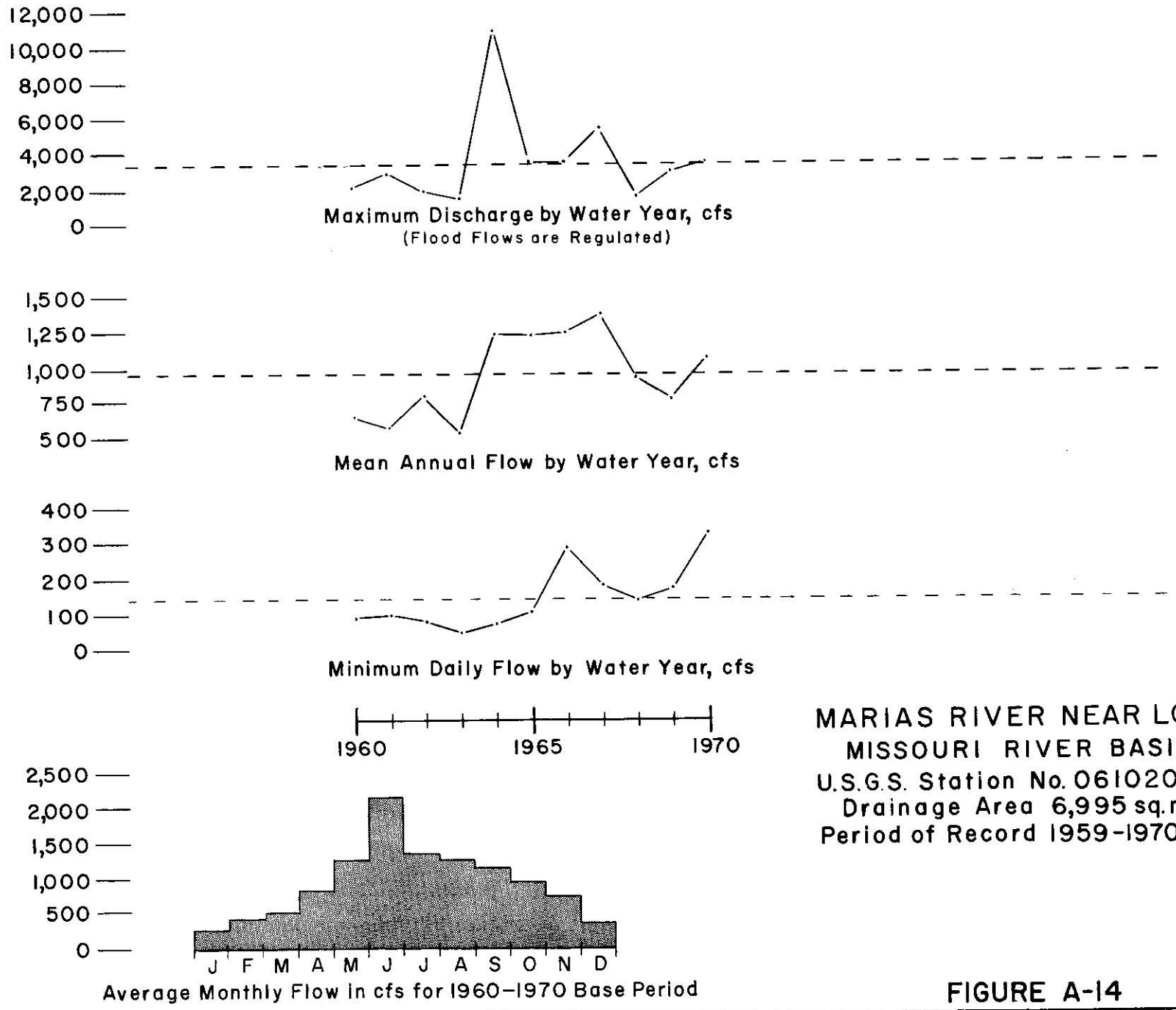




SUN RIVER NEAR VAUGHN

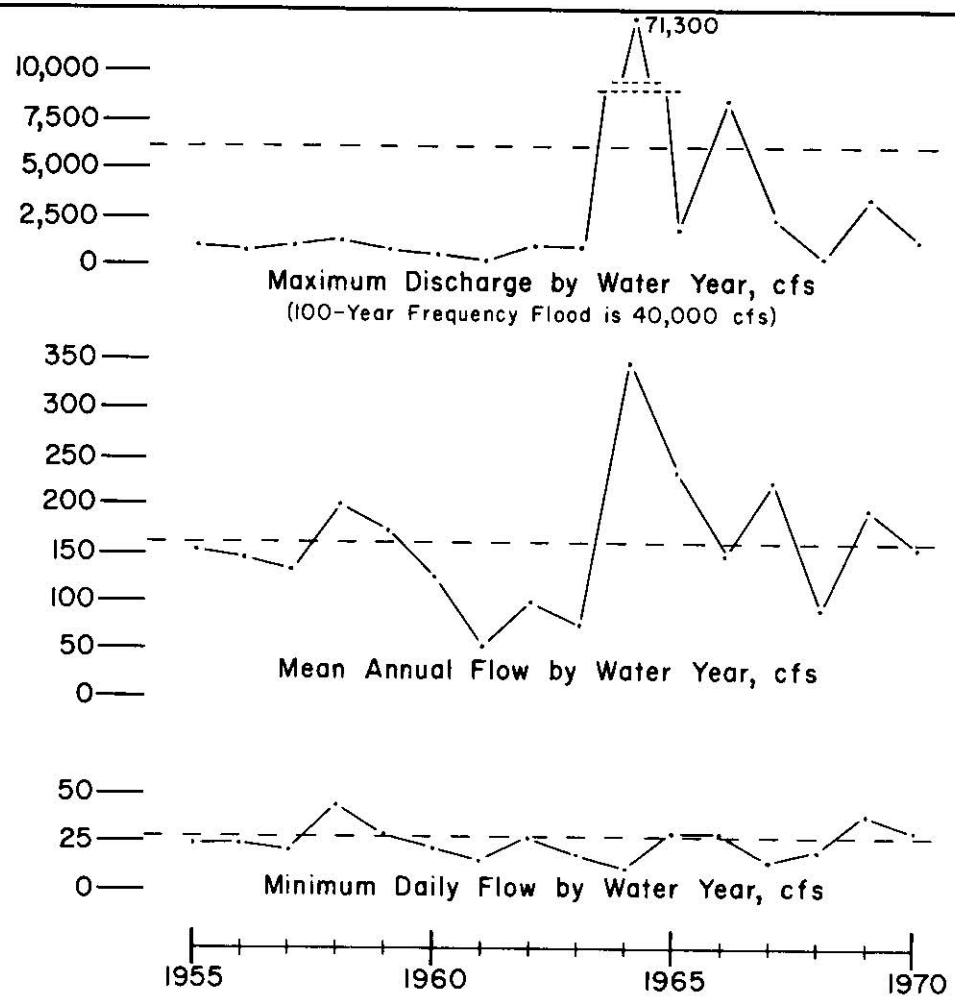
MISSOURI RIVER BASIN
U. S. G. S. Station No. 06089000
Drainage Area 1,854 sq. mi.
Period of Record 1897; 1934-1970

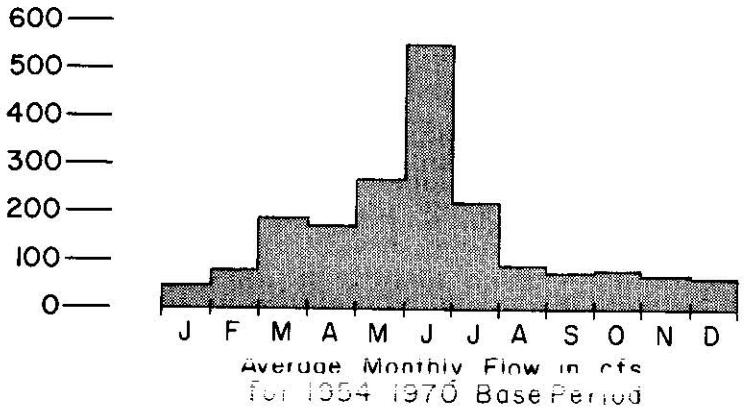
FIGURE A-13



MARIAS RIVER NEAR LOMA
MISSOURI RIVER BASIN
U.S.G.S. Station No. 06102050
Drainage Area 6,995 sq.mi
Period of Record 1959-1970

FIGURE A-14

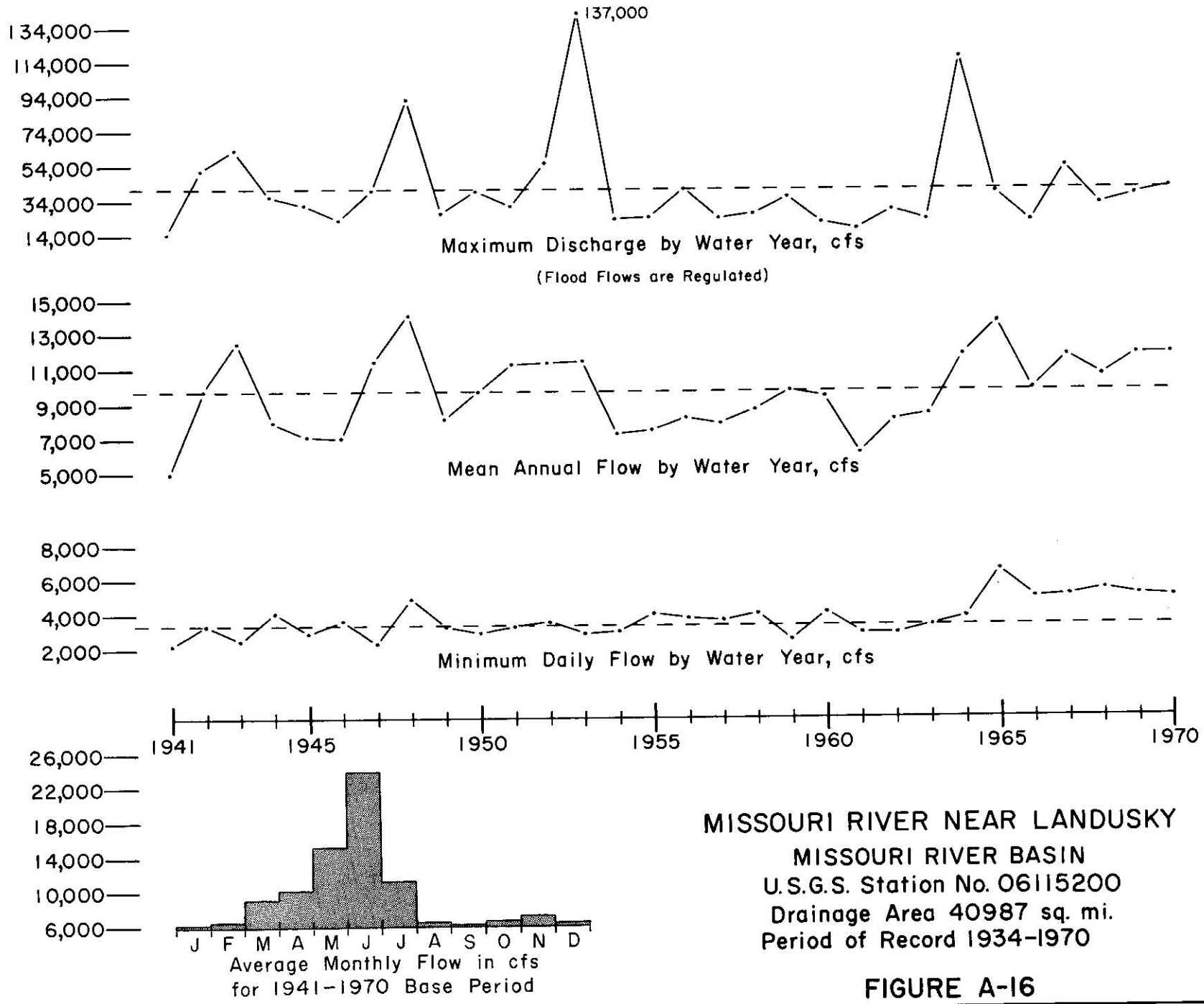




TETON RIVER NEAR DUTTON

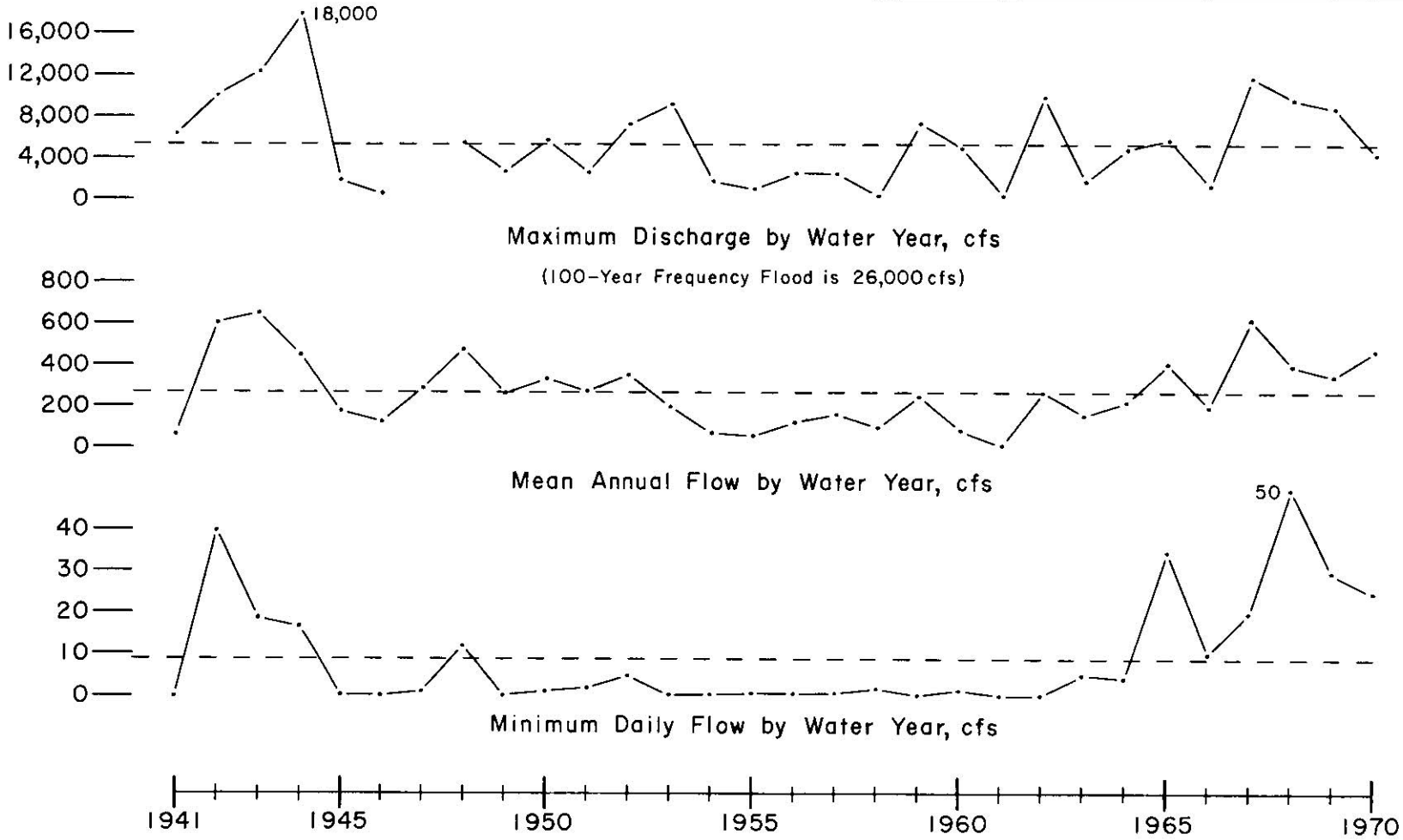
MISSOURI RIVER BASIN
U. S. G. S. Station No. 06108000
Drainage Area 1308 sq. mi.
Period of Record 1954-1970

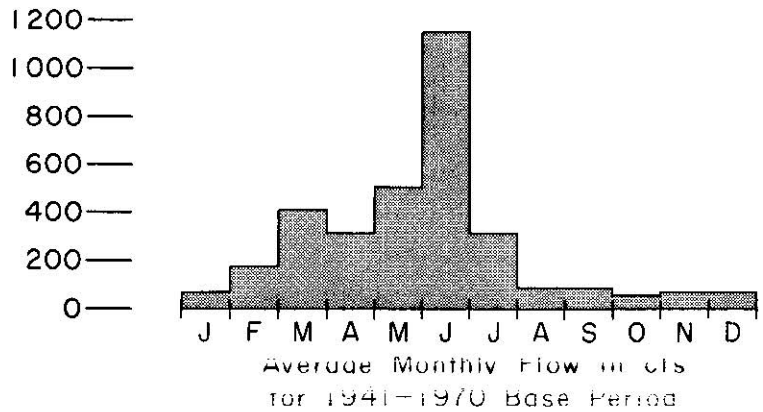
FIGURE A-15



MISSOURI RIVER NEAR LANDUSKY
MISSOURI RIVER BASIN
U.S.G.S. Station No. 06115200
Drainage Area 40987 sq. mi.
Period of Record 1934-1970

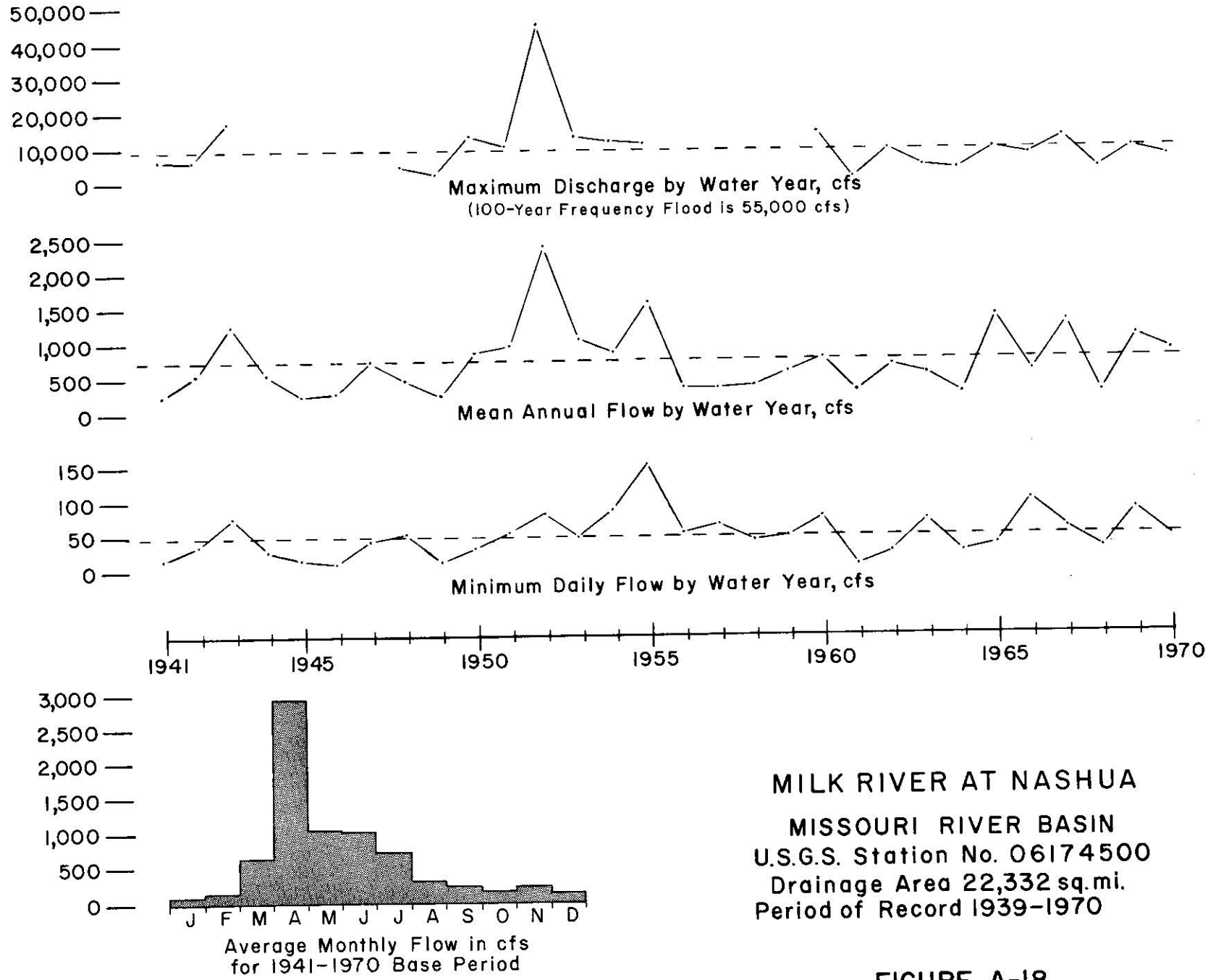
FIGURE A-16





MUSSELSHELL RIVER AT MOSBY
MISSOURI RIVER BASIN
U.S.G.S. Station No. 06130500
Drainage Area 7846 sq. mi.
Period of Record 1929; 1930-1932
1934-1970

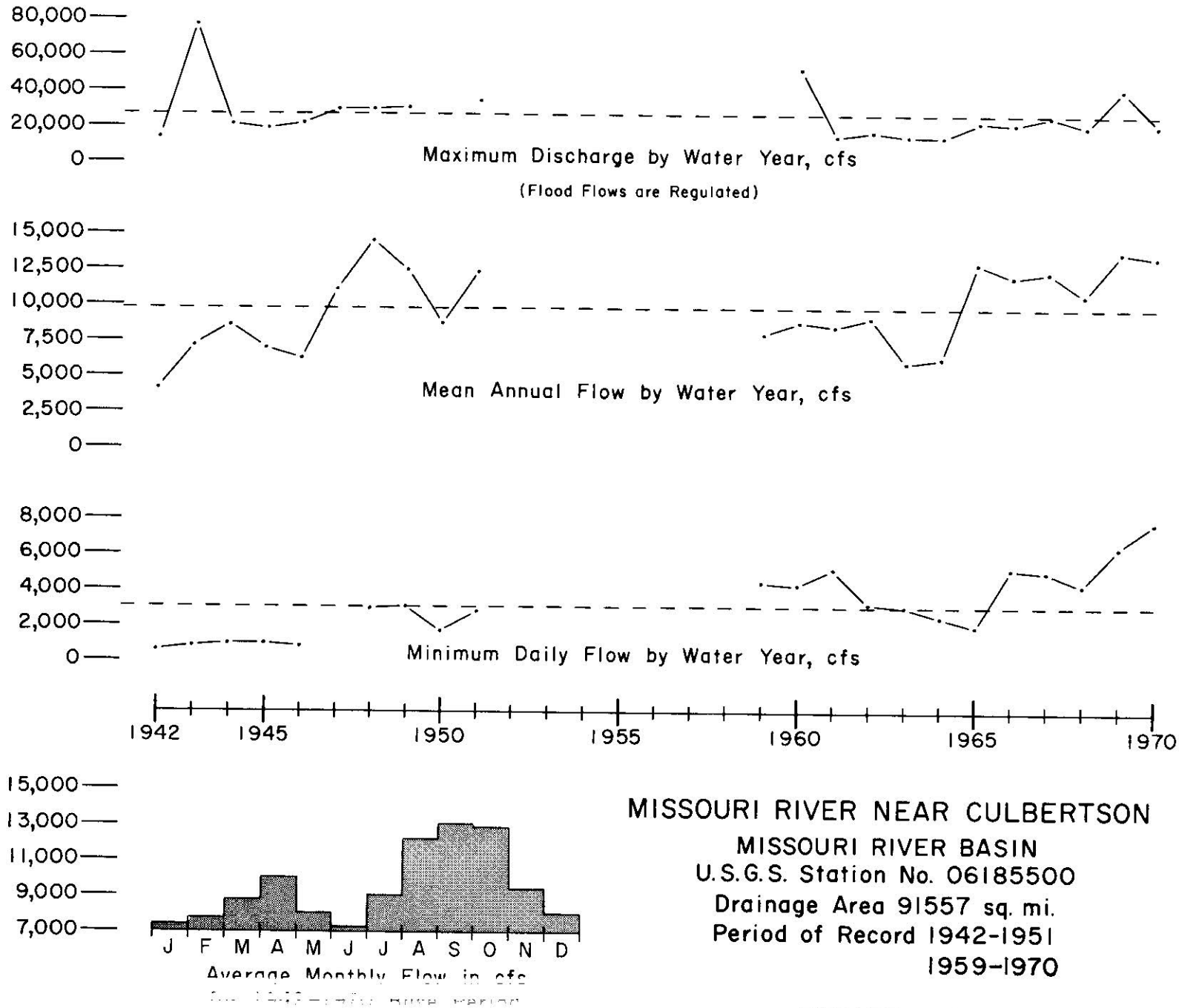
FIGURE A-17



MILK RIVER AT NASHUA

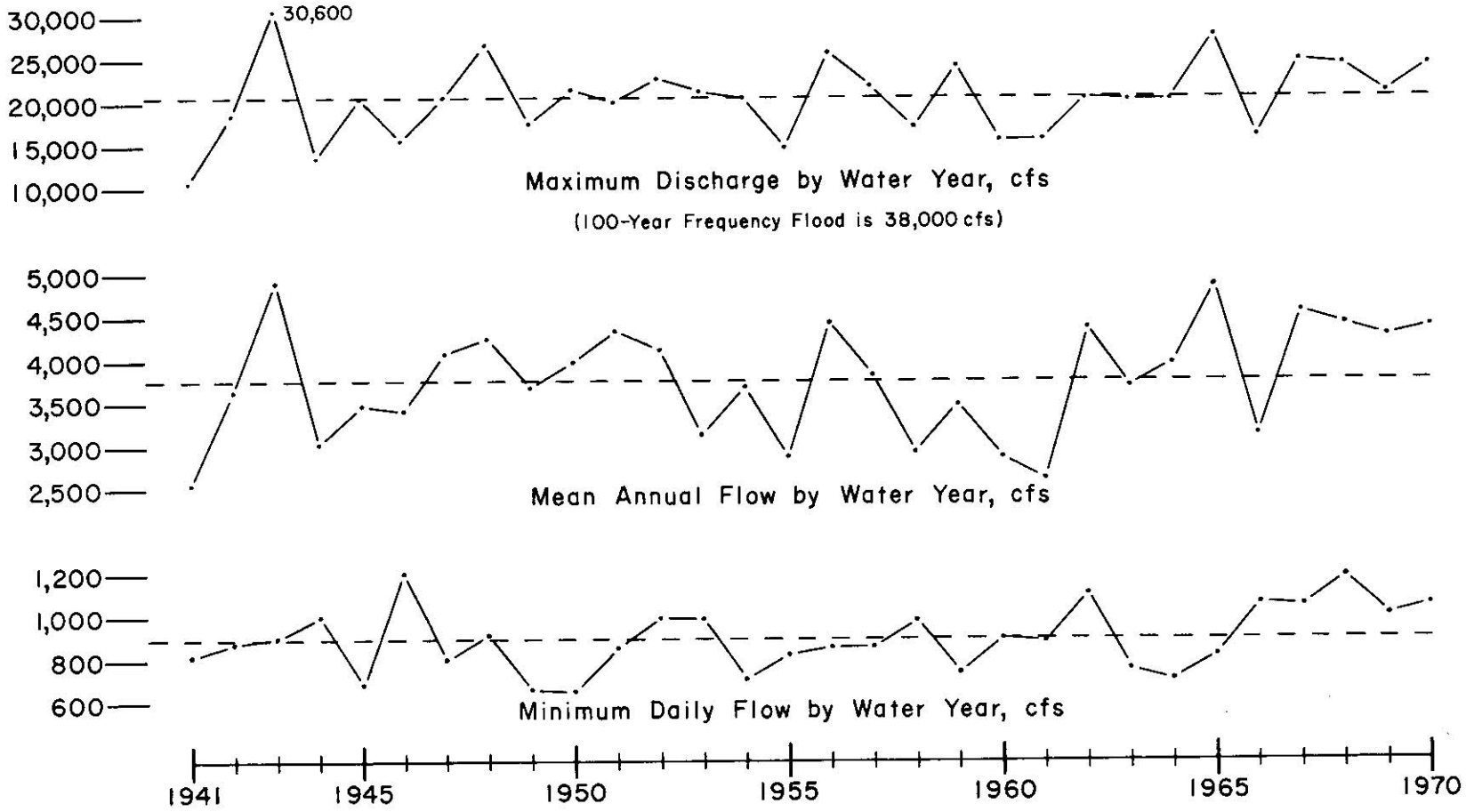
MISSOURI RIVER BASIN
U.S.G.S. Station No. 06174500
Drainage Area 22,332 sq.mi.
Period of Record 1939-1970

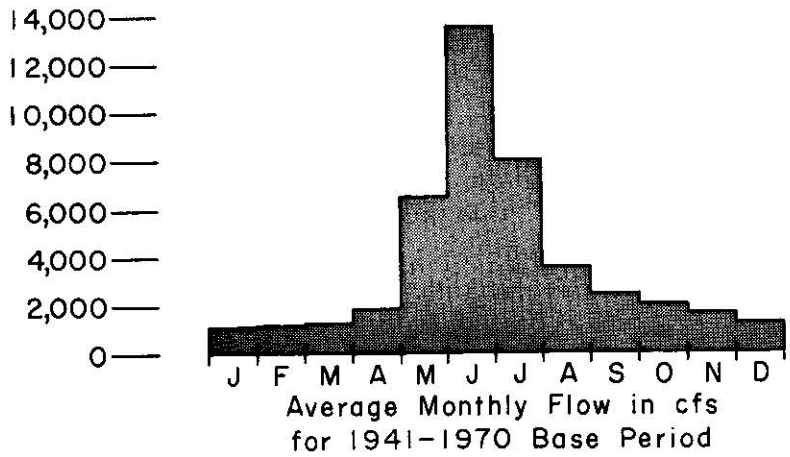
FIGURE A-18



MISSOURI RIVER NEAR CULBERTSON
MISSOURI RIVER BASIN
U.S.G.S. Station No. 06185500
Drainage Area 91557 sq. mi.
Period of Record 1942-1951
1959-1970

FIGURE A-19





YELLOWSTONE RIVER NEAR LIVINGSTON

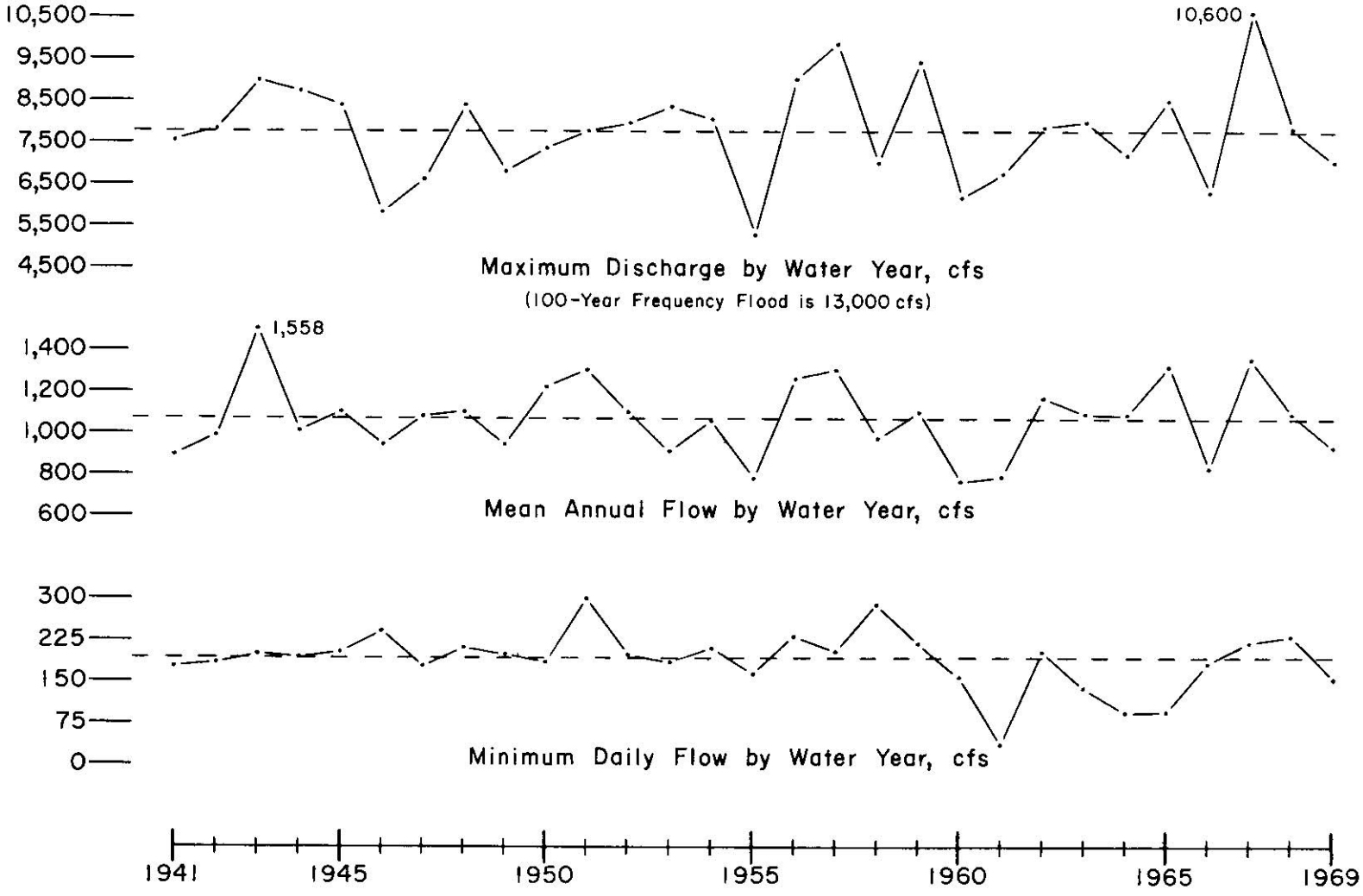
YELLOWSTONE RIVER BASIN

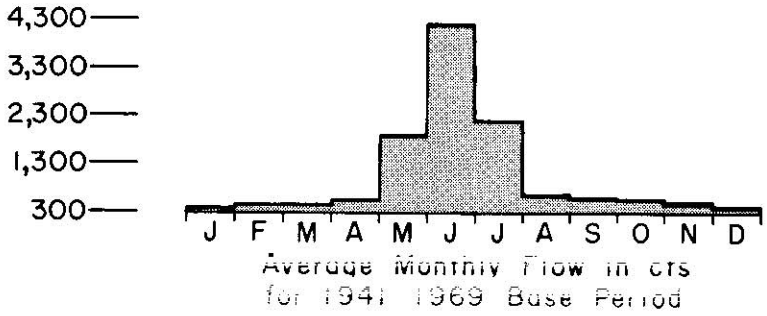
U.S.G.S. Station No. 06192500

Drainage Area 3551 sq. mi.

Period of Record 1897-1905; 1928-1932
1937-1970

FIGURE A-20

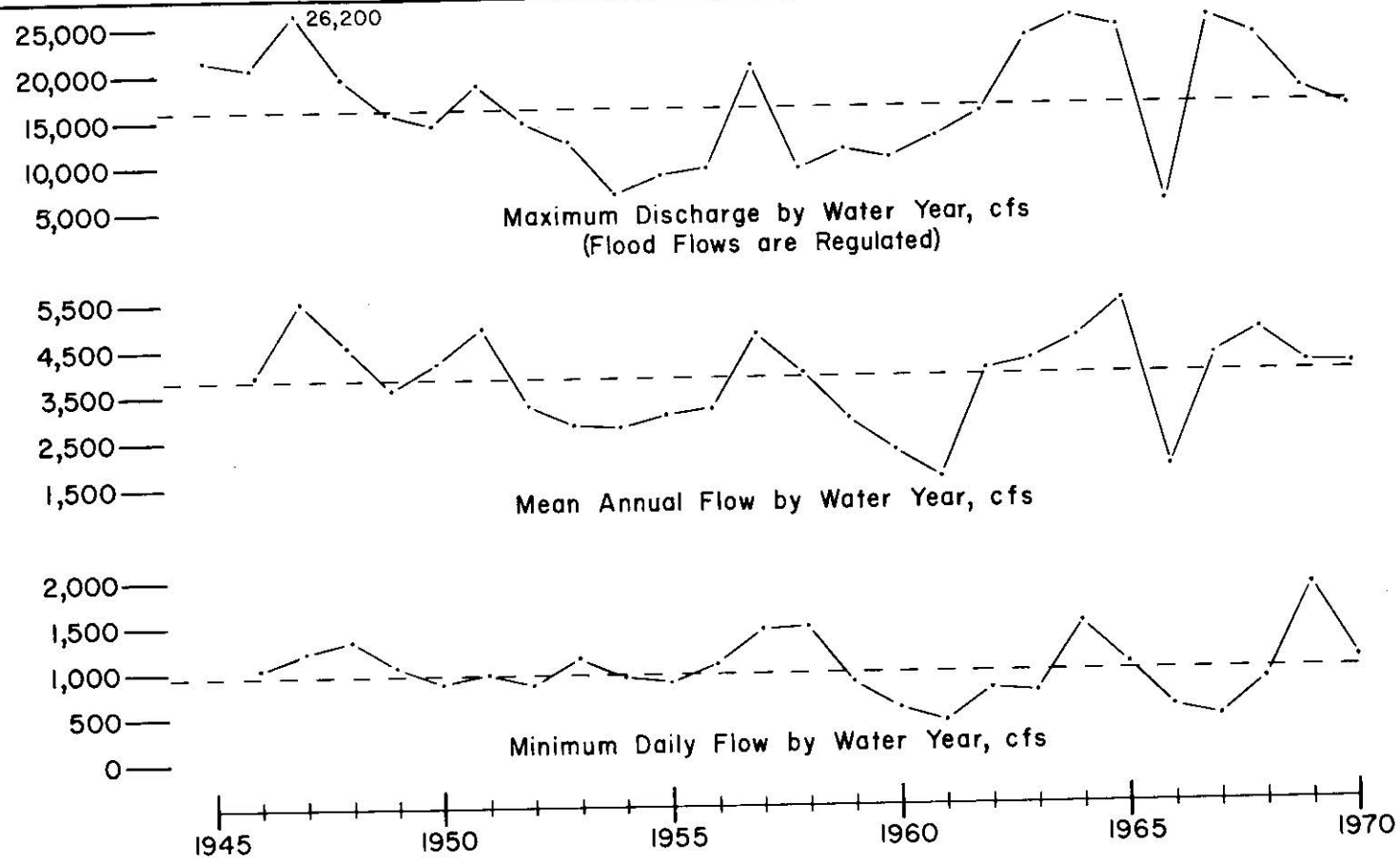


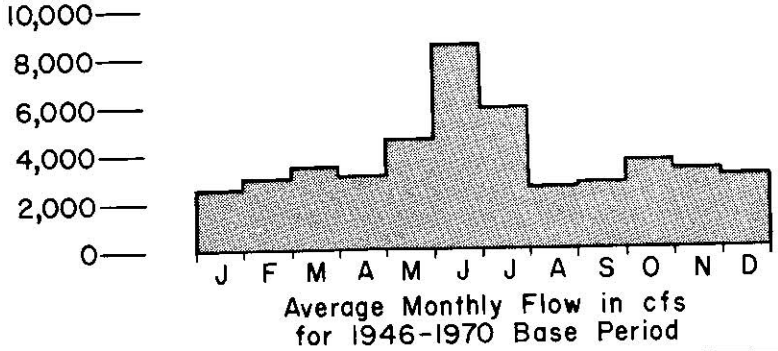


CLARKS FORK YELLOWSTONE AT EDGAR

YELLOWSTONE RIVER BASIN
U.S.G.S. Station No. 06208500
Drainage Area 2032 sq. mi.
Period of Record 1921-1969

FIGURE A-21

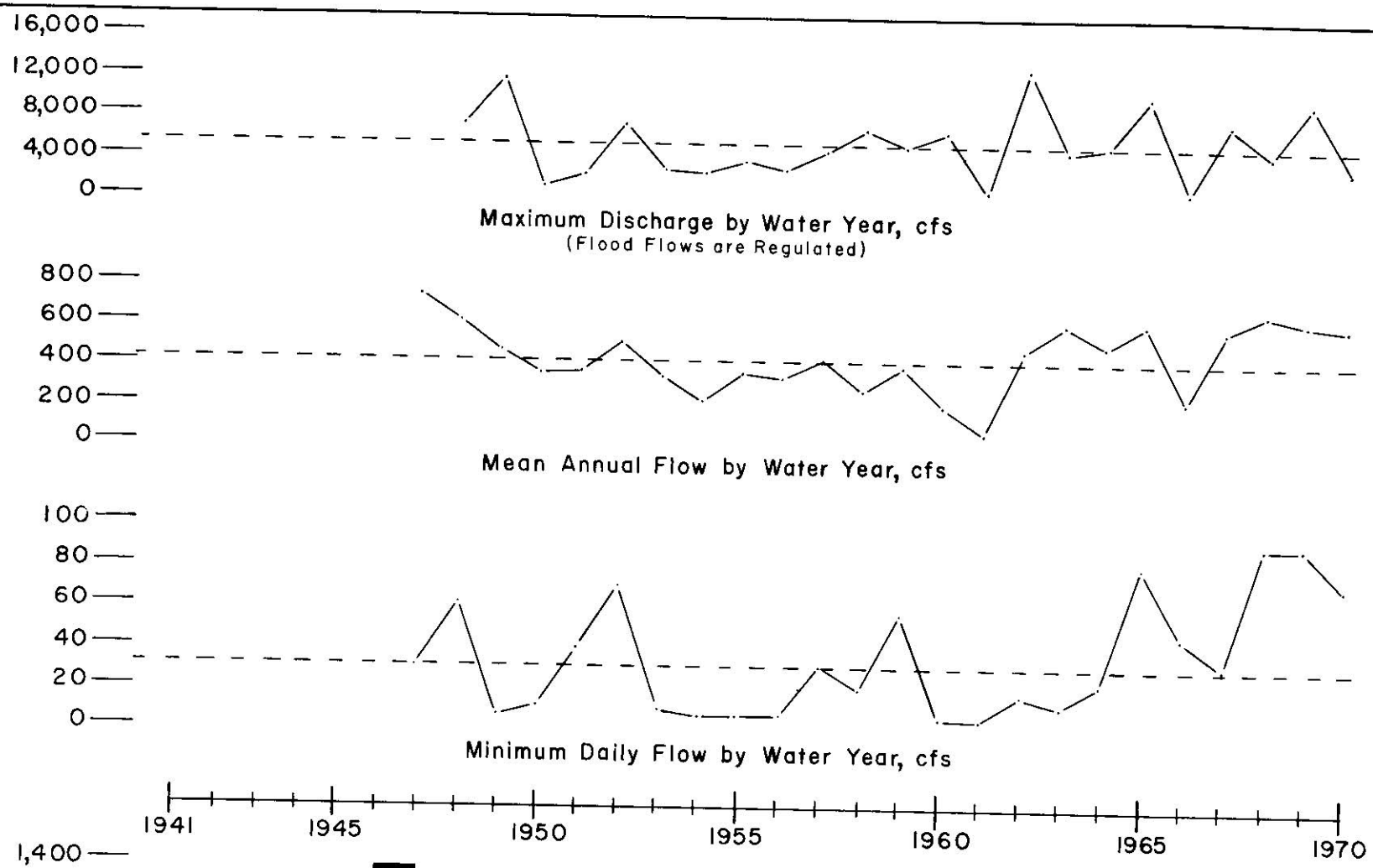


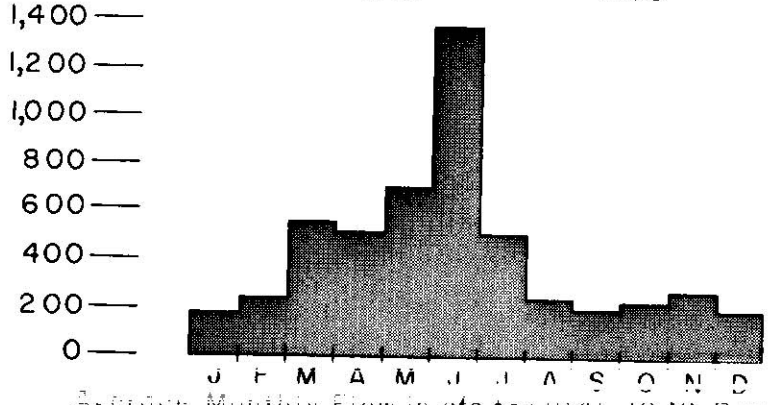


BIGHORN RIVER AT BIGHORN

YELLOWSTONE RIVER BASIN
U. S. G. S. Station No. 06294700
Drainage Area 22885 sq. mi.
Period of Record 1945-1970

FIGURE A-22

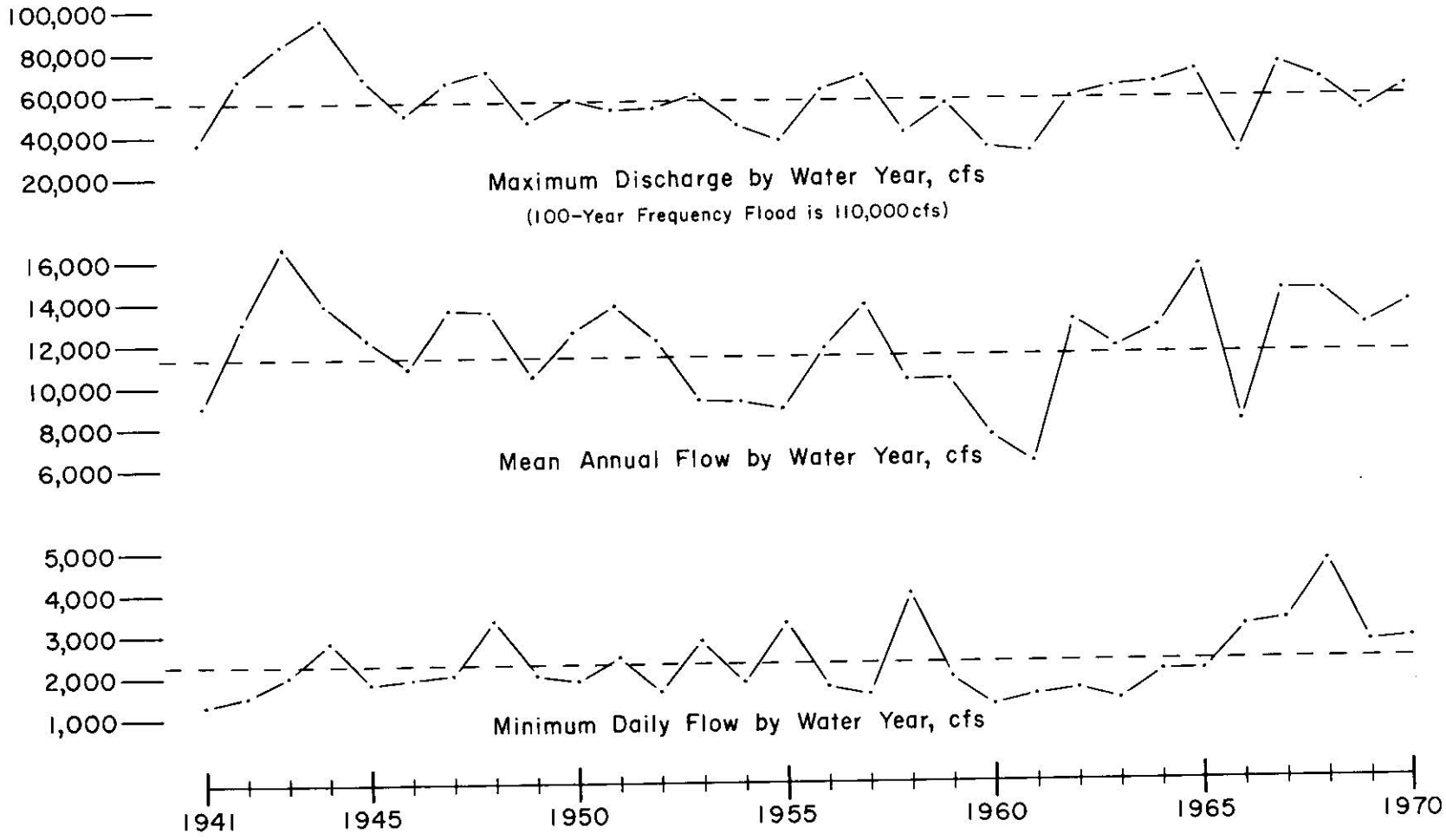


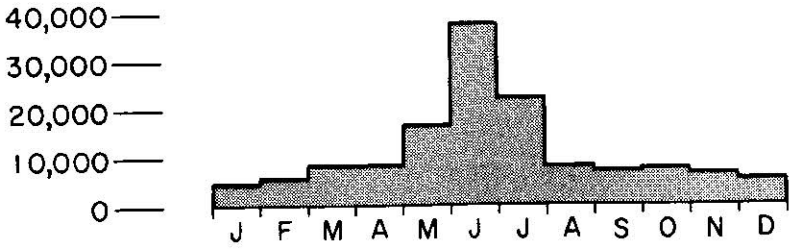


Average Monthly Flow in cfs for 1941-1970 Base Period

TONGUE RIVER AT MILES CITY
YELLOWSTONE RIVER BASIN
U.S.G.S. Station No. 06308500
Drainage Area 5,379 sq.mi
Period of Record 1938-1942
1946-1970

FIGURE A-23



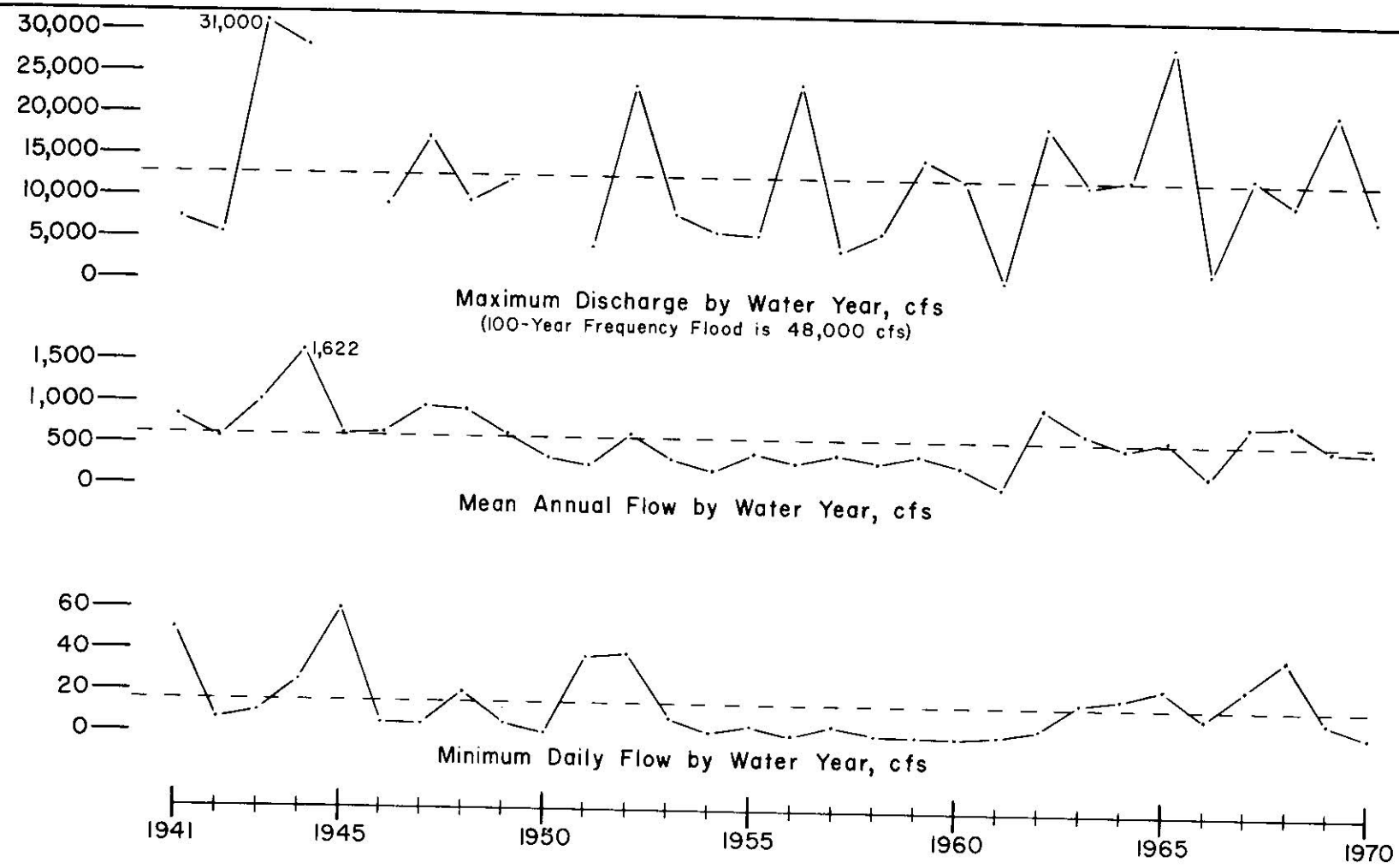


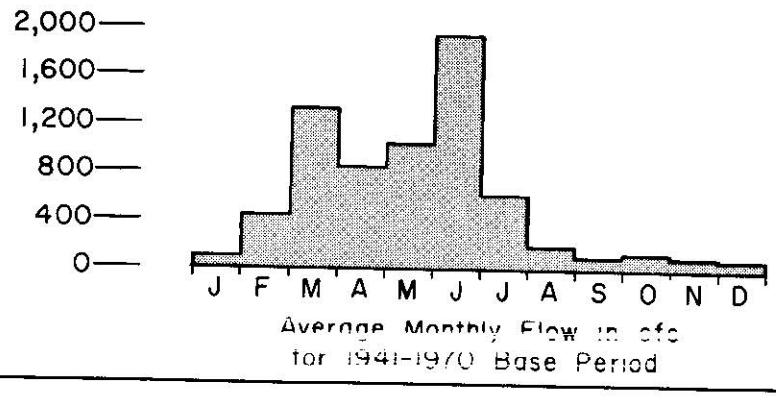
Average Monthly Flow in cfs
for 1941–1970 Base Period

YELLOWSTONE RIVER AT MILES CITY

YELLOWSTONE RIVER BASIN
U.S.G.S. Station No. 06309000
Drainage Area 48253 sq. mi.
Period of Record 1922–1923
1928–1970

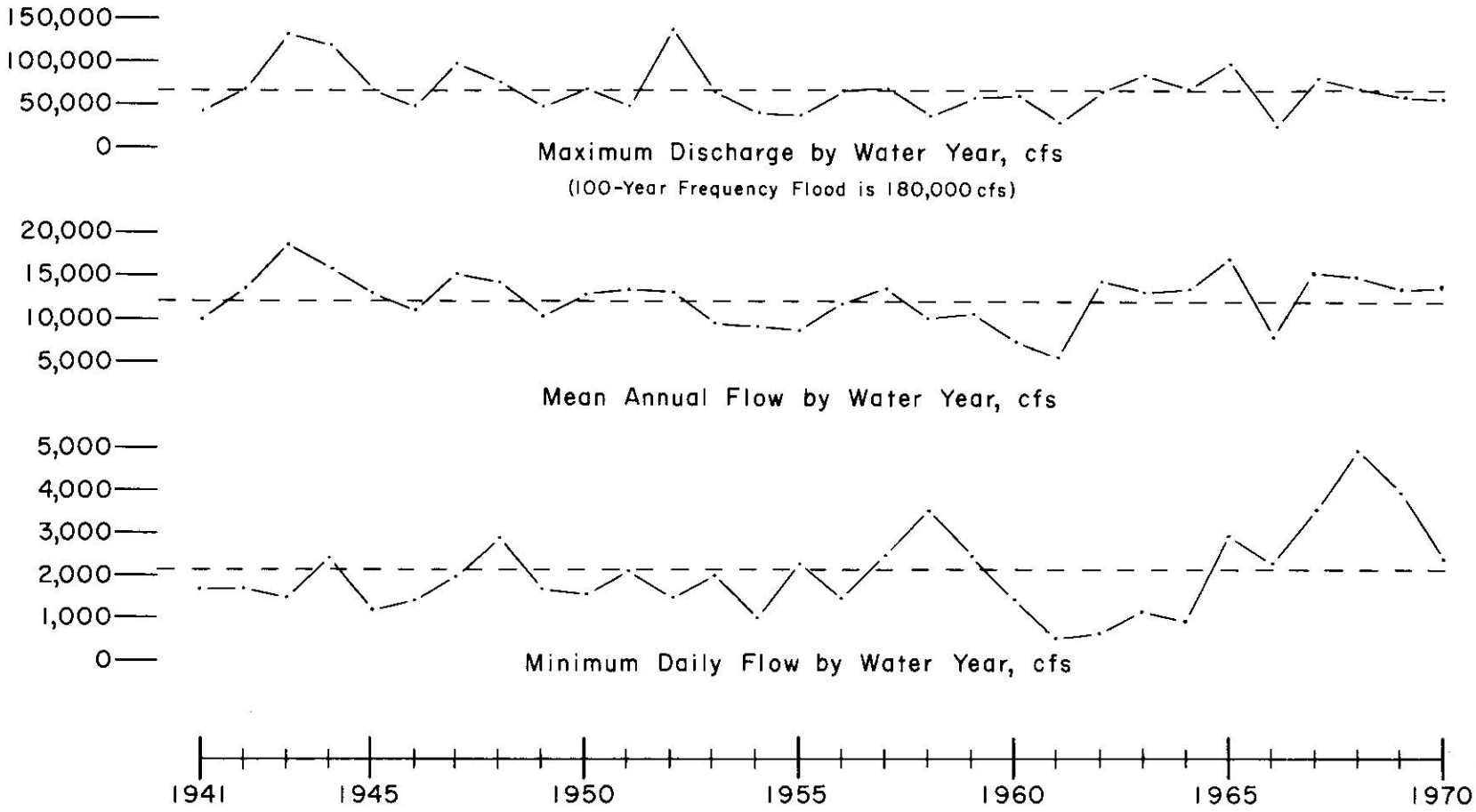
FIGURE A-24

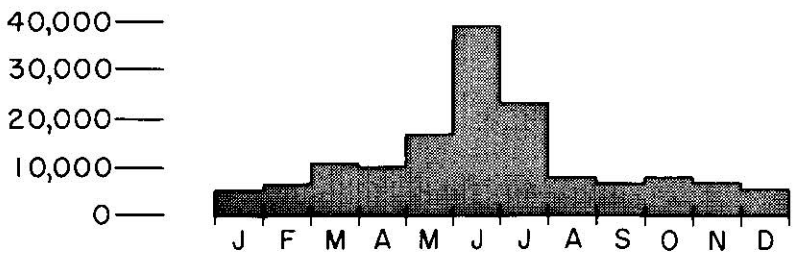




POWDER RIVER NEAR LOCATE
YELLOWSTONE RIVER BASIN
U.S.G.S. Station No. 06326500
Drainage Area 13189 sq. mi.
Period of Record 1938-1970

FIGURE A-25





Average Monthly Flow in cfs
for 1941–1970 Base Period

YELLOWSTONE RIVER NEAR SIDNEY

YELLOWSTONE RIVER BASIN
U.S.G.S. Station No. 06329500
Drainage Area 68812 sq. mi.
Period of Record 1910–1931
1933–1970

FIGURE A-26