GOOSEBERRY RESERVOIR
Carbon-Sanpete Counties - Proposal Study 1/

Analysis of the Scofield basin was made from a water supply, use, and time basis.

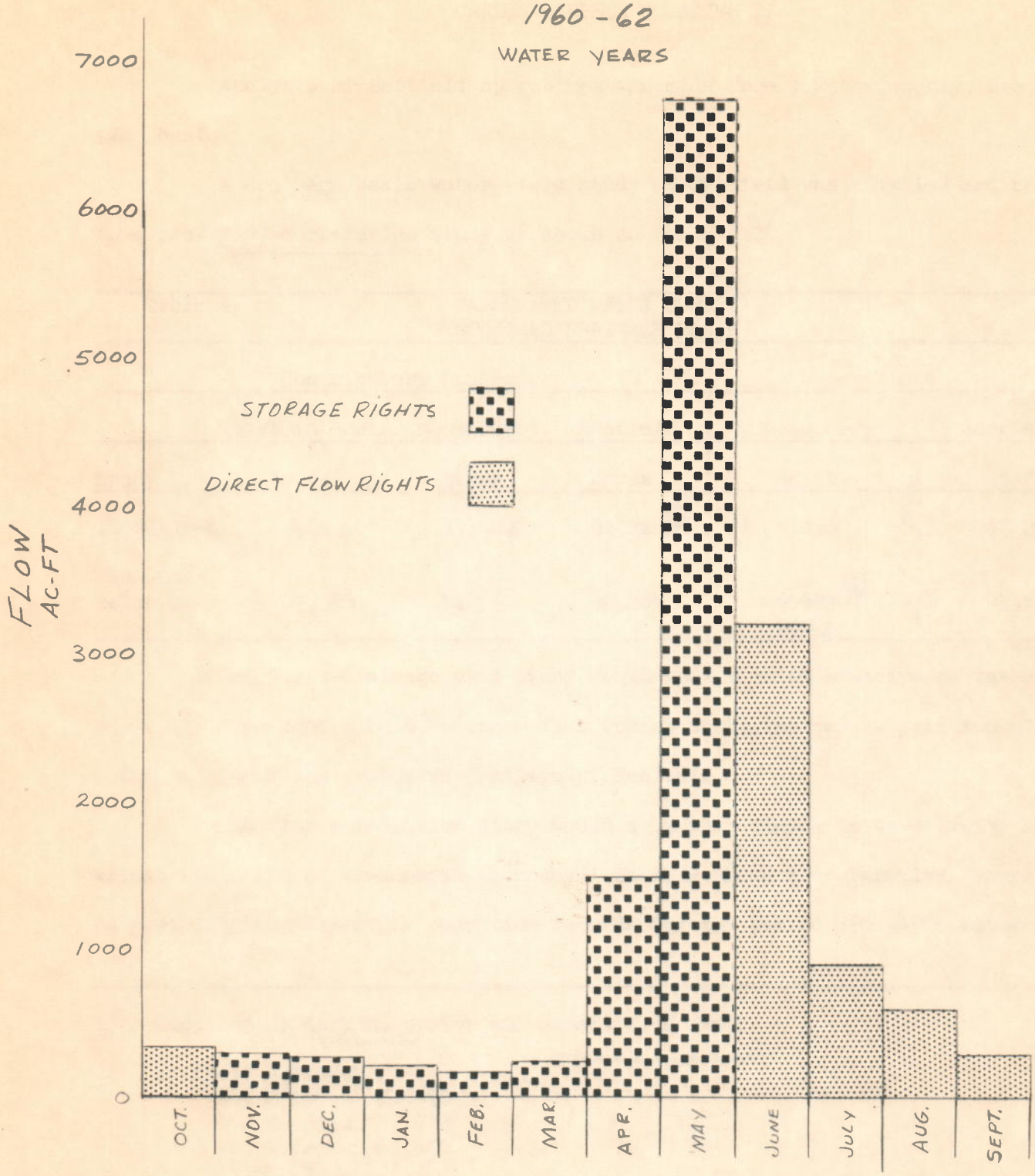
The amount of water available to be stored in a reservoir constructed at the Narrows Site for diversion to irrigate Sanpete County lands and the feasibility of such a project has been the subject of many studies by governmental and private agencies. It has also furnished fuel for arguments by Carbon and Sanpete County interests. Most of the past studies have been made on a scope wide enough to include all phases of the construction of the Gooseberry Reservoir at the Narrows Site. Little has been accomplished up to this time in assisting the water users involved in the acceptance of a water supply schedule that could cover the water division between Scofield Reservoir and the proposed Gooseberry dam.

In response to the request for assistance on this problem, the State Engineer's Office has worked out a proposed schedule for Price River-Gooseberry Reservoir operations. The proposed schedule was developed from a water yield study correlated with a past reservoir operations study of Scofield Reservoir. The Resource Division compiled a flow correlation based on the U.S.G.S. Gaging Stations at Gooseberry Creek near Fairview and Gooseberry Creek near Scofield for the period 1941 through 1963. This study is included as Table I in this report.

1/ Compiled by Donald C. Norseth and Earl M. Staker from information from studies of other agencies, other divisions of the State Engineer's office and from available basic material

2/ Compiled by Jack Barnett and Francis Mayo

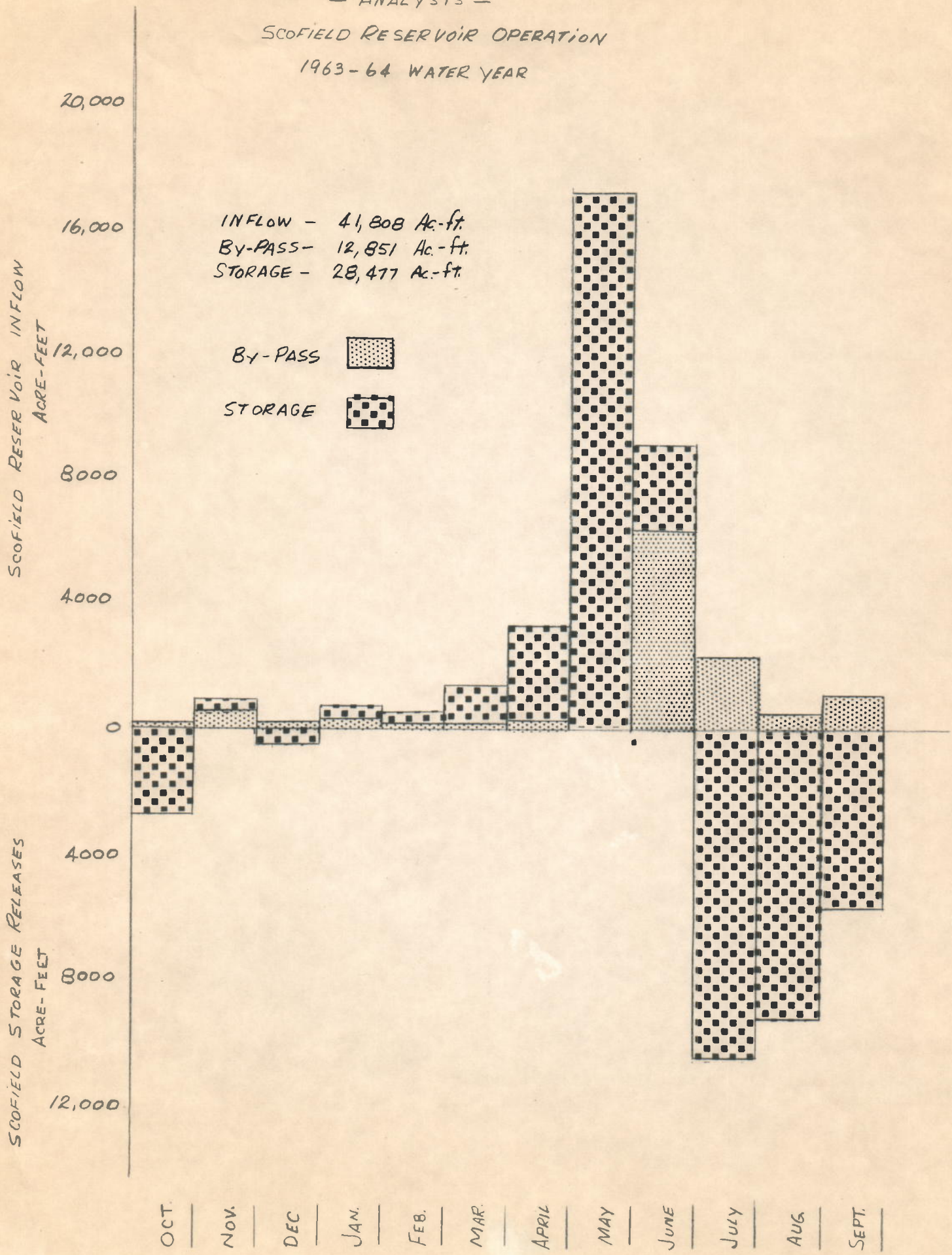
GOOSEBERRY CREEK NEAR SCOFIELD
1960 - 62
WATER YEARS



— ANALYSIS —

SCOFIELD RESERVOIR OPERATION

1963-64 WATER YEAR



Water Year	Gooseberry Cr. Nr. Scofield	Gooseberry Cr. Nr. Fairview	Gooseberry Cr. Nr. Scofield June - Sept.	Gooseberry Cr. Nr. Fairview June-Sept est.	Gooseberry Cr. Nr. Scofield during Storage Period (Oct.-May)	Amount available for Gooseberry Project if Scofield Gets The First 12,020 at Mammoth	Gooseberry Cr. Nr. Fairview during Storage Period (Oct.-May)
1941	19,910	11,000	7,599	4,200	12,311	291	6,800
1942	21,120	11,550	6,439	3,520	14,681	2,661	8,030
1943	11,810	6,550	4,759	2,640	7,051	0	3,910
1944	16,870	9,250	7,339	4,030	9,531	0	5,220
1945	15,750	8,700	6,304	3,480	9,446	0	5,220
1946	10,520	5,800	2,516	1,390	8,004	0	4,410
1947	13,610	7,550	3,477	1,930	10,133	0	5,620
1948	9,240	5,200	2,619	1,470	6,621	0	3,730
1949	16,150	8,900	4,331	2,390	11,819	0	6,510
1950	11,670	6,500	3,911	2,180	7,759	0	4,320
1951	12,970	7,200	4,166	2,310	8,804	0	4,890
1952	29,520	16,100	12,217	6,660	17,303	5,283	9,440
1953	12,200	6,800	5,956	3,320	6,244	0	3,480
1954	8,490	4,900	1,930	1,110	6,560	0	3,790
1955	9,440	5,300	2,801	1,570	6,639	0	3,730
1956	10,940	6,150	2,642	1,490	8,298	0	4,660
1957	18,520	10,200	12,160	6,800	6,360	0	3,400
1958	16,950	9,400	5,036	2,790	11,914	0	6,610
1959	7,340	4,200	2,360	1,350	4,980	0	2,850
1960	8,900	5,000	2,546	1,430	6,354	0	3,580
1961	5,380	3,140	760	522	4,620	0	2,618
1962	18,190	10,070	3,112	2,044	15,078	3,058	8,026
1963	10,590	5,820	1,878	1,095	8,712	0	4,725
TOTAL		175,280					115,569
AVE.		7,621					5,025

Water Available For Use At The Narrows Site On An Average After Direct Flow Is Bypassed

	1,400	Brooks
	5,025	Ave. at Site
	1,500	Fairview Ditch
	7,925	
-	700	Res. Loss
	7,225	
-	300	Evap.
	6,925	

Oct-May

Total out of Scofield 1,024,560
Ave. 44,525 → 17.1% of total Ave. Discharge From Scofield

DRAINAGE AREA

Gooseberry Nr. Fairview	7.9 sq. mi. = 4.8% of drainage
Gooseberry Nr. Scofield	16.4 sq. mi.
Price River Ab. Scofield Res.	62 sq. mi.
Scofield Res.	163 sq. mi.
Price River Nr. Scofield	163 sq. mi.
Heiner	455 sq. mi.