

RESERVOIR SEDIMENTATION
DATA SUMMARY

Echo
NAME OF RESERVOIR

65-2

DATA SHEET NO.

Assn.

DAM	1. OWNER <u>Weber River Water Users/</u>		2. RIVER <u>Weber</u>		3. STATE <u>Utah</u>			
	4. SEC. <u>30</u> TWP. <u>3N</u> RANGE <u>5E</u>		5. NEAREST TOWN <u>Echo & Coalville</u>		6. COUNTY <u>Summit</u>			
	7. STREAM BED ELEV. <u>5450</u>		8. TOP OF DAM ELEV. <u>5570</u>		9. SPILLWAY CREST ELEV. <u>1/ 5560</u>			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE- FEET	14. ACCUMULATED ACRE- FEET	15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL	-	-	-	-	Oct. 1930		
	b. POWER	-	-	-	-			
	c. WATER SUPPLY	-	-	-	-			
	d. IRRIGATION	5560	1,470	75,718	75,718	16. DATE NORMAL OPER. BEGAN		
	e. CONSERVATION	-	-	-	-	May		
	f. INACTIVE	5450	0	0	0	1931		
WATERSHED	17. LENGTH OF RESERVOIR <u>4</u> MILES		AV. WIDTH OF RESERVOIR <u>.57</u> MILES					
	18. TOTAL DRAINAGE AREA <u>732</u> SQ. MI.		22. MEAN ANNUAL PRECIPITATION <u>14.5 - 35*</u> INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA <u>732</u> SQ. MI.		23. MEAN ANNUAL RUNOFF <u>5.2</u> INCHES					
	20. LENGTH <u>47</u> MILES		AV. WIDTH <u>16</u> MILES		24. MEAN ANNUAL RUNOFF <u>203,100</u> AC.-FT.			
	21. MAX. ELEV. <u>11,947</u>		MIN. ELEV. <u>5450</u>		25. CLIMATIC CLASSIFICATION <u>semi-arid</u>			
SURVEY DATA	26. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA ACRES	32. CAPACITY ACRE- FEET	33. C/W RATIO AC.-FT. PER SQ. MI.
	Oct. 1930					1,470	75,718	103
	Oct. 1954	24.0	24.0	R	16 (M)	1,445	73,900	101
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AC.-FT.		
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE	
	Oct. 1954	14.5 - 35*	203,125	415,700	4,875,000	203,125	4,875,000	
	26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE- FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.			
		a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	
	Oct. 1954	1818	76	.104	1818	76	.104	
	26. DATE OF SURVEY	39. AV. DRY WGT. LBS. PER CU. FT.	40. SED. DEP. TONS PER SQ. MI.-YR.		41. STORAGE LOSS PCT.		42. SED. INFLOW PPM	
		a. PERIOD	b. TOTAL TO DATE	a. AV. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
Oct. 1954	2/ 71	161	161	0.1	2.46	424	424	

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.								
3/ 1931	5511	5450	98,800	1943	5560	5506	219,200								
1932	5552	5450	238,400	1944	5560	5480	208,100								
1933	5559	5500	161,100	1945	5560	5450	164,200								
1934	5531	5450	69,300	1946	5560	5511	168,200								
1935	5560	5450	64,400	1947	5560	5510	188,400								
1936	5560	5470	254,300	1948	5560	5492	218,300								
1937	5560	5525	211,500	1949	5560	5491	234,800								
1938	5560	5511	267,600	1950	5560	5511	362,100								
1939	5560	5476	155,000	1951	5560	5532	274,200								
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
(Continued from Item 45)															
1940	5544	5473	112,500		1952	5560	5496	415,700							
1941	5560	5478	164,800		1953	5560	5505	172,700							
1942	5560	5507	225,500		1954	5545	5564	124,900							
47. REMARKS AND REFERENCES						Data from "Report of Sedi-									
1/Top of radial gates.						mentation Survey Made on									
2/Computed from size analysis.						Echo Reservoir and East									
3/Annual figures adjusted slightly for evaporation.						Canyon Reservoir in October									
Particle Size Analysis						1954," Region 4, Bureau of									
1% larger than .074 mm.						Reclamation, Salt Lake									
32% between .05 & .005 mm.						City, Utah									
8% between .005 & .002 mm.															
59% smaller than .002 mm.															
48. AGENCY SUPPLYING DATA						49. DATE 9-1-55									